

ACTIVITY REPORT

A year in review of French scientific
diplomacy in the United States

2023

**DEVELOP
FACILITATE
SUPPORT
VALUE**





08

The Office for Science and Technology

Research and Innovation in France :
Key Figures

Our programs at a glance

10 scientific events that took place
in 2023

14

DEVELOP
Bilateral Cooperation

32

FACILITATE
mobility

38

SUPPORT
French innovation

50

VALUE
The scientific communities

56

Distinctions / Delegations

Scientific and technology
watch

Communication

The Office for Science
and Technology Team



Dear readers,

The year 2023 was marked by an unprecedented acceleration of our actions and initiatives within the Office for Science and Technology. We have intensified our efforts to consolidate and broaden the links of cooperation between France and the United States in science and technology.

In this activity report, you will discover how we pursued our main mission: developing cooperation bilateral between our two countries. We have taken new steps towards implementing the common roadmap priorities of Franco-American scientific cooperation, established in December 2021. This roadmap guides our actions and has already given rise to a series of collaborations, such as the events and partnerships described in this report.

In this year 2023, we have consolidated our position as a major player in cooperation Franco-American science and technology. We remain determined to continue this momentum by strengthening our ties with all research stakeholders in the United States and continuing to promote scientific excellence and innovation in the service of progress.

We have organized major events such as the "France Science Summit" in Washington D.C., co-organized with the National Center for Scientific Research (CNRS), dedicated to the promotion of French research in the United States, as well as the development of bilateral scientific cooperation projects between France and the United States. The contributions of French researchers in three areas - priority thematic areas for Franco-American cooperation in science and technology - the environment, health and emerging technologies - were highlighted during this symposium.

The year 2023 was also marked by significant events, such as the launch of La Synapse, a Deeptech acceleration structure on the transatlantic axis, aiming to promote France as a leading technological partner and to promote international cooperation in the areas of disruptive innovation.

One of the remarkable achievements of the year was the launch of the first edition of the "week of women and girls in science". This event raised awareness of the gap between men and women in science and to promote scientific fields among young girls, while highlighting inspiring journeys of women in science and technology.

Finally, we have also intensified our mobility programs, notably the French American Doctoral Exchanges (FADEX), which enabled young North American and French researchers to exchange and generate interest for future cooperation.

I wish you an excellent reading,

A handwritten signature in blue ink that reads "Mireille Guyader". The signature is fluid and cursive, with a horizontal line underneath the name.

Counselor for Science
and Technology

The Office for Science and Technology

4
missions



Develop
Bilateral Cooperation



Facilitate
Mobility



Support
French innovation



Value
Scientific Communities

SAN FRANCISCO

Artificial intelligence
Robotics
New numerical technologies

LOS ANGELES

Life Sciences, Health

22 team members

1 Science counselor

8 Scientific attachés

10 deputy attachés (VIA)

3 assistants / accountants

7 Consular
Zones

CHICAGO

Agronomy
Green technologies
Nutrition

BOSTON

Biotechnology

WASHINGTON

Environment, Energy
Climate

STIC (Communication and
Security Information
Technology)

ATLANTA

Innovation
Technology Transfer

HOUSTON

Physics, Nanoscience

5
chiffres



70
events



5000
cumulative participants



91
Diplomatic Notes



41
Missions completed



49
delegations welcomed

4

Research
Organizations

11

team
members





Research and Innovation in France : Key Figures*



49.5 billion €
2.27% of PIB
devoted to R&D



604 700 individuals
implicated in R&D
(28 500 researchers)



14 500 Doctorate
diplomas awarded
each year



40% of doctorate
degrees awarded to
international students



4th place
in terms of demand
of European patents



7th place globally
in terms of scientific
publications



CNRS 1st position
globally in terms of
scientific publications



57%
of international
co-publications

Research and Innovation in the United States : Key Figures*



806 billion \$ - 3.5% of PIB
devoted to R&D (FY 2021)



8 576 000 individuals
implicated in R&D
(43 000 researchers)



55 000 doctorate
diplomas awarded
each year



41% of doctorate
diplomas awarded to
international students



5 300 universities
250 research
universities



More than 200
acceleration programs



80% of R&D funding
derived from private
financing



21 000 articles
co-published between
France and the United
States each year

Our programs at a glance

Chateaubriand Program

The Chateaubriand Fellowship program finances stays in French laboratories for US university PhD students, for a period of 4-9 months, in the framework of a joint research project. It aims in particular to initiate or strengthen research cooperation between French and American teams.

42 fellowships
financed in 2023

The bilateral funds

Four bilateral funds have been established with American universities spread across the entire territory: the University of California at Berkeley and Davis, Stanford University, the University of Chicago and Massachusetts Institute of Technology (MIT). The income generated by these endowment funds is used to support scientific collaborations between French research and teaching institutions and these partner universities.

62 projects
financed in 2023

Transatlantic Research Partnership

Launched in 2017 in partnership with the Institut Français-Villa Albertine, the TRP aims to encourage and support the collaboration of the most promising young French and American researchers, and to promote innovative joint research projects with a view towards meeting the major challenges of the 21st century.

15 scholarships
financed in 2023

NETVA - Start in America

The NETVA program offers young innovative French startups a personalized support program, analysis of opportunities and development of technological partnerships in the United States. This program aims to meet the need for internationalization of French startups developing part innovative products with high added value.

18 startups
selected in 2023

The 10 scientific events that defined 2023

FÉV

Launch of the first edition of the “Week of Women and Girls in Science” which aims to raise awareness of the gap between men and women in science, promote scientific fields among young girls and present inspiring trajectories of women in the fields of science and technology. [N° 1.]

MAI

The reception of the delegation from the University of Paris Sciences et Lettres (PSL) made it possible to strengthen links with leading universities and institutes in California, leading in particular to the formalization of a collaboration between the deeptech entrepreneurship departments from PSL University and Caltech. [N° 3.]

JUIN

The first workshop of the International Research Center (IRC) CNRS-U. Chicago Discovery which was inaugurated in November 2022 in order to boost major projects in the human and social sciences, biological sciences and quantum sciences. [N° 5.]

NOV

The event on the transformation of professions through generative AI, in collaboration with NASA, the Berkeley Space Center and the University of California at Berkeley, was the meeting point of important political and scientific personalities, in order to discuss the role of international cooperation in the light of this new technological wave. [N° 7.]

NOV

The Synapse structure for accelerating Deeptech on the transatlantic axis, was launched in order to promote, in the United States, France as a leading technological partner, to build bridges between Deeptech communities on both sides of the Atlantic, and to promote international cooperation in the areas of disruptive innovation, to help solve the major global challenges of tomorrow. [N° 9.]

MARS

L’apéro des Sciences “Women & Diversity in Science” which took place in Los Angeles allowed for a conversation on feminist diplomacy, France’s international strategy for equality between women and men, and to reflect on the issues, challenges and actions that can be carried out to ensure diversity in science. [N° 2.]

JUIN

The creation of an International Associated Laboratory (LIA) between INRAE and Michigan State University on the adaptation of plants to climate change, formalizing collaboration between the teams at an institutional level in order to facilitate scientific exchanges and promote the project among international financing programs. [N° 4.]

OCT

The French-American Doctoral Exchanges (FA-DEX), a one-week immersion in France, on a pre-defined theme: cybersecurity in 2023, enabled around ten doctoral students from North American universities, to which were added around ten doctoral students French, to exchange and arouse interest among them to pursue their careers in possible cooperation with their French counterparts. [N° 6.]

NOV

The very first edition of the “France Science Summit”, organized with the CNRS in Washington D.C., was dedicated to the promotion of French research in the United States, as well as to the highlighting of bilateral scientific cooperation projects around 3 major priority themes for Franco-American cooperation in science and technology (health, environment and emerging technologies). [N° 8.]

DÉC

The French American Innovation Days (FAID) “HealthAI” and the delegation from the Institut Convergence “QLife” made it possible to highlight the results of French researchers from the Institut Curie, the Collège de France, the ESPCI, the ENS and the Pasteur Institute for 2 days in San Francisco. [N° 10.]



1. Washington DC



5. Chicago



3. Los Angeles



4. Chicago



2. Los Angeles



8. Washington DC
Oussama Khatib



8. Washington DC



6. Paris



7. San Francisco



9. Atlanta



10. San Francisco

01

DEVELOP

Bilateral Cooperation

The Office for Science and Technology in close collaboration with the research organizations represented in Washington, deploys a range of tools at the service of Franco-American scientific cooperation and contributes to strengthening the attractiveness of France to our foreign partners.



France Science Summit



The Office for Science and Technology at the French Embassy in the United States (SST) and the Office of the National Center for Scientific Research (CNRS) in Washington D.C. organized the very first edition of the “France Science Summit” on Monday, November 6, 2023 at the French Embassy in Washington D.C.

This day highlighted bilateral scientific cooperation projects between France and the United States, thus showing the importance of exchanges and collaborations in the field of scientific research.

The contributions of French researchers in three priority thematic areas for Franco-American cooperation in science and technology (the environment, health and emerging technologies) were spotlighted during this symposium.

Structured around key testimonials and discussions in the form of panels, this event made it possible to promote the added value of the structuring partnership programs deployed by the SST of the French Embassy in the United States and to highlight the richness of the

pathways French scientists working in the United States.

This event was also an opportunity to officially inaugurate the network of French scientists identified by the SST in the United States and the deeptech acceleration program on the transatlantic axis: La Synapse.

Researchers involved in the collaboration tools of the CNRS (International Research Center, International Research Laboratory, International Research Project, International Research Network), INRAE and INSERM have demonstrated the usefulness of these structured partnerships to support projects of joint research excellence.

The France Science Summit brought together researchers from various disciplines, academics, students, diplomatic figures from the Washington region and officials from American federal agencies such as the Department of State, the National Institutes of Health (NIH), the National Science Foundation (NSF), the National Academies of Sciences, Engineering, and Medicine.



Photo Competition

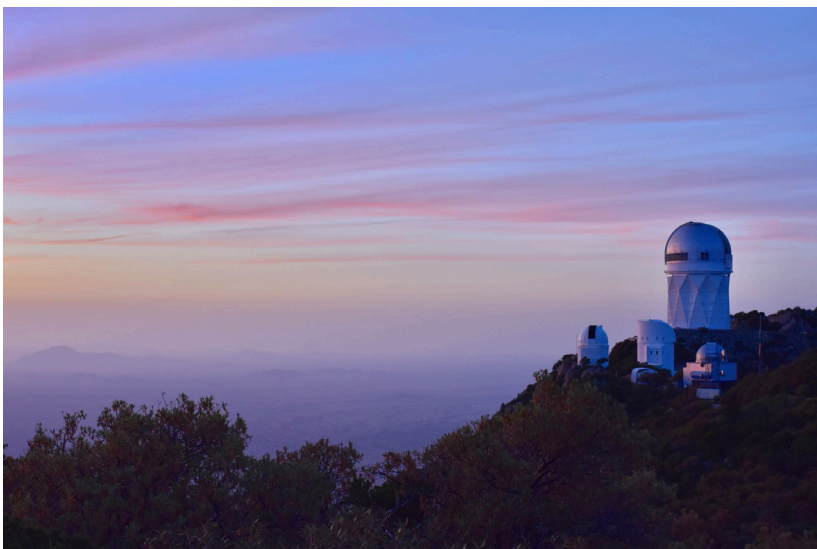
The Office for Science and Technology organized its first photo competition. The objective of this competition was to celebrate the collaboration between France and the United States in the scientific field, while making science more accessible. This competition was open to all scientists from private or public laboratories, having carried out research within the framework of a Franco-American partnership.

Jury's Prize



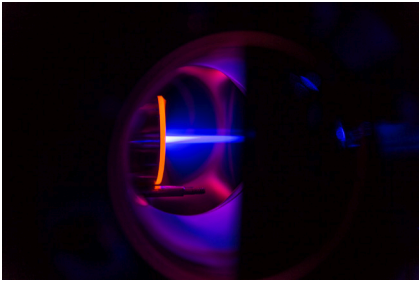
Raphael Attié - astrophysicist at NASA Goddard Space Flight Center and at George Mason University

Public's Prize

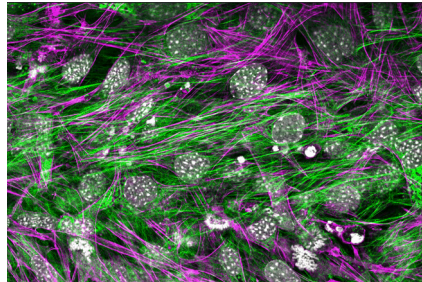


Satya Gontcho A Gontcho
- cosmologist at Lawrence Berkeley National Laboratory

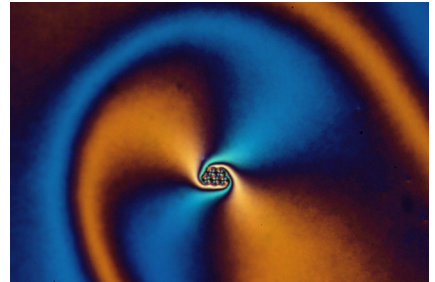
The 15 Finalists Showcased at the Maison Française



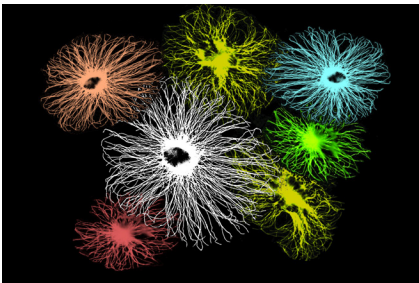
© Pierre Barral



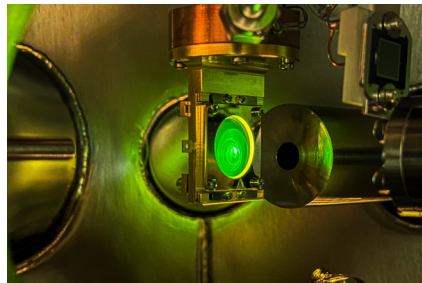
© Alexandra Naba



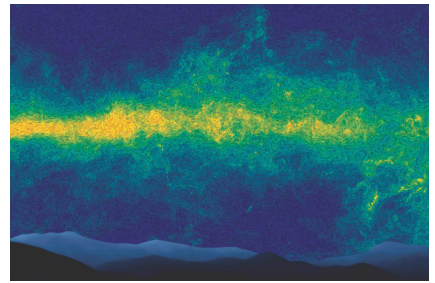
© Ivan Smalyukh



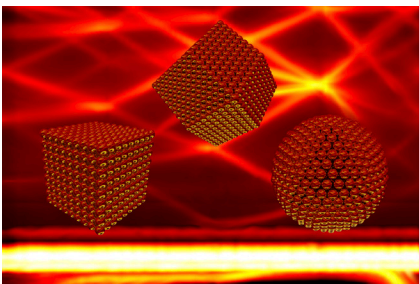
© Elsa Ronzier



© Alexia Simon



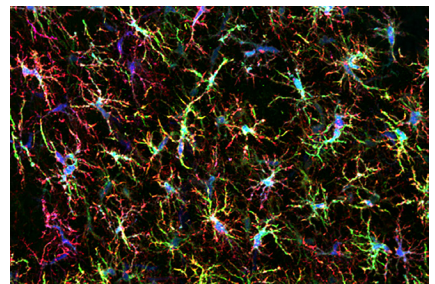
© Uros Seljak



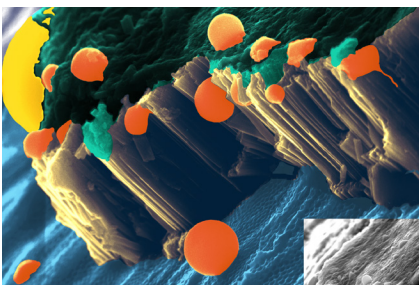
© Nicolas Large



© Stephen Dobson



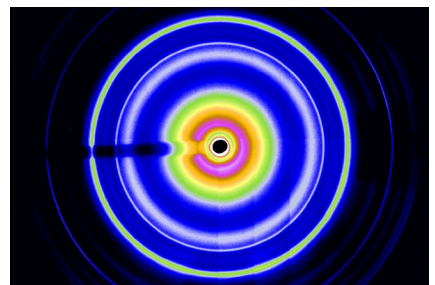
© Marine Krzisch



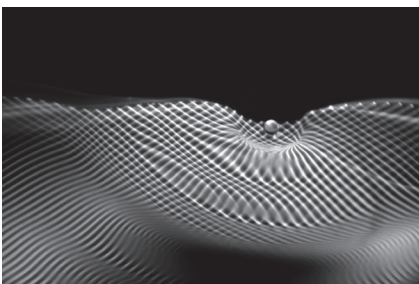
© Amandine Impergre



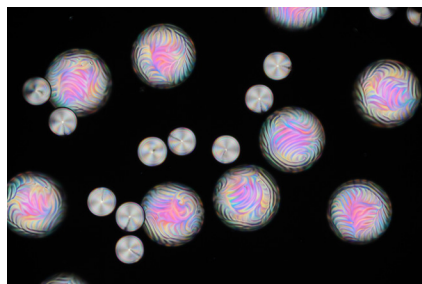
© Joshua Meyer



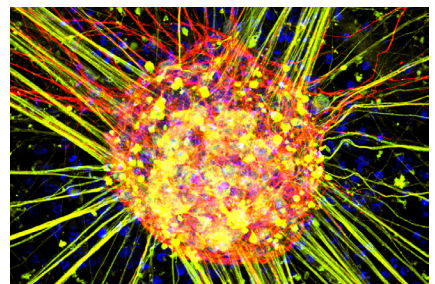
© Stephanie Wong



© Charles Fort



© Teresa Lopez-Leon



© Laetitia Francelle



Space Galette 2023 – CNES

📅 February 1st

📍 Washington DC



The CNES office and space department of the French Embassy in Washington D.C. organized the “Space Galette” event on February 1, 2023. This reception organized at the French Residence brought together the Washington space community around a French tradition in order to promote French activities in space and spotlight the Franco-American bilateral relationship in space. On this occasion, the President of CNES expressed his best wishes, took stock of last year's space activities and presented the outlook for the coming year. This event brought together nearly 200 guests, influential figures in the American space sector and representatives of federal entities – including the administrator of NASA and the secretary general of the National Space Council, foreign space agencies and the private sector.

Reception of a Delegation from the University of Lille in the Southwest United States

📅 February 21st - 24th

📍 Los Angeles

A delegation from the University of Lille composed of Didier Gosset, advisor to the university president, and Joseph Armando Soba, director of international development, visited Arizona and California from February 21 to 24, 2023. Organized by the Los Angeles Office for Science and Technology, this visit provided an opportunity to interact with seven universities and research institutes in Phoenix, Tucson and the Los Angeles re-

gion. In accordance with the expectations expressed by the delegation, the meetings were structured around the four research priorities displayed by the University of Lille: (i) precision health, (ii) innovation in the service of a changing planet, (iii) digital world at the service of humans and (iv) changing cultures, societies, practices. This visit made it possible to monitor current partnerships and assess the relevance of new collaborations.





Closing of the Week of Women and Girls in Science

📅 February 8th

📍 Washington DC

As part of the United Nations International Day of Girls and Women in Science, the SST in Washington organized the first edition of the "Week of Women and Girls in Science" in Washington, DC in collaboration with the Italian and German embassies, Children's National Hospital and George Washington University. A week of events aimed to raise awareness of the existing gap between men and women in science, promote scientific fields among young girls and present inspiring trajectories of women in the field of science and technology.

The closing evening was organized at the Résidence de France around a "Women in Tech" panel with Aurélie Jean, a French scientist expert in AI and entrepreneur and Prachi Vakhari, Founder of "Women In STEM". This debate was moderated by Zolan Kanno-Youngs, journalist at the New York Times.



Visit of the IHES and Philanthropy

📅 28-31 of March

📍 San Francisco

The management team of the Institute of Advanced Scientific Studies (IHES) was visiting the San Francisco Bay Area, accompanied by the co-presidents of Friends of IHES and benefactors of the Institute, Jim and Marilyn Simons. This visit was concomitant with the research stay of the director of IHES, Professor Emmanuel Ullmo, at the Simons Laufer Math Institute in Berkeley. Co-organized with the SST of SF, it made it possible to promote French research by highlighting mathematics and fundamental sciences. Since 1958, IHES is a very important provider of awards, in particular Fields Medals and Nobel Prizes.

Among the many meetings and events of the week, a major philanthropy evening was organized by Friends of IHES – for the first time in San Francisco – to highlight the organization's endowment. Meetings also allowed IHES to strengthen its positioning and legitimacy within the American technology community.



Visite of l'Institut Pasteur and Philanthropy

📅 27 February - 2 March

📍 San Francisco

The management of the Pasteur Institute and the Quantitative Biosciences Institute (QBI) of the University of California at San Francisco (UCSF) met for the official launch of a project to create a joint Center of Excellence for the fight against emerging infectious diseases. This center should open on the UCSF campus by 2024 and house joint research teams. A delegation of around fifteen members of the Pasteur Institute traveled for the occasion and were accompanied by the SF SST, which has supported this collaboration since its beginnings in 2020, during the pandemic. The launch of this philanthropic operation took place during a reception at the Residence, where donors and supporters attended a presentation of the partnership by the Pasteur and QBI teams. Through the various events organized on the sidelines of this reception, this trip mobilized very widely within the biotech, medtech and healthtech communities in California.

Support for CNRS Collaborations at the University of California - Berkeley (CNRS)

📅 6-7 of March

📍 Berkeley



The Deputy Director General for Science of the CNRS, Alain Schuhl, and the Europe and International Director, Christelle Roy, visited the University of Berkeley in March 2023 to discuss the future of their collaboration. On this occasion, the delegation accompanied by the CNRS office in Washington D.C. went to the international laboratory Center Pierre Binétruy and spoke with the two directors of the IRL, Saul Perlmutter and Radek Stompor.



Mission at the Vision Institute (CNRS)

📅 18-20th April

📍 Pittsburgh



The CNRS office in Washington D.C., the Scientific Advisor of the French Embassy and a representative of INSERM went to Pittsburgh to attend the inauguration of the building which will house the vision institute, directed by José-Alain Sahel. This institute brings together in one place the infrastructures for receiving patients intended to receive care and researchers at the forefront of this field, who thus have access to unique equipment and know-how. Remember that Dr Sahel developed and then directed the Vision Institute in Paris - whose management has now been entrusted to Serge Picaud - under the co-supervision of Sorbonne University, INSERM and CNRS. A partnership agreement is being developed between the faculty of medicine of U. Pittsburgh, Sorbonne U., INSERM and the CNRS in 2017. This mission was the occasion for numerous discussions in order to structure the France- CNRS-Pittsburgh, and to expand it beyond vision institutes. Neuroscience, transfer activities, bioethics (presence of an IRN CNRS philosophy in biology and medicine), but also AI, quantum (1 IRP CNRS), chemistry (1 IRP CNRS) should find their place there.

First France Pavilion at the Space Symposium - CNES

📅 17-20th April

📍 Colorado



The Space Symposium - taking place every April in Colorado Springs (Colorado) - is the most important annual space conference in the United States. The 38th Space Symposium (April 17-20, 2023) welcomed more than 15,000 participants representing the entire American and international space ecosystem (space agencies, government representatives, defense, industries, commercial companies, etc.). During this 2023 edition, France had a national pavilion for the first time (like other major space nations), supported by CNES and New Space Factory. Throughout the Symposium, this stand helped to highlight and showcase the entire French ecosystem and the associated capabilities in the civil, military and commercial fields. More than 30 French companies had the opportunity to pitch on the stand, several events welcomed the American and international space community, and numerous interviews were held there (CNES, Commandement de l'Espace, GIFAS, Business France, sessions B2B).

The president of CNES was present and spoke with his American counterparts (National Space Council, JPL, NASA, Office of Space Commerce) and international (Canada, Taiwan, Australia, Japan), as well as with numerous companies, both French and foreign.

At the same time, Business France organized French Space Days in collaboration with CNES, which allowed 7 French space companies and start-ups to travel to Houston and Colorado Springs in order to meet players in the space ecosystems of Texas and Colorado. On this occasion, the French start-up ThrustMe signed contracts with American partners for the supply of satellite propulsion systems.

Series of Conferences and Events on the Theme of Plastic Pollution

📅 May

📍 Washington DC

On the occasion of the broadcast of the documentary "Cher plastic", the SST organized a conference-debate in the presence of director Dorothée Adam and Dr. Mary Ellen Ternes and Jeaffrey Seay (Global Council for Science and the Environment). A stand dedicated to plastic pollution and a photo exhibition also took place during the embassy's open days. Finally, the Washington SST went to the Global Plastics Forum conference, organized at the University of Rhode Island, in the company of French parliamentarians, Angèle Preville, senator, and Philippe Bolo, deputy. This conference was the occasion for a meeting between French and American parliamentarians, to discuss the theme of plastic pollution.



Initiatives Dedicated to Innovation and Entrepreneurship Organized on the Occasion of the Arrival in California of the University of Paris Sciences et Lettres

📅 19th May

📍 Los Angeles

The Department for Science and Technology of the Consulate General of Los Angeles accompanied several initiatives dedicated to innovation and entrepreneurship during the visit of a delegation from PSL University. The delegation, led by Cédric Denis-Rémis, vice-president of development, innovation and entrepreneurship, was made up of international program managers from the University and the 2023 class of the Institute of Advanced Studies for Innovation and Entrepreneurship (IHEIE; Mines Paris - PSL). The sequences offered the delegation an overview of innovation practices underway on the west coast of the United States, during visits to incubators, universities and research institutes or large companies. They could relate to the fields of defense, aerospace and robotics, environment and health. The visits were followed by discussions organized at the Résidence de France in Los Angeles and allowed PSL University to strengthen its ties with leading universities and research institutes such as the University of Southern California or the California Institute of Technology (Caltech). They notably led to the formalization of a collaboration between the deeptech entrepreneurship departments of PSL University and Caltech, whose technology transfer office is recognized for its performance in promoting scientific results. The collaboration today results in a one-year residency at the prestigious California institute of Dr. Akin Osman Kazakci, director of the Data Innovation Lab at IHEIE. This residency should allow PSL University and Caltech to further discuss best practices in technology transfer for the creation of scientific companies, particularly those related to data sciences.



Visit of the French Ambassador to San Diego

📅 21 - 23rd June

📍 Los Angeles

Ambassador Laurent Bili traveled to San Diego in June 2023 to inaugurate French Tech San Diego. On this occasion, accompanied by the Service for Science and Technology, he met major players in innovation in the fields of communications, transport, life sciences and health and the environment, including a visit to the Scripps Institute for Oceanography laboratory. The discussions provided a better understanding of the dynamism of the San Diego ecosystem, the result of close collaboration between different academic, industrial and entrepreneurial players. They also highlighted the opportunities it offers and the importance of ongoing collaborations with French research institutes and universities, particularly in view of the challenges posed by the France 2030 Plan.

First Workshop of the International Research Center (IRC) CNRS - U. Chicago Discover - CNRS

📅 5-7th June

📍 Chicago



A CNRS delegation went to Chicago from June 5 to 7 to participate in the launching workshop of the CNRS – University of Chicago international research center on the fundamental scientific discovery “IRC Discovery”. The IRC, inaugurated in November 2022, aims to establish a strategic dialogue with the University of Chicago, a major academic partner of the CNRS, in order to drive large-scale projects aimed at thinking about and responding together to the major challenges of our world. Three workshops in human and social sciences, biological sciences and quantum sciences were organized during the meeting. The human and social sciences workshop highlighted the need to create a common International Research Laboratory (IRL). For its part, the biology working group highlighted the importance of capitalizing on the existence of strong communities in marine biology, both at the CNRS and at the University of Chicago. Finally, it was recalled during the quantum sciences workshop that student mobility was essential to the discipline. Discussions have been undertaken to study the feasibility of collaborations in other disciplines, exchanges which could lead the IRC to strengthen its multidisciplinary scientific expertise.



The CNRS office publishes a booklet updated every year entitled: “CNRS in the United States”, available in French and English. This booklet published on the website <https://washington.office.cnrs.fr/> presents all of the structured cooperation of the CNRS in the USA: IRC, IRL, IRP, and IRN.



Signature of an International Laboratory Association (LIA) Between INRAE and Michigan State University - INRAE

📅 **June 2nd**

📍 **East Lansing, Michigan**

On the occasion of the visit of the CEO of INRAE and his delegation to North America, Jean-François Soussana, vice-president in charge of international policy, visited the campus of Michigan State University (MSU) for the signing of an agreement between the two institutions. This is an International Associated Laboratory (LIA) on the adaptation of plants to climate change. The formalization at institutional level of this collaboration between MSU and INRAE teams will facilitate scientific exchanges and promote the project to international funding programs.



Visit to Salt Lake City

📅 **5-7th of July**

📍 **San Francisco**

The SST SF went to Salt Lake City to meet researchers and entrepreneurs. The city is a growing center of innovation, particularly in the field of biotechnology. This dynamic results from several factors which the SST was able to measure: an environment favorable to medical innovation, the presence of associative and investment structures, a breeding ground for scientific excellence at the University of Utah. The SST, accompanied by Professor Carla Saleh from the Pasteur Institute, had the chance and honor to visit Metrodora, at the invitation of its founder Fidji Simo, a great figure of Tech entrepreneur in Silicon Valley. Metrodora is a new cutting-edge care center specializing in the management of autoimmune diseases, and boasts a unique systemic approach to the diagnosis and treatment of the disease, relying on a clean biobank of data shared with all clinicians and researchers hosted by the center. This visit was also an opportunity to meet French researchers from the University of Utah in the fields of health, microelectronics and geophysics, and startups that they co-founded.



Blue Talks Conference

📅 **July 6th**

📍 **Washington DC**

The SST organized a conference dedicated to the sustainability of the oceans, in partnership with the Representation of France to the Organization of American States. Ahead of the UNOC 2025 summit taking place in Nice, this conference presents the state of scientific knowledge on the oceans, with the intervention of French, Costa Rican, Chilean, American and Brazilian scientists. This conference brought together many diplomats and international political decision-makers.

Inauguration of the Nuclear Physics and Astrophysics IRL - CNRS/Michigan State University - CNRS

📅 July 18th

📍 East Lansing, Michigan



The CNRS and Michigan State University have joined forces to create the IRL Nuclear Physics and Astrophysics, an international research laboratory on the physics of atomic nuclei, the role it plays in the properties of the matter that surrounds us, as well as on certain processes taking place in stars. This Franco-American laboratory, based at the Facility for Rare Isotope Beams in Michigan, was created on July 18 in the presence of representatives from the CNRS and Michigan State University.

Quantum Day: “Everything You Always Wanted to Know About Quantum but were Afraid to Ask”

📅 July 18th

📍 Washington DC

Quantum is one of the priorities defined during the 2021 Franco-American joint committee and was highlighted during President Macron's visit with the signing of an agreement on cooperation taken to ministerial level in 2022. Researchers and high-level representatives of the main American federal research agencies gathered on July 18 to take stock of the actions carried out and the perspectives opened. The idea was to explore interactions and cooperation in the quantum world along three axes: Fundamental vs Applied; Public vs. Private; France vs USA. For the occasion, a general public science popularization conference followed and brought together 200 curious people at the French Embassy in Washington to discover little-known aspects of a booming quantum world.



Climate Fresco Workshop

📅 June 15th

📅 17th August

📍 Los Angeles

📍 Atlanta



La Fresque du Climat is a French association whose objective is to raise public awareness of global warming and to train local actors in environmental issues. She developed an educational, educational and collaborative game of the same name, based on data from scientific reports from the Intergovernmental Panel on Climate Change (IPCC). This French tool has met with great success since its creation in 2015 and was identified, during the last States General of French diplomacy, as support for ecological diplomacy.

The climate fresco is now enjoying success within American institutions and businesses. The Atlanta and Los Angeles posts organized Climate Fresco workshops during the summer of 2023. The organization of these workshops made it possible to provide systemic insight to the French and American community present, and to highlight France's environmental commitments. They will also have contributed to democratizing the use of this tool, to facilitate its adoption in Southern California on the one hand and on the other hand to create a workshop within Georgia Tech itself in September 2023 with the aim of train facilitators capable of conduct workshops on their own.



“Exploring Tracks for Transatlantic Cooperation on Intelligent Mobility” Event

📅 August 30

📍 Washington DC

This hybrid scientific conference, where 20 scientific presentations took place one after the other, aimed to serve as a springboard for potential cooperation between French institutions working on connected and automated vehicles, and more broadly on intelligent mobility issues, and the Institute of Maryland Transportation. The short lectures given by American and French researchers on parallel topics provided an overview of research carried out on both sides of the Atlantic, and helped determine the most promising topics for a physical workshop to come.

Accompaniment to San Diego with a CNRS Chemistry Delegation - CNRS

📅 September 30 - October 4

📍 Los Angeles



The CNRS Office in Washington D.C. accompanied a French delegation from CNRS Chimie led by its Director, Jacques Maddaluno, to the University of California at San Diego in early October 2023. The members of the delegation had the opportunity to visit the International Research Laboratory in molecular chemistry and to discuss the future of the laboratory with its Director, Professor Guy Bertrand. The extension of this trip allowed Sylvette Tourmente, (director of the CNRS office in Washington D.C.) to meet with the managers of other CNRS strategic partnerships within the Universities of California and Caltech. These discussions contribute to the monitoring and development of international actions, an essential condition for competitive cutting-edge research and a priority for the CNRS.



CNRS - U. of Arizona Conference: “Climate Change and Health - Pollution and Nutrition” - CNRS

📅 October 16-17

📍 Washington DC



On October 16 and 17, the scientific deputy directors of the CNRS institutes, representatives of the International Research Center (IRC) CNRS-UArizona for Global Grand Challenges, representatives of the CNRS office in Washington D.C., Michael Dake (Senior Vice President for Health Sciences from the University of Arizona) and several researchers from the University of Arizona met in the American capital to deepen cooperation between the CNRS and the University Arizona site on one of the IRC's strategic directions, entitled "Preparing for Global Challenges: Climate Change and Health". Two sub-themes of priority interest were identified for the discussion: how to preserve health in very arid and polluted areas, and how to ensure food/nutritional security in the face of climate change.

Durable Mobility and Intelligence, Celebrating 10 Years of the French Tech Mission

📅 20 October

📍 Atlanta

The SST organized, in collaboration with the French American Chamber of Commerce - Atlanta and La French Tech Atlanta, a round table on the issue of sustainable and intelligent mobility, in the presence of various speakers from: Emory University, Metro Atlanta Chamber, Georgia Tech's Partnership for Inclusive Innovation, Curiosity Lab, Exotec, Michelin Connected Fleet and Orange Business Americas. Speakers addressed issues related to the need to strengthen the sustainable dimension of mobility, technological advances and transatlantic partnerships. As the various speakers come from research, innovation or industry environments, the diversity they represent made it possible to consolidate several points of view on the issue (scientific, technological, economic and social interests). The event allowed the community of Francophile entrepreneurs in Atlanta to also celebrate the 10th anniversary of the French Tech mission in the presence of the French Ambassador to the United States, Laurent Bili, who delivered the opening speech.



Visit of the Ambassador to Los Angeles: Visit to the Jet Propulsion Laboratory (NASA/CalTech) and interview with Frances H. Arnold, Nobel Prize in Chemistry in 2018 and co-president of PCAST

📅 **November 2**

📍 **Los Angeles**

Ambassador Laurent Bili visited the Jet Propulsion Laboratory (NASA-Caltech) where he met Dr. Laurie Leshin, its director since May 2022, and scientists in charge of space programs. The visit to NASA facilities and the discussions with the scientists working there demonstrated the ambition of the programs carried out there and the historic relationship that the Jet Propulsion Laboratory maintains with France through its cooperation with CNES since 1961. Current collaborations in the field of planetary sciences (Insight mission using the CNES seismometer on Mars), Earth observation from space (SWOT mission for observing oceans and surface waters) and robotic exploration (Mars Sample Return mission developed jointly with France via the European Space Agency). The contribution of the Marseille astrophysics laboratory and CNES to the PRIMA project, which will make it possible to study the evolution of gal-

axies and the formation of planetary systems was also highlighted. Laurie Leshin and the ambassador agreed on the importance of this collaboration which allows for the sharing of expertise and pooling of resources. The ambassador then spoke with Frances H. Arnold, professor at Caltech, winner of the 2018 Nobel Prize in Chemistry and co-chair of President Biden's Council of Advisors on Science and Technology. The discussion focused on some of the most important science and technology initiatives in our countries, and priorities for future collaboration, as defined by the United States-France Joint Committee meeting. The challenges of attracting young researchers as well as the links between research and entrepreneurship were also discussed, in the presence of Frédéric Farina, head of Caltech's technology transfer office.

Reception of the USDA - ARS Delegation to the INRAE Labs

📅 **August 3**

📍 **Montpellier**

INRAE received a delegation from the Agriculture Research Service of the United States Department of Agriculture (USDA-ARS) for a visit to its laboratories in France. This visit relaunched discussions at institutional level around several themes of common interest, nota-

bly on carbon sequestration in soils and the application of artificial intelligence to animal and plant genetic improvement. The strengthening of existing collaborations and the creation of new collaborations are therefore to be expected in 2024.



Nuclear Service News in 2023



The 2023 news of the Nuclear Service will have mainly been marked by events resulting both from the state visit in November 2022, and from the international context, characterized by environmental and energy security considerations.

On the nuclear fission aspect, the French and American actors involved in the roadmap drawn up at the end of the state visit have started the implementation of the corresponding cooperation work, covering all sectors of the bilateral relationship. :

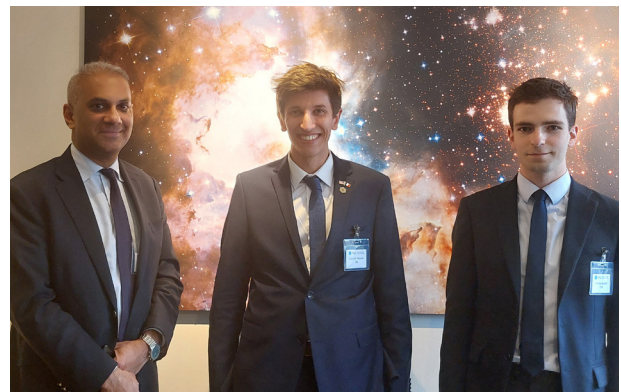
- R&D component: research work on small modular reactors, the production of hydrogen from nuclear technologies, the development of fourth generation reactors, tools for testing and qualifying nuclear fuel and materials, etc. subjects that should contribute to the sustainability of nuclear power;
- Regulatory aspect: the safety of small modular reactors, as well as the aging of materials, with a view to extending the life of the reactors;
- Industrial component: the development of accident-resistant nuclear fuels, the construction of fuel cycle installations with a view to securing the supply of nuclear fuel. On this last point, the Nuclear Service also contributed to multilateral initiatives organized during international events (G7 meeting, COP28, etc.).

From these different activities, the Nuclear Service drafted a document on a possible influence strategy aimed at promoting French interests in North America.

Finally, faced with the growing interest of both the private sector and American institutional players in thermonuclear fusion technologies, a study was conducted by the Nuclear Service, describing the

American strategy on the subject, allowing, in addition to suggesting possible avenues of cooperation, to better appreciate the positioning of the United States with regard to the ITER project.

On the non-nuclear side, the activities of the Nuclear Service will have enabled the launch of discussions intended to strengthen links between the CEA and American organizations, both institutional and private sector, in the field of semiconductors, in a characterized context, on the American domestic scene, by the CHIPS and Science Act, and, on the international scene, by exacerbated competition with China in particular. The current geopolitical tensions as well as the climate emergency have led the Nuclear Service to examine the American position on the question of the supply of critical materials for the energy transition, as well as on the subject of sustainable aviation fuels (SAF). . Finally, special monitoring is being carried out of the Department of Energy project for hydrogen production and transport facilities (H2 Hub), bringing together, in addition to institutional actors, actors from the private sphere, American and foreign.



02

FACILITATE

Mobility

International research networks play an essential strategic role in enabling researchers to share ideas, accelerate the production of results and tap into complementary resources. In order to increase transatlantic ties and exchanges between students and young researchers, the Office for Science and Technology is deploying a range of mobility programs.

FADEx: French-American Doctoral Exchanges - October 16 to 20 - Paris



After several years of interruption, FADEx was relaunched in 2023. This program consists of a one-week immersion in France, on a predefined theme, for a dozen doctoral students from North American universities, who were joined by a dozen French doctoral students studying the same thematics. The program is designed to foster exchanges and encourage young American scientists to pursue their careers in a possible collaboration with their French counterparts. The theme chosen for 2023 was cybersecurity, and the American universities represented included UC Berkeley, Johns Hopkins, George Mason U, University of Chicago, Urbana-Champaign, U Texas (Austin), University of Maryland, Columbia and Carnegie Mellon.

The week's program was developed in partnership with CNRS (co-financier of the 2023 event), CEA and INRIA, including the Cybercampus at La Défense, the LORIA laboratory in Nancy and IRISA in Rennes.

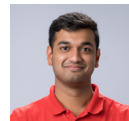
Feedback from the 2023 event was very positive. The delegation of 20 university doctoral students visited various cybersecurity research centers in Nancy, Paris and Rennes, and benefited from strategic talks by senior French officials in the field (ANSSI, SGPI). One of the highlights of the program was the week-long immersion of this mixed group of students, many of whom had never before visited France or Europe. This experience of living together, against the backdrop of a professional program, created strong bonds between the participants, which we hope to build on over the long term. A follow-up program for FADEx students will be organized from 2024 onwards, to capitalize on these informal encounters and transform the experience into a lasting cooperative relationship between the two concerned ecosystems.

"The FADEx program was a great experience and enabled me to discover France's research ecosystem, government priorities and university culture. I look forward to continuing the relationships formed and my research in France in the future, and I'm excited about leveraging research to change policy in both France and the U.S.!"



Elleen Pan
2023 FADEx Fellow,
University of Chicago

"FADEx 2023 was an extraordinary program designed to promote bilateral research collaboration. It was a great experience to learn about security research in France, and this encourages me to consider a post-doctoral career in this country."



Sirish Oruganti
2023 FADEx Fellow,
University of Texas



T
E
S
T
I
M
O
N
I
A
L
S

The Chateaubriand scholarship program

Every year, a number of student mobility programs are set up between France and the United States. Amongst those, the Chateaubriand Fellowship Program, created in 1981, aims to initiate or strengthen collaborations, partnerships or joint projects between French and American research teams. The fellowship program benefits some forty laureates in the United States each year, and comprises two components:

- The Chateaubriand Fellowship in Science, Technology, Engineering, Mathematics and Health (STEM) is offered to doctoral students enrolled at American institutions who wish to spend several months in a research laboratory in France as part of a collaboration in France. The program is supported by the French research institutions Inserm, Inria and Université Paris-Saclay. It is also a partner of the Graduate Research Opportunities Worldwide (GROW) program of the National Science Foundation (NSF).

- The Chateaubriand Fellowship in the Humanities and Social Sciences (HSS) is aimed at doctoral students enrolled at American institutions who wish to engage in research in France in any discipline of the humanities and social sciences, in collaboration with a French host laboratory. The program is supported by Campus France, which accompanies fellows on site.

The CNRS is now a partner in STEM disciplines. In 2023, the CNRS funded 8 fellowships for American PhD students who will carry out part of their doctoral research in CNRS laboratories in France.



Promotion of the Chateaubriand program

As part of the launch of the call for applications for Chateaubriand student mobility grants, events were organized in Los Angeles and Chicago to bring together the French-speaking and Francophile scientific community. These convivial gatherings enabled researchers likely to collaborate, or already collaborating, with France to learn more about our mobility programs. Former recipients and representatives of laboratories that have benefited from these programs were able to testify to the relevance of such opportunities for strengthening Franco-American collaborations.



 **October 3**
 **Chicago**



 **October 24**
 **Los Angeles**

Transatlantic Research Partnership

Collaboration in research is essential for scientific breakthroughs and cutting-edge discoveries. Identifying solutions to the major challenges of the 21st century, such as finding a cure for cancer, protecting the environment, advancing cybersecurity and preserving cultural heritage, requires global collaboration that transcends national and cultural boundaries. The Transatlantic Research Partnership (formerly known as the Thomas Jefferson Fund), is a program that brings together talented young researchers in France and the United States. Initially launched in 2017 in partnership with the FACE Foundation, it was designed to foster forward-looking collaborative research that addresses pressing global challenges. The program supports two-year collaborative projects linked to one or more of the United Nations Sustainable Development Goals (SDGs). A call for proposals is launched each year. Project proposals can cover the following fields:

- Humanities and Social Sciences (HSS)
- Science, Technology, Engineering and Mathematics (STEM)
- Sciences for Society (interdisciplinary projects STEM-HSS)

Funding amounts of up to \$20,000 over a two-year period, divided equally between the French and American teams. Co-funding by the researchers' universities is encouraged to ensure the sustainability of the research partnership. These funds support the transatlantic mobility of researchers, collaborative research activities, the organization of workshops and international conferences, and the publication of joint articles.

Success of the first edition of the "Transatlantic Research Partnership" (TRP) call for applications, which supports cross-border mobility of young researchers as part of collaborative projects contributing to the Sustainable Development Goals (SDGs): 79 applications were received, 31 were rated A or A+ by MES independent experts, and 16 projects were selected for funding of \$300,000.



Jury France-Stanford

📅 May 19

📍 Stanford

On May 19, 2023, the jury for the France-Stanford scholarships for research projects in the hard and social sciences was held at Stanford. The jury was attended by the scientific advisor and deputy cultural advisor of the French Embassy in Washington, as well as local scientific and cultural attachés. 21 grants were awarded, for a total of \$256,000. The scientific projects awarded cover themes aligned with the priorities of the joint Franco-American research committee, covering technological, environmental and health challenges. Student mobility financed by this program between France and the USA - in either direction - will begin in September 2024 and run until autumn 2025.

Jury France-Berkeley

📅 June 5

📍 Paris

On June 5, 2023, the jury for the France-Berkeley scholarships for research projects in the hard and social sciences was held in Paris, between French universities and the Universities of California, Berkeley (UCB) and Davis (UCD). A total of 21 grants were awarded, worth \$256,000. The scientific projects awarded cover themes aligned with the priorities of the joint committee for Franco-American research, in terms of technological, environmental and health challenges. Student mobility between France and the United States - in either direction - will begin in September 2024 and run until autumn 2025.

Jury MIT-France

6 fundamental research projects were selected, involving MIT laboratories and laboratories from French research organizations such as CNRS, CEA and Paris Saclay.

MIT Career Fair

📅 February 25

📍 Boston



In February 2023, the CNRS in Washington D.C. and the OST attended the MIT Career Fair in Boston. This was an opportunity to present the OST's programs and the career opportunities at the CNRS in France, and to promote the attractiveness of research organizations and France to American researchers and students. To mark the event, the UDICE delegation (France's top 10 research universities) was received in Boston for a three-day learning expedition ahead of the career fair. They met with local university innovation players such as the MIT Martin Trust Center for Entrepreneurship, Harvard HiLab, MIT Media Lab and Tufts University. An evening networking event was organized with the region's academic players. The visit provided an opportunity to present the Boston ecosystem to France's major research universities, and discussions with the Université Paris-Saclay continued afterwards about building joint programs.



PhD Forum

📅 December 1st

📍 Chicago



As part of joint calls for theses between the CNRS and the University of Chicago, a remote "PhD Forum" was organized on Friday December 1st to enable PhD students to present their thesis topics in 180 seconds, in biology, chemistry, ecology, environment and engineering. Alain Schuhl, Executive Vice President for Science at CNRS, and Juan de Pablo, Executive Vice President for Science, Innovation, National Laboratories and Global Initiatives at the University of Chicago, also attended the workshop. Two students, Yuqin Wang and Rendy Prastiko, won the prize for the best presentation given for their work on the treatment of PFAS.

FACCTS France-Université Program of Chicago

📅 April 28

📍 Paris, U. Chicago Campus

22 bilateral STEM projects were submitted, 16 of which were funded for a total of \$395,150.



03

SUPPORT

French innovation

Supporting and promoting innovation made in France, and fostering public-private partnerships in strategic R&D fields, by involving all players - entrepreneurs, scientists and students - between France and the USA, is a priority for the Science and Technology department.



Launch

la (s)ynapse

The Transatlantic DeepTech Accelerator

Presentation

After two years of preparation, the Office for Science and Technology (OST) of the French Embassy in the United States launched, on November 6, 2023 at the Residence of France in Washington DC, its new initiative for the acceleration of transatlantic deeptech:

La Synapse. La Synapse's name represents its action: developing important ties and generating dynamic interconnections between France and the United States, between research and entrepreneurship, and science and technology. In concrete terms, La Synapse offers 4 training programs of immersion and networking, based around the OST's 7 geographic locations and 10 key thematic competencies, while drawing on the OST's Franco-philie scientific network.

Context

In today's fast-moving global economy, science and the innovation that goes with it - deeptech - are essential for competitiveness. Scientific research and technological innovation, on the one hand, and economic development, on the other, are closely linked. Today's scientific breakthroughs pave the way for tomorrow's economy; above all, disruptive inno-

ventions promise economic growth, new jobs and transformative investment. For a country like France, which aims to make its mark on the international scene, scientific research is the prism through which solutions to major human, societal and environmental challenges have been, are being and will continue to be conceived and developed, in fields as varied as public health, sustainable development, agriculture, energy, transport and education.

Mission

La Synapse's mission is to promote France in the United States as a leading ecosystem and to contribute to the promotion of France's 2030 plan; it aims to build bridges between deeptech communities on both sides of the Atlantic, and foster international cooperation in the fields of disruptive innovation, to help solve major global challenges such as climate change, pandemics and food security. La Synapse's ambition is to enrich France's deeptech with entrepreneurial know-how, scientific talent and international perspectives, in partnership with transatlantic leaders in innovation ecosystems and institutions such as BPI France, French Tech, Team France Export and Choose France.

Action

In concrete terms, La Synapse's action is based on the OST experience of over twenty years in supporting technological innovation at the frontier between research and entrepreneurship. Through the New Technology Venture Accelerator (NETVA), the Young Enterprise Initiative (YEi) and the French American Innovation Days (FAID) programs, the OST has had a significant impact on transatlantic links between academic research, technology development and science-based entrepreneurship. The NETVA program, launched in 2010, has supported 202 French deeptech startups, stemming from scientific research or backed by research laboratories, in their quest for best practices in technology commercialization and international prospects. Conversely, between 2005 and 2020, the YEi program attracted nearly 200 foreign talents to France to discover its innovation ecosystem. Since 2001, the FAID programs have been creating synergies between transatlantic researchers, entrepreneurs and industrialists. Building on the positive track record and results of these programs and its network of more than 1,400 French and Francophile professors, researchers, scientists, entrepreneurs and executives across the United States, the OST aims to bring together its activities of support for deeptech innovation within La Synapse, around 4 training, immersion and networking programs, based on 3 major assets: exceptional human capital, key geographical locations and strategic thematic competencies.

Deeptech

Deeptech is a term used to describe cutting-edge technologies based on scientific and technological innovations with disruptive potential in their field of application.

Unlike traditional technology, which focuses on improving existing products and processes, deeptech aims to create innovative new products and services that push back the limits of current technologies; it is often associated with long term research and development, longer financing cycles and greater challenges in bringing products to market than traditional technology. Deeptech is therefore a continuation of scientific research.

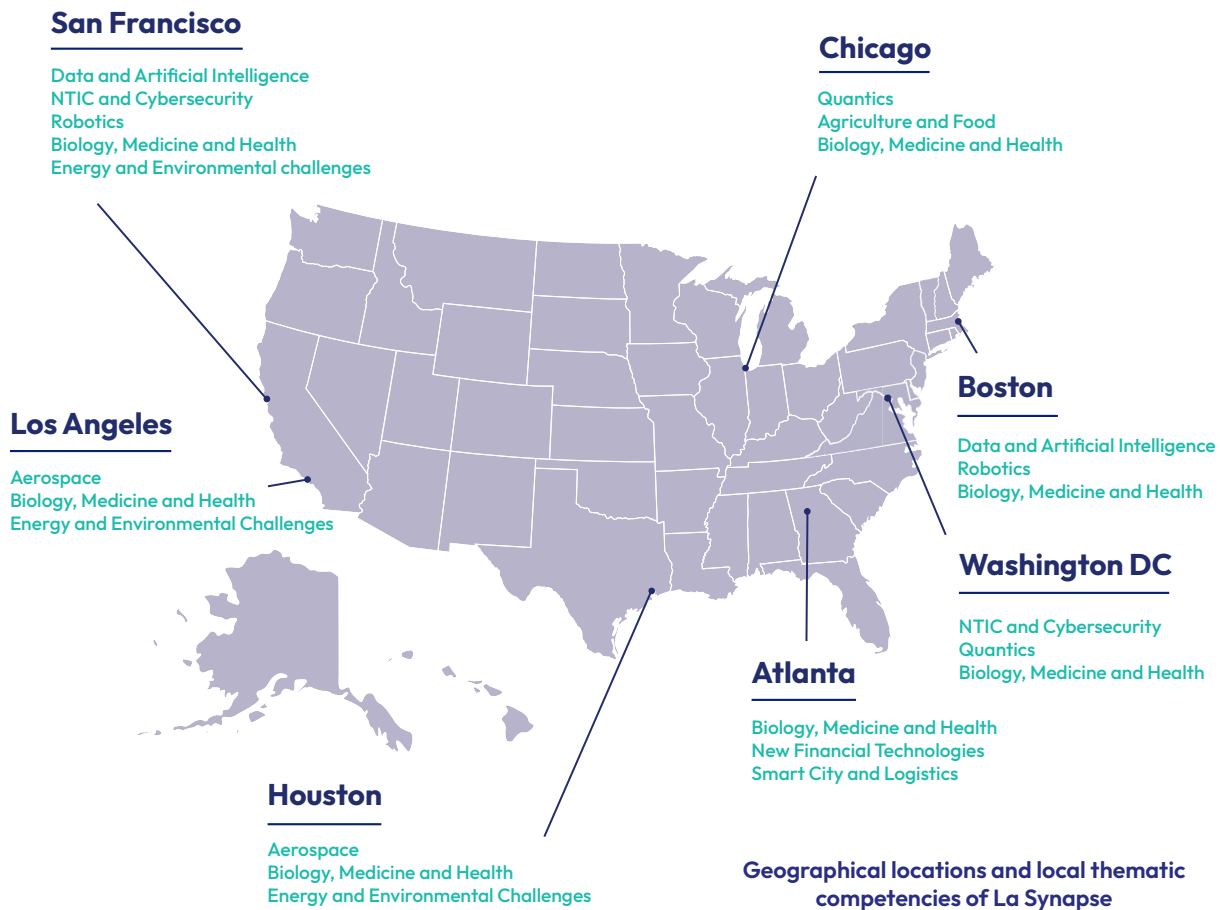
This is why the OST, which is in charge of scientific diplomacy, has made deeptech diplomacy one of its core missions through La Synapse.

Ressources

A dedicated website, la-synapse.com, presents the initiative as well as its various programs. The Office for Science and Technology has also produced a launch manifesto, entitled "Transatlantic Perspectives for Deeptech", which details the vision, mission, programs, geographic locations and thematic competencies.



la-synapse.com



Programs

- **Start in America (NETVA)**, for 15 to 20 French startups, deeptech, early stage:
 - Selection in autumn
 - Training seminar in February in Paris
 - Immersion in the U.S. in spring at our 7 locations
- **Start in France**, for 10 US-based deeptech talents:
 - Selection in autumn
 - Virtual training seminar in January
 - Immersion in France in spring (Île-de-France and other regions)
- **Innovation Days**, for French companies and researchers
 - Programmed on an as-needed basis
 - Date and location to be defined according to mission
 - 3 days of meetings, exchanges and discussions to build partnerships
- **Learning Expedition**, for students and training programs
 - Programmed as and when required
 - Date and location to be defined according to the mission
 - 3 days of visits and meetings to discover an innovation ecosystem

NETVA

- Start in America

The New Technology Venture Accelerator (NETVA) program, now known as Start in America, organized by the Office for Science and Technology (OST) of the French Embassy in the United States, has been offering young French deeptech startups personalized support in analyzing opportunities and technological partnerships in the United States. This support is provided in two phases: a training seminar in Paris, followed by a week's immersion in one of the seven American ecosystems where the OST is present. NETVA is organized in partnership with Bpifrance and the French Ministry of Higher Education and Research.

For the winners of the NETVA 2023 edition, immersion took place between March and May 2023. A seminar was organized in February 2023 to prepare the startups for the realities of the American ecosystem. The immersion took place face-to-face in the Atlanta, Boston, Chicago, Houston, Los

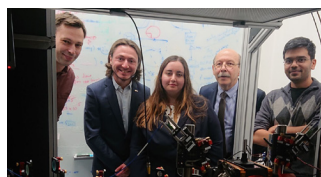
Angeles, San Francisco and Washington DC ecosystems. For startups, the objectives of this immersion were to :

- meet entrepreneurs, specialized companies, incubators and start ups to gain a better understanding of the American ecosystem;
- forge links with academic players and research laboratories for technological co-development; familiarize themselves with intellectual property issues in the USA;
- develop internationalization prospects.

In all, the program mobilized more than 400 players on the entrepreneurial scene in all 7 locations, involving more than 20 venture capital funds, 55 companies, 60 support structures (incubators, start ups, chambers of commerce) and 50 researchers through almost 100 personalized meetings.



San Francisco



Chicago



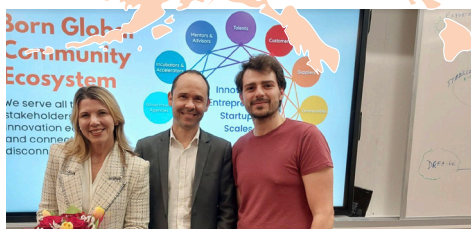
Boston



Los Angeles



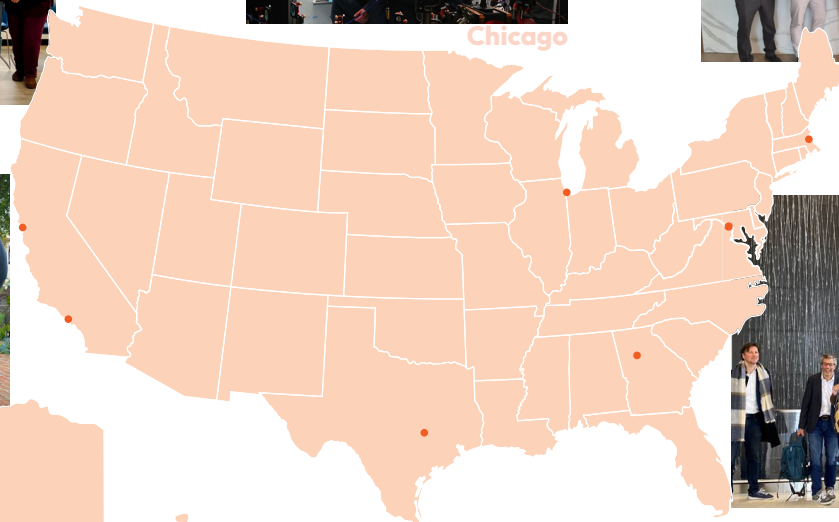
Washington DC



Houston



Atlanta



"Participating in the NETVA program was a transformative experience for me. The week in Los Angeles, orchestrated exceptionally well by the French Embassy in the United States and the Los Angeles team, offered me an immersion in the American entrepreneurial ecosystem. [...] The sound advice I received from experts in fund-raising in the United States was particularly valuable. Over and above my technical knowledge, NETVA provided me with a solid network and enriching professional relationships. [...] In short, NETVA is not just a program, it's a gateway to concrete international opportunities. I would like to express my gratitude to the French Embassy in the United States and 'La Synapse' team for this exceptional experience, which will continue to positively impact the development of my company, aKen Medical."

NETVA TESTIMONIAL



Inila Quere
aKen Medical

LA

Paire

develops an AI tool to facilitate MRI reading. Their solution improves productivity reduces measurement variance, provides a second opinion and gives access to new indicators.

Aken Medical

is developing a new generation of personalized radiotherapy for the treatment of solid cancer tumors, with the aim of improving the efficacy of current therapies and reducing their side effects.

Austral Dx

develops a new ultrasound-based imaging method for the rapid, simultaneous diagnosis of cardiac and pulmonary pathologies.

BOS

InSpek

is developing a new sensor based on optical microchips, enabling better characterization of (bio)chemical reactions, accelerating chemical process development and reducing production errors in a wide range of industries.

Myotact

develops a biomedical solution for people suffering from phantom limb pain. Their solution enables the acquisition of muscle activity and generates adequate tactile feedback.

Chipiron

develops a new generation of low-magnetic-field MRI machines to overcome the constraints of conventional MRI machines.

SF

Ochy

is an application that uses image processing and AI to help people of all levels maximize their physical potential by providing a bio-mechanical analysis of their movements from their smartphone.

Safehear

develops hearing protection for people working in noisy environments (up to 100 dB) while enabling them to communicate with each other.

XmBauble

develops XmART: a unique and secure digital identity for any physical object that enables authentication.

WAS

Astran (ex Astrachain)

develops a new software solution enabling their customers to adopt the cloud without compromising data confidentiality.

Bfore.Ai

develops artificial intelligence algorithms that identify potential malicious domains even before they become active.

Snowpack

develops a technology that enables its customers to use public Internet networks to send their data anonymously and securely.

HOU

Revival Bionics

develops innovative prosthetics and orthotics designed to fully compensate for the handicaps associated with lower-limb amputation or paralysis.

Twincal

develops a new paradigm to help surgeons preview soft-tissue surgery. Its technology combines artificial intelligence and augmented reality for enhanced visual guidance during operations.

ATL

Firecell

develops and distributes the first open source software solution for 4G and 5G, enabling manufacturers to deploy private networks in their factories and industrial sites.

MecaBotiX

develops innovative robots that can work alone (mono-robot) or in groups (poly-robot), adapting to the task according to its complexity, the workspace required and the load to be handled.

CHI

Predicting Med

provides diagnostic and prognostic services for personalized medicine. The company is the originator of the Pancreas View molecular test, which enables prognostication and therapeutic treatment of pancreatic cancers;

Welinq

is developing a high-performance quantum memory and agnostic quantum link solution to interconnect multiple quantum processing units.



Accompaniment of Ministerial delegation at CES

📅 January 5 to 7

📍 Las Vegas

From January 5 to 8, 2023, the greats of the global technology industry and promising young companies gathered in Las Vegas for the Consumer Electronics Show (CES), known as the world's most influential technology gathering.

This year, for the second time in a row, the French delegation was the largest international delegation, with over 170 startups supported by Business France and FrenchTech. France was also awarded the title of "champion of innovation" by the Consumer Technology Association (CTA), organizer of the event. Mr. Jean-Noël Barrot, Minister Delegate for Digital Transition and Telecommunications, attended the event, accompanied by Mrs. Julie Duhaut-Bedos, Consul General of France in Los Angeles, as well as two regional presidents, Mrs. Valérie Péresse and Mrs. Carole Delga, representing the Ile-de-France and Occitanie regions respectively.

French Space Days

📅 April

📍 Houston



The CNES Washington office, in partnership with Business France (Export) and the French Consulate team, organized an agenda in Houston for a delegation of private French space companies. Three days dedicated to meeting, discovering and understanding the local space ecosystem, in one of the most space-active states in the US. The three days were rich in discoveries and enriching encounters, and promised many opportunities for the future, with the NASA Johnson Space Center, the NASA Neutral Buoyancy Laboratory and Rice University's Next Emerging Science and Technology Center (NEST).

Biotech LA Summit: raising awareness of our actions to promote innovation in biotechnology

📅 **October 21st**

📍 **Los Angeles**

In October, at the ninth annual summit organized by Biotech Connection Los Angeles (BCLA) at the California NanoSystems Institute (CNSI) at University of California Los Angeles (UCLA), The OST was invited to represent France on the topic of "Bridging Continents: LA's Role in International Biotech Ventures". Clara Devouassoux, deputy for Science and Technology at the Consulate General of France in Los Angeles, promoted the work of the OST and French biotech innovation policies. She was joined by experts involved in global collaborations with the South Californian biotech ecosystem, such as Dave Whelan, CEO of BioscienceLA (moderator), Pamela Collingwood, Director of International Strategic Alliances at Cedars-Sinai Technology Ventures, James Cummings, Vice President of Business Development at London & Partners, and Jong Choi, Founder of M3 Global LLC (consulting firm for Korean companies).

Delegation of young female entrepreneurs

📅 **15 au 22 mars**

📍 **Boston**

The Boston OST and the Consulate General of Boston organized the visit of 10 young female student-entrepreneurs from Paris-Saclay University from March 15 to 22nd, 2023. This week of immersion enabled the delegation to confront their ideas with Boston's entrepreneurial ecosystem, in particular Labcentral or major pharmaceutical companies such as Sanofi or Servier, partners of the event.



Scientific Diplomats Network of the San Francisco Bay Area

📅 **founded in June 2023**

📍 **San Francisco**

Inspired by the Women in Science Diplomacy association, founded in 2023 in Washington DC, the OST in San Francisco initiated in June 2023 the creation of a network of science diplomats in the San Francisco Bay Area. Initially supported in this project by its British, Swiss and Dutch alter-egos, the OST's team in SF now belongs to a network of over 30 diplomats from 20 consulates in San Francisco, including many European countries, as well as India, Korea and Japan. Informal in content and deliberately focused on science and research, this network meets occasionally to share best practices in scientific diplomacy, or to organize joint visits to nearby university and technology sites. The network also shares invitations to events organized by its members, so as to offer the various diasporas of the concerned countries more opportunities to get together and exchange views on scientific topics. This initiative is particularly valuable in the wake of the pandemic, which had a severe and lasting impact on event attendance in the San Francisco area. Last but not least, given the Bay Area's vast and ever-changing scientific ecosystem, this network is an effective way of welcoming and guiding new scientific diplomats arriving in the Bay Area.



Emmanuelle Pauline-Vaujour
 Attachée for Science and Technology



Event ‘The Future of Skills in the AI Era’ on business transformation through generative AI - In collaboration with Nasa & UC Berkeley - at NASA Ames

📅 **September 22**

📍 **San Francisco**

On September 22, 2023, the OST in SF co-hosted with UC Berkeley and NASA a day of discussions around educational and professional challenges in the age of Artificial Intelligence (AI) and large language models (LLMs), in the image of ChatGPT. The event, which was held at the NASA Ames Research Center, welcomed renowned speakers to share their latest advances on the hot topics of AI regulation, the spread of AI into our businesses and technologies, the AI revolution for the technological moonshots of the future, data protection, and AI as an object and tool for continuing education.

The event brought together a number of key figures and key players in this changing landscape, including Amy Tong, California’s Secretary of Government Operations, who was joined by 10 members of her team who worked on the Governor’s recent executive order on AI regulation, including Ashkan Soltani (Executive Director at the California Privacy Protection Agency, CPPA) and Nolwenn Godard (French, Director of the California Office of Data and Innovation).

Of particular note is the organization of an unprecedented "diplomatic" panel, moderated by the scientific attaché in San Francisco, bringing together the consuls

general of France and Ukraine, the representative of the EU office in San Francisco and NASA’s head of international programs to discuss the role of international cooperation on these issues.

This day was a precursor to the agreement for the establishment of a future campus of the University of California on this exceptional site, which was officially announced a month later, on October 16, 2023. This is a large-scale project led by our compatriot, Professor Alexandre Bayen, with whom the consulate has been collaborating for a long time.

The organizers collaborated on a second event on societal transformations through generative AI, which was held in Berkeley on December 14. Among the topics discussed: the spread of AI in professional environments, the digital identity of the Californian citizen, the definition of the notion of expert, AI and cognitive development, public health issues, AI as a tool for victory and justice in a war zone, AI and hyperproductivity. Remarkably, this second symposium awarded a prize to the French association OSMOZ, from the suburbs of Trappes, for its action aiming to promote access to AI for everyone.

Science Diplomats Club - Speech by Dr Erwin Gianchandani, Deputy Director of Technology, Innovation and Partnerships, at the National Science Foundation

📅 December 4th
📍 Washington DC

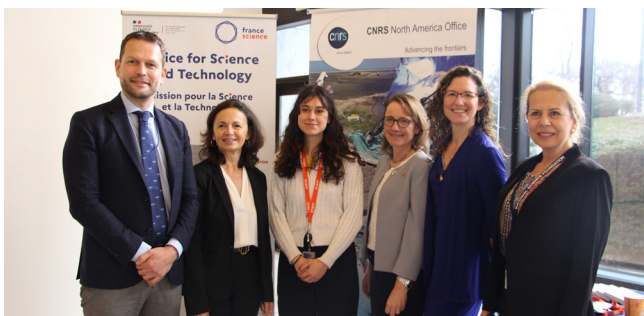


On December 4, Dr. Erwin Gianchandani presented the missions and objectives of his new directorate to members of the Science Diplomats Club, made up mainly of science and technology advisors and attachés from various embassies and representatives of research institutions. He emphasized NSF's commitment to finding talent from diverse backgrounds to foster innovation ecosystems across the US (via, for example, the "Regional Innovation Engines" program), and interacted with the cosmopolitan Science Diplomats Club audience to draw inspiration from foreign initiatives in promoting innovation (i.e. CNRS Innovation), leveraging research results from the laboratory to the marketplace, and exploring new opportunities for collaboration.



Visit to QLife and Institut Curie on the occasion of FAID "HealthAI"

📅 December 5 to 7
📍 San Francisco



On the occasion of the visit to the San Francisco Bay Area of a delegation from the "QLife" Convergence Institute, the San Francisco OST organized 2 days of conferences around the theme of health and artificial intelligence (AI). The delegation was made up of researchers from Institut Curie, Collège de France, ESP-CI, ENS and Institut Pasteur, who came to present the results of their research in cellular and molecular biology, pharmacology and healthcare at the University of California, San Francisco (UCSF). QLife was hosted by its local partner, the Quantitative Biosciences Institute (QBI), with whom a collaboration agreement has already been signed. The symposium, entitled "HealthAI", was co-organized by the OST and QBI, as part of French American Innovation Days (FAID). It featured 4 panel discussions around these same healthcare topics, seen through the prism of AI, as well as a fascinating discussion on issues of ethics and trust in AI, as applied to healthcare and clinical trials. The FAID brought together 18 top-quality speakers and over a hundred participants in lively debates.

04

VALUE

The scientific community

The Office for Science and Technology relies on a dense and active community of French scientists spread throughout the United States in universities, companies and federal agencies, with whom it maintains close and regular ties, and which it helps to promote through various means

Cafés des sciences

The Cafés des sciences are a regular opportunity to bring the general public together with one or more French-speaking speakers, scientists who share their work and their American experience. Each consular post has organized one or more Cafés des Sciences in 2023, and here is a selection.

📅 **March 16**
📍 **Atlanta**

With Mathieu Dahan, research professor at Georgia Tech in the School of Industrial and Systems Engineering.

📅 **November and December**
📍 **Chicago**

In partnership with the FACC, two neuroscience researchers (Maude Wagner from Rush and Laetitia Francelle from Northwestern) and a physicist (Fanny Rodolakis from Argonne) spoke at the Café des Sciences in Chicago.

📍 **Boston**

With Rébecca Kleinberger, a young professor at Northeastern University, an expert in voice technologies.

📅 **December 6th**
📍 **San Francisco**

Rebuilding speech with medicine and AI Prof. Robert Knight, distinguished professor of neurology at the Universities of California, Berkeley (UCB) and San Francisco (UCSF), presented his groundbreaking research into cognitive disorders associated with speech. UCSF's Dr Alexander Silva enthralled the audience with recent breakthroughs in speech restoration using AI. French researcher Ludovic Bellier gave a striking demonstration of the first-ever reconstruction of a piece of music using AI and brain signals. This work heralds future great advances in the ability to reconstruct not only speech, but the musicality of the voice.

📅 **June 8th**
📍 **Los Angeles**

Alexis Souchet, PhD from Université Paris 8 and a Fulbright Visiting Scholar at the University of Southern California (USC), presented his work on the impact of virtual reality on people and the environment, highlighting the importance of quantifying the true environmental impact of these technologies; and, Karim Jerbi, a graduate of Université Pierre et Marie Curie and now the Canada Research Chair in Computational Neuroscience and Cognitive Neuroimaging, presented his studies at the interface of creativity, artificial intelligence and neuroscience.

📅 **December 7th**
📍 **Boston**

Matthias Lambert, a French researcher at Boston Children's Hospital working on genetic causes of his own disease, a rare form of muscular dystrophy, and on Duchenne Disease.



Café des sciences
📅 November
📍 Chicago

Cafés des entrepreneurs

Entrepreneurs' Cafés bring together French innovation players with a guest speaker. These meetings provide an opportunity to discuss the specifics of the innovation market in the United States and to share experiences.

📅 May 10
📍 Boston

Organized during NETVA week, this Café desP entrepreneurs showcased the developments of the startup Genoskin, a NETVA 2016 prizewinner that has since established itself in Massachusetts near Beverly, USA.



Café des sciences
📅 December 6
📍 San Francisco

Cafés des étudiants

📅 April 13 and November 28
📍 Atlanta

The Café des étudiants is an initiative to meet French doctoral students pursuing their studies at a local university. This meeting provides an opportunity to discuss the motivations of French students for joining American institutions, their ambitions once they graduate, their feedback and opportunities in France in the fields of higher education, higher research, research and innovation.



Café des sciences
📅 December 7
📍 Boston

Apéros des Sciences

The Apéros des Sciences are convivial get-togethers for the French scientific community based in the United States. Several scientists are invited to present their research work before a more informal exchange of ideas. The Apéros des sciences are organized at the French Embassy in Washington and the French Consulate General in Los Angeles.



Apéro des Sciences :
Women and Diversity in Science
📍 Los Angeles



Apéro des Sciences
📍 Washington DC

Women and Diversity in Science

📅 March 6th

📍 Los Angeles

On March 6, 2023, an Apéro des Sciences was held on the representation of women and diversity in Science. The event was organized by the Science and Technology Department of the Consulate General of France in Los Angeles. It provided an opportunity to communicate on feminist diplomacy and France's international strategy for equality between women and men, and to reflect on the issues, challenges and actions that can be taken to ensure diversity in science. The event also provided an opportunity for the scientists in attendance to exchange views with Aurélie Jean, a doctor of science and entrepreneur specializing in algorithms and digital simulations, about her personal experiences and the actions she is taking to support girls and young women and encourage them to embark on scientific careers.

San Diego's biotech and healthcare ecosystem

📅 March 22nd

📍 Los Angeles

As part of the NETVA immersion week in Southern California, San Diego's biotech and healthcare community was brought together in collaboration with French BioBeach, a local network of French-speaking and Francophile researchers-entrepreneurs. San Diego is a very dynamic ecosystem in this field, and many French scientists are settling here and strengthening collaborations with France. These strong ties have led to the establishment of a "La French Tech office" in San Diego, to be inaugurated in 2023: its aim is to facilitate transatlantic exchanges in various technological fields, particularly in the life and health sciences.



SciChat: Earth Day

📅 April 18th

📍 Los Angeles

A popular science conference was held at the Lycée Français in Los Angeles. The speaker was Samantha Yeo, a French-speaking scientist specializing in geospatial data analysis who works for the non-governmental organization The Nature Conservancy. Samantha Yeo presented her work on remote sensing of vegetation and terrestrial carbon estimation. The conference drew great interest from around 120 students aged 11y to 14y, and enabled them to learn more about the application of science to the environment, as well as science diplomacy.

Tribute to Gustave Eiffel

📅 November 7th and 8th

📍 Washington DC and New York City

The year 2023 was a year of centennial tribute to Gustave Eiffel (1832-1923). For this occasion, Mr. Jean-François Belhoste, an engineer from the Ecole Centrale (from which Gustave Eiffel graduated) and historian, delivered two lectures, successively at the Maison Française in Washington on November 7 and at the Villa Albertine in New York City on November 8, to remember the engineering feat represented by an emblematic transatlantic project in its time: the Statue of Liberty.



2023 Berkeley Business Analytics Summit on "Analytics, AI, and Society: Towards a Wiser World?"

📅 December 14th

📍 San Francisco

This year's Berkeley Analytics Summit addressed important issues around recent advances in "mainstream" AI deployment, AI regulation and the measurable impact of AI on society. The OST of SF had the opportunity to actively contribute to the debates by organizing a science apéro followed by an exchange on the theme of AI exposure in young children and its impact on cognitive development. The presentation highlighted the Everyone.AI project, spearheaded by three French women specializing in child psychology, speech therapy and entrepreneurship, who will co-publish a white paper in early 2024 referencing all their exchanges with experts in AI, cognitive science and child development. The presentation was followed by an exchange with Jodi Halpern, distinguished professor of public health at Berkeley, on the link between AI and mental states.

Distinctions

Dr. Linda Fried,
Knight in the National Order of the Legion of Honor (Chevalier dans l'Ordre National de la Légion d'Honneur)



Dr. Subra Suresh,
Knight in the National Order of the Legion of Honor
(Chevalier dans l'Ordre National de la Légion d'Honneur)

Delegations



Didier Samuel, CEO of INSERM
📅 November 2023
📍 Washington DC

Science and Technology Watch

The Office for Science and Technology continuously monitors research in American laboratories, universities and research institutes, and acts as an observer of American strategy in certain key areas, notably innovation and investment in research and development. This watch is enhanced by the production of diplomatic notes and public articles distributed via our newsletter and accessible on the website “france-science.com”. The department for science and technology and the research organizations CNRS, CNES and CEA each publish a monthly newsletter accessible on the website. This page gives a brief overview of this monitoring work.

Selection of articles

February: As every year, MIT publishes the 10 innovations that will make news in 2023

April:

- The White House's strategy for eliminating "Eternal Pollutants"
- Biofuels and the future of transportation: US ambitions for "sustainable mobility"

May: US energy scenarios and carbon management to 2050

June: USDA research strategy for 2023-2026: promoting innovation and sustainability in agriculture

July: Congressional review of 5 years of national quantum strategy

September: One year after the CHIPS and Science Act "Invent it Here, Make it Here", President Biden's new motto

November: Equal opportunity in the United States and maternal health research

Frugality in the land of giant language models: between paradox and necessity

- in collaboration with Datacraft

📅 June 15 to September 15

📍 San Francisco

As part of a collaboration with French startup Datacraft, The OST in SF hosted an internship during the summer of 2023 on the subject of AI frugality. Combining intelligence and fieldwork, this exploration highlighted the strengths and weaknesses of the French and American ecosystems on the subject of AI that consumes less data and energy, a field in which France is demonstrating much greater hindsight than its American partner. This collaboration has led to the publication of a series of articles by the OST in SF on the frugal AI landscape in Silicon Valley - most often embodied by expatriate French engineers, who would like to see this issue given greater prominence. Finally, a workshop was held in Paris on the premises of Datacraft and with the collaboration of Airbus - which provided a suitable dataset. The aim of this workshop was to put into practice the know-how and frugal coding rules explored during this collaboration. Initially scheduled to take place simultaneously in San Francisco, the American edition of this workshop could finally be held in 2024.



"Frugale AI is turning technological codes upside down codes: deciphering innovative technical solutions from Silicon Valley"

Article to be found
france-science.com



Communication

Context

Since October 2022, the Office for Science and Technology of the French Embassy in the United States has been working on a graphic charter to give a modern, and dynamic image of its activities, and to ensure graphic consistency in its media communication, making it more attractive and homogeneous, notably with a logo conveying its symbols and values.



Visual identity

France Science communicates several messages:

- The colors of the French flag and the Marianne font, reflect our affiliation with the French public service (see the new graphic charter for government communication in France, created in 2020);
- A series of values motivate our actions on American soil:
 - science and technology,
 - excellence and innovation,
 - bilateral exchanges and the connection between the two countries,
 - movement and mobility;
- The hexagon on the "i" of the word science represents the geometry of France;

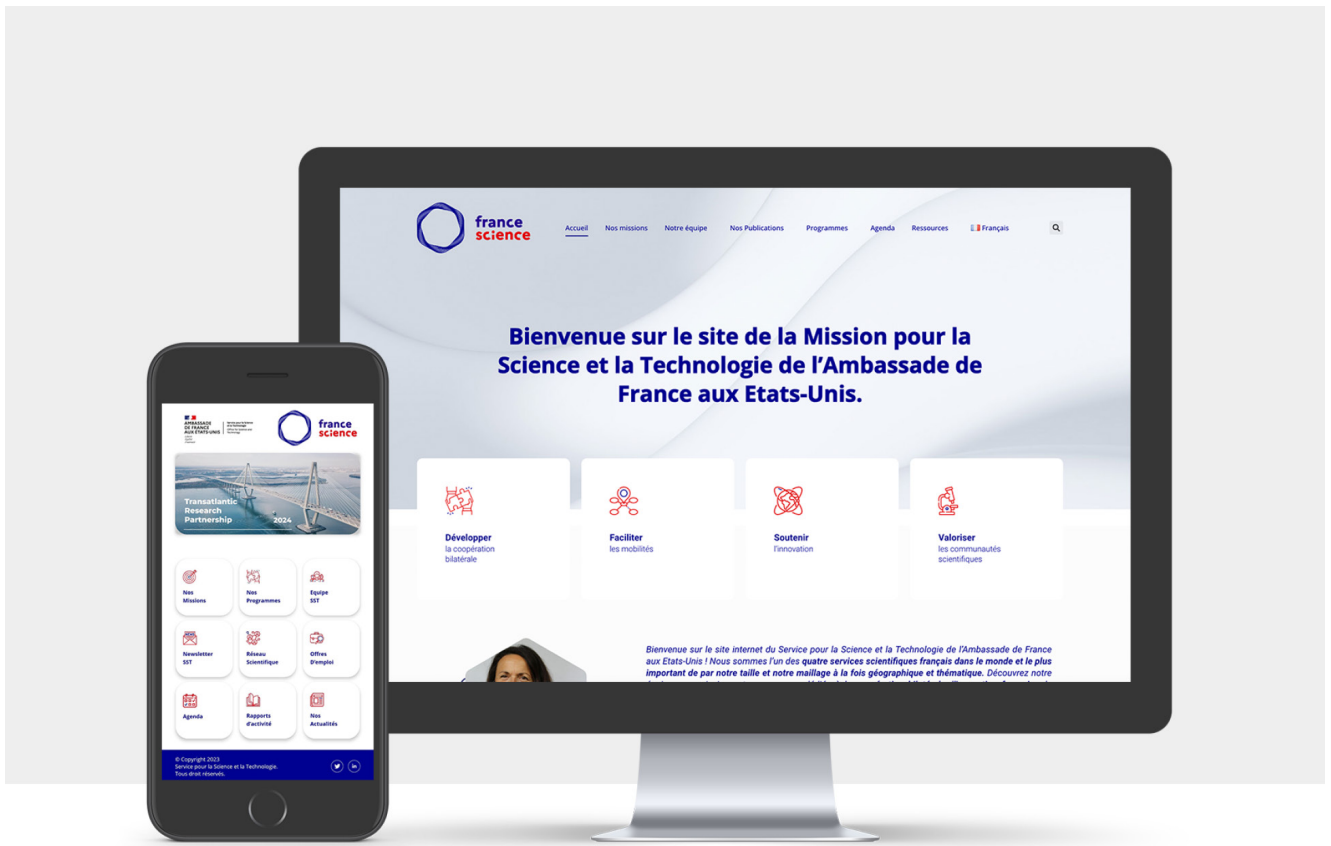
- The seven intersecting lines, also forming a hexagon, refer to science, new technologies, innovation, mobility and connection, and may be seen by some as the Möbius strip or the DNA symbol. In the creative process, these seven lines originally represented the seven OST locations in the USA;

- A hidden symbol: if we flip the two "c" s, present in the word France (in blue) and in the word Science (in red), an "S" is formed. The letter "S" then becomes the first letter of the word "Science", but also draws the infinity symbol and represents the bilateral exchange between the two countries.

Communication materials

The department's new logo will be used in a variety of ways, including kakemonos for events, flyers for program presentations, a new website (france-science.com) and its Android application. Business cards reflecting the visual identity were also designed, as was a PowerPoint presentation. This approach ensured visual consistency and an effective presence across all communication channels.





The science and technology team

WASHINGTON DC

Mireille GUYADER

Counselor for Science and Technology

Leah NAMOUNE

Administrative and Financial Manager

Julian MULLER (- march)

Juliette FALEWÉE (april -)

Deputy attaché(e) to the Counselor

Richard BURKE

Programs assistant

Héloïse THERRAT

Communication officer and webmaster

Joaquim NASSAR

Attaché for Science and Technology

Théophile ALTUZARRA (april -)

Deputy attaché for Science and Technology

Xavier BRESSAUD (- august)

Pascal REVEL (sept -)

Attaché for Science and Technology

Antoine GLORY

Deputy attaché for Science and Technology

ATLANTA

Rami ABI-AKL

Attaché for Science and Technology

Yann FERRY (- sept)

Pauline BOULAY (nov -)

Deputy attaché(e) for Science and Technology

BOSTON

Jean-Philippe NICOLAI

Attaché for Science and Technology

Alexandre BÉCACHE

Deputy attaché for Science and Technology

CHICAGO

Jean-Paul LALLES

Attaché for Science and Technology

Marie POIROT

Deputy attaché for Science and Technology

HOUSTON

Renaud SEIGNEURIC (- august)

Alessio GUARINO (sept -)

Attaché for Science and Technology

Noelly ROUSSEL (sept -)

Deputy attachée for Science and Technology

LOS ANGELES

Karim BELARBI

Attaché for Science and Technology

Clara DEVOUSSOUX

Deputy attachée for Science and Technology

SAN FRANCISCO

Emmanuelle PAULIAC-VAUJOUR

Attachée for Science and Technology

Valentine ASSEMAN

Deputy attachée for Science and Technology

Raegen SALAIS-FABRE

Science and Technology assistant

ÉQUIPE CNRS

Sylvette TOURMENTE

Director of the CNRS office in Washington

Jeanne RÉVIL

Deputy Representative CNRS

Audrey DUC (- march)

Erel GLOAGUEN (april -)

Deputy Representative CNRS

ÉQUIPE CEA

Sunil FELIX

Nuclear Counselor

Mislav ROGOSIC (- march)

Thomas GUYARD (april -)

Deputy Nuclear Representative

Oumaïma MHIBIK (- june)

Julien DI MASCOLO (july -)

Deputy Alternative Energies Representative

ÉQUIPE CNES

Nicolas MAUBERT

Space Counselor

and CNES Representative

Samuel MAMOU (- march)

Chloé SAVINIEN (april -)

Deputy Representative CNES

Thomas LESAGE

Deputy Representative CNES

INRAE

Laura GONCALVES DE SOUZA

INRAE Representative





Editorial Manager
Mireille Guyader
Conception and realization
Héloïse Therrat
Editor-in-Chief
Juliette Falewée
Translation
Raegen Salais-Fabre
Richard Burke

Contributors:

Joaquim Nassar, Théophile Altuzarra, Xavier Bressaud, Pascal Revel, Antoine Glory, Rami Abi-Akl, Yann Ferry, Pauline Boulay, Jean-Philippe Nicolai, Alexandre Bécache, Jean-Paul Lallès, Marie Poirot, Renaud Seigneuric, Alessio Guarino, Noelly Roussel, Karim Belarbi, Clara Devouassoux, Emmanuelle Pauliac-Vaujour, Valentine Asseman, Raegen Salais, Sylvette Tourmente, Jeanne Révil, Erell Gloaguen, Sunil Felix, Thomas Guyard, Julien Di Mascolo, Nicolas Maubert, Thomas Lesage, Chloé Savinien, Laura Gonçalves de Souza, Julian Muller

Photo credit:

Nassereen Mirza/Ambassade de France aux États-Unis,
Christophe Ortega/Consulat général de France de Los Angeles,
Loïc Ruffaud/LR visuals,
Héloïse Therrat/Service pour la Science et la Technologie, Ambassade de France aux États-Unis

france-science.com

