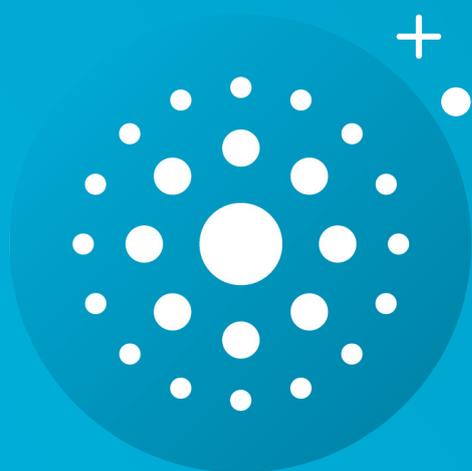


UCA J.E.D.I.
UNIVERSITY FOUNDATION

ACTIVITY REPORT + 2024



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"In its pilot phase, IdEx Université Côte d'Azur aimed to create a new university that was modern, agile and ambitious. Now permanent, IdEx is a strategy and development program for the whole university."

In accordance with our commitments, we are pleased to present the IdEx activity report for 2024. In its pilot phase, IdEx Université Côte d'Azur aimed to create a new university that was modern, agile and ambitious. Now permanent, IdEx is a strategy and development program for the whole university. Its earmarked budget enables it to incubate projects, experiment with schemes and accelerate actions with the aim of making Université Côte d'Azur a high-impact, research-intensive university with a strong international visibility that raises the profile of its region.

In 2024, more than 200 project leaders benefited from IdEx funding, and invested in the future of research by recruiting 17 PhDs and 21 postdocs with IdEx funds. More than half the IdEx budget is directly or indirectly injected into research at Université Côte d'Azur, with a strong emphasis on trans- and interdisciplinarity, and addressing the United Nations Sustainable Development Goals (SDGs).

The investments for the future through which IdEx receives its dedicated funding encourage us to think in the medium and long term. Our policy of attracting talent, which is shaping the future of Université Côte d'Azur, is yielding concrete results in terms of recruitment to the national research organizations: of the eight new researchers who obtained permanent positions at the university in 2024, three are former recipients of IdEx postdoctoral funding, illustrating the high standard of the young researchers selected, the quality of our laboratories and the pertinent assessments made by the graduate schools (EURs).

New in 2024, research support specifically targeted at faculty members was awarded to the inaugural four members of the IdEx *Collegium of Advanced Studies*, who were selected by a high-level international jury. New members will be admitted each year for the next four years, until the *Collegium* has grown to sixteen people.

IdEx also strongly supports the university in its new status as a Major Institution, funding 27 positions in university departments outside IdEx. It devotes 25.3% of its budget to support services, either for its own activities or in the form of ongoing or one-off support for the institution's departments.

Given the large number of actions and projects supported by IdEx and its structures, this report cannot be exhaustive.

Sylvain Antoniotti

Vice-President in charge of the Initiative of Excellence

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STEERING, ORGANIZATION AND KEY FIGURES

STEERING AND ORGANIZATION

Consolidation of steering

Since the confirmation of the IdEx, particular attention has been paid to ensuring that its management structure is connected with that of the university as a whole. This is achieved by the participation of the IdEx VP in the university's governing bodies, and by the participation of the university's statutory VPs in IdEx steering bodies, thus enabling **synergy between IdEx and university strategies**.

The participation of the IdEx and Major Projects Executive Director in the university's executive committees, together with the General Director of Services, also helps to align strategy with administrative management, thus fostering a better understanding of IdEx by university services.

Strengthening support and assistance roles

In 2024, IdEx support and assistance services were strengthened by the recruitment of new staff with the aim of providing strategic services to the community:

- A new head of the Office of International Visibility within the Research Program.
- A project officer in charge of scientific diplomacy attached to the International Program.
- A project officer in charge of strategic international partnerships attached to the International Program.
- A communications manager specifically dedicated to IdEx structures and projects/actions, reporting to the IdEx Executive.

IdEx support services now employ 58 people, 8 of whom are attached to the university finance and human resources departments, for a total budget of €2,677,765.

IdEx also continues to support the capacity-building and modernization of the university through the funding of 14 positions assigned to University services (in addition to the 10 assigned to support IdEx), 5 positions in support of the Graduate Schools (EURs) and 8 attached to an Innovation and Partnership Institute (2IP), for a total budget of €1,131,901.

Simplification

IdEx is fully committed to the research simplification project initiated by Université Côte d'Azur following the Gillet report. Relevant measures include simplifying its own actions (e.g., streamlining calls for proposals, establishing a framework for the disbursement of IdEx funds), coordinating working groups that aim to simplify the set-up and implementation of European and other research projects, and improving access to information for all researchers at the university.

Measuring the impact of IdEx

In line with the commitments made to the French government, specific indicators to measure the impact of the confirmed IdEx have been defined by the initiative's steering bodies. Monitoring these impact indicators will enable us to steer IdEx and adapt our strategy appropriately.

The first measurement of these indicators was performed at the end of 2024, involving all project leaders who had received funding from IdEx in the previous 3 years. Subsequent measurements will be made at the end of each calendar year.

These indicators aim to measure the impact of IdEx in the following eight areas:

- Outreach / reputation / visibility
- Economic impact
- Attractiveness
- Internationalization
- Building university core structure
- Transformation/change management
- Student life
- Open science

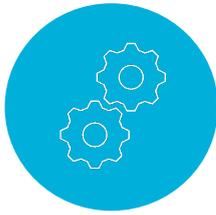
The data collected in 2024 highlight the strong leverage effect of the ERC Boost action, with a success rate of 29% for ERC applications supported by IdEx. An investment of €105,551 generated €31,632,320 in European funding for the laboratories.

Similarly, for a total budget of €9,769,921 allocated to Research Program projects, project leaders received co-funding of €6,164,002.

In terms of innovation, 17 projects were supported by the IdEx DeepTech Startup Call for proposals, and 9 startups were successfully created.

The 2024 indicators also illustrate Université Côte d'Azur's high profile and attractiveness at the international level. Notably, 94% of applications for IdEx academic programs came from abroad, while 65% of senior and junior researchers recruited with IdEx funding were from abroad.

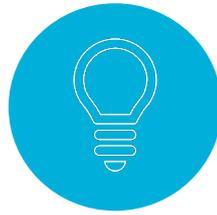
KEY FIGURES



245

New projects funded

(201 recipients)



17

Theses begun in 2024

(of which 9 were co-funded)



21

Postdocs funded



17

Engineers funded in laboratories



58

Staff assigned to IdEx support missions



27

Staff funded by IdEx and assigned to University departments

to support development and capacity-building



1,146

Students applied for IdEx academic programs

(of whom 1,078 were from abroad)



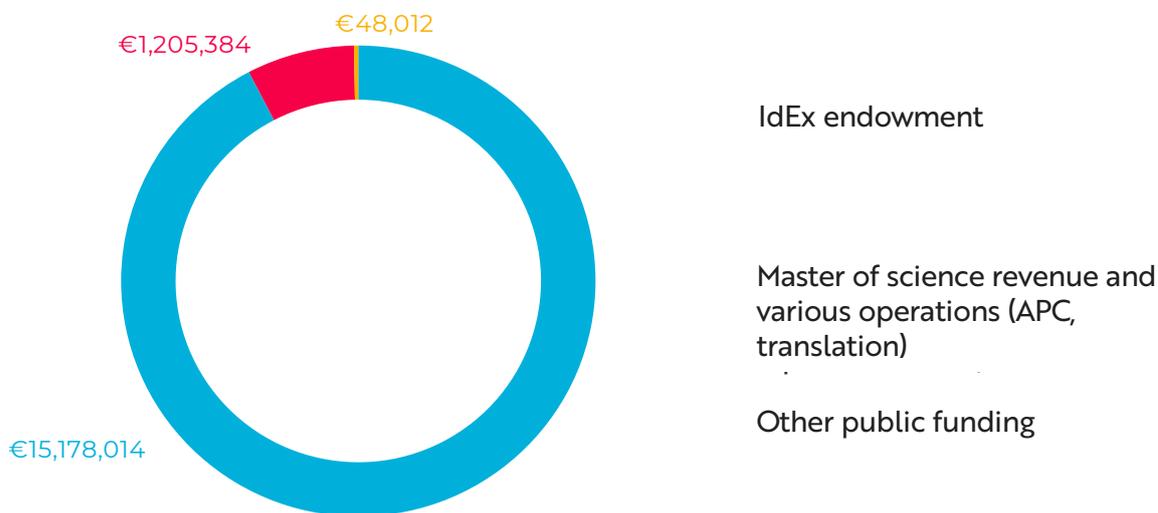
387

Students enrolled in an IdEx academic program

(367 in master's and 20 in university degrees)

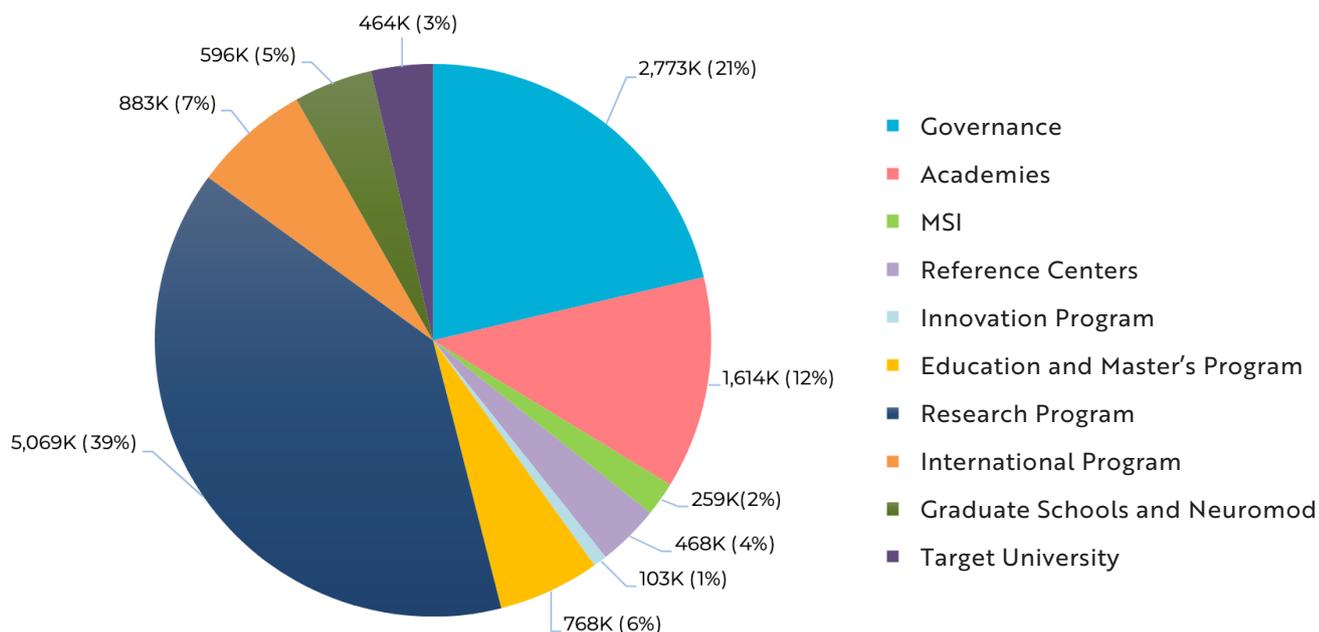
REVENUE 2024

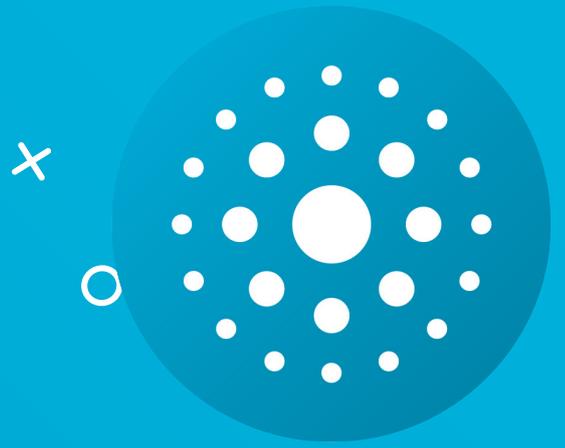
The UCA^{I.E.D.I.} Foundation received €16,431,410 in revenue in 2024, broken down as follows:



MULTI-YEAR COMMITMENTS IN 2024 BY IDEX ACTION

The breakdown of IdEx endowment commitments by action is provided below. It should be noted that these commitments are multi-year (i.e., the budgetary execution of the corresponding actions may be carried out over several years):





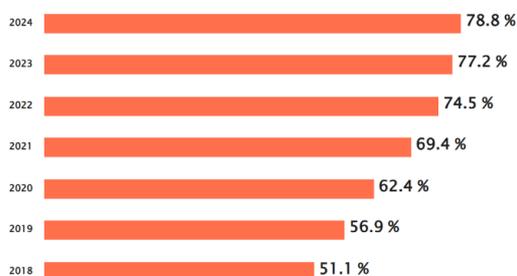
MAJOR PROGRAMS

RESEARCH PROGRAM

Introduction

The Research Program continued to grow this year, building on previous efforts to improve the scientific excellence, international visibility and attractiveness of the university, while consolidating and continuously refining its existing initiatives. The momentum created has led to a significant increase in the number of researchers and teacher-researchers responding to calls for proposals, as well as a marked improvement in the quality of successful applications.

Université Côte d'Azur : Open access rate of Université Côte d'Azur scientific publications with a Crossref DOI published in the previous year by year of observation



Baromètre français de la Science Ouverte – CC-BY MÉSIS

This graph shows, for each year since 2018, the open access rate of Université Côte d'Azur scientific publications with a Crossref DOI that were published in the previous year. Thus, 77.2% of Université Côte d'Azur's scientific publications with a Crossref DOI published in 2022 were open access in 2023 (date of observation). For publication year 2023 this rate rises to 78.8%. The open access rate thus increased by 1.6 points in one year.

The past year also saw the reorganization of the Office of International Scientific Visibility (OISV), which is now attached to the Operational Research Program. This development is part of a wider effort, carried out jointly with the Vice-President of Open Science and DiBSO (Director of Libraries and Open Science), and including the launch of the Impact & Visibility program, to support the dissemination of scientific outputs and strengthen the international impact of work carried out at Université Côte d'Azur. The Université Côte d'Azur's Open Science Barometer, which monitors open access rates of scientific publications, showed that 78.8% of our publications were open access this year, 12 points above the national average.

Another highlight of 2024 was that IdEx became a point of contact for Inria's Quadrant High-risk Research program (PIQ), demonstrating the core, unifying role IdEx now plays in the university community. It is notable that the first project to be selected for this nationwide program came from Université Côte d'Azur, and a second Université Côte d'Azur project has now also been successful.

Finally, the Research Program continues to actively promote the university's strategic vision, supporting interdisciplinary and transdisciplinary projects as well as strategic programs led by IdEx. This focus helps to enhance the university's scientific synergies and foster high-impact initiatives in response to major contemporary issues.

IN 2024



67.3%

of projects supported were interdisciplinary



4 142 k€

in total funding for interdisciplinary projects

IdEx Research Program initiatives



IdEx Postdoc Program - Excellence Fellowship for Young Researchers

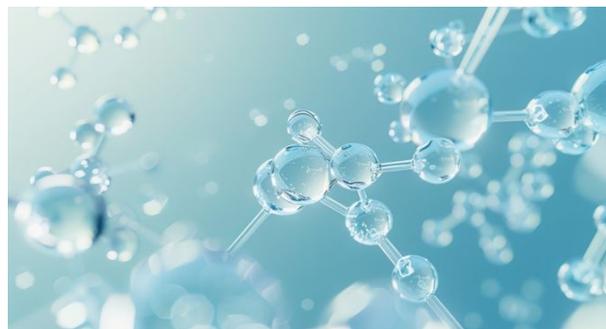


In 2024, IdEx awarded 12 two-year Excellence Fellowships for Young Researchers, including 8 from abroad (Japan, Belgium, Spain, Italy and the United States), confirming the growing international appeal of this initiative. The program received 70 applications this year, a figure that confirms its reach and the interest it attracts in the scientific community.

Furthermore, among the eight researchers who have recently obtained a permanent position at the university, three were recipients of IdEx postdoctoral funding (Guilhem Madiot, Joris Labarbe, Małgorzata Chmiel), illustrating the quality of both the young researchers supported and our laboratories that host them.

Advanced Research Program (PRA) Chairs

Through the PRA program, IdEx is pursuing its strategy of attracting top-level scientific talent, with the aim of raising the university's international profile and promoting excellence based on high-quality collaborations.



Four new PRA Chairs were awarded in 2024, including three to international researchers, Mairi Sakellariadou (King's College London), Mikko Karttunen (Western University, Canada) and Luísa Lopes (Lisbon Faculty of Medicine), and one internal chair, awarded to IRCAN researcher Hervé Techer.

In addition, on the recommendation of the selection committee, IdEx decided to award visiting professorships of four months to two other researchers, Igor Meglinski (Aston University, Birmingham, UK) and Lise Eilin Stene (Norwegian Centre for Violence and Traumatic Stress Studies - NKVTS).

Attractivity Packages

As part of the drive to improve the university's scientific potential and attractiveness, in 2024 IdEx awarded Attractivity Packages to eight new permanent researchers who chose Université Côte d'Azur as their first placement following the national competitive examinations.

These young researchers were recruited to the following laboratories: CEPAM, iBV, C3M, IPMC, LJAD, Géoazur and Inria. The aim is to help the researchers establish themselves in their new laboratory and integrate into local research teams and to support the launch of their scientific projects.



Collegium of Advanced Studies

In 2024, IdEx launched the inaugural year of the Collegium of Advanced Studies, a new scheme for faculty members at Université Côte d'Azur. The aim is to offer members preferential conditions to launch, develop or complete ambitious research projects, or to fund high-level outgoing mobility.

Four members were selected by a committee of internationally renowned researchers: Ingrid Bethus (IPMC), Andreas Höring (LJAD), Jacques Barik (IPMC) and Paolo Zeppini (GREDEG). Collegium members benefit from a reduced teaching load, a bonus and an operating grant, providing enhanced conditions for carrying out their research project.



Impact & Visibility Program

In conjunction with the Vice-President of Open Science and DiBSO (the Director of Libraries and Open Science), IdEx has established a new scheme designed to increase the impact and visibility of scientific work carried out at Université Côte d'Azur, while actively supporting open science.

This scheme complements the Couperin agreements and offers full or partial payment of publication costs in open access journals (Gold OA) via the article processing charges (APC) tool, as well as personalized support to improve the dissemination and promotion of the university's scientific output. This collective effort is already bearing fruit: the rate of open access of scientific publications produced by the university's teams reached almost 80% in 2024, a remarkable level by national and international standards.

This initiative ties in with the reorganization of the Office of International Scientific Visibility (OISV), now attached to the Operational Research Program and strengthened by the arrival of Vincent Dusastre, founder and former editor-in-chief of the journal *Nature Materials*. His expertise will be valuable in helping researchers develop their publication strategy and aim for the most selective journals. Since his arrival, he has led several seminars at the university's laboratories, notably INPHYNI and CRHEA.





Research Program events

IdEx Tour

To raise awareness of the tools available to researchers, the IdEx Research Program, together with the Innovation and International/Europe Programs, held an information half-day on September 25, 2024 at the Jean Alexandre Dieudonné Laboratory (LJAD) on the Valrose campus.

The IdEx Tour was an opportunity to meet with researchers, make them more aware of the opportunities on offer, gather their suggestions and respond to questions.



IdEx Research Meetings – IdEx Young Researcher Award

On March 13, 2024, the IdEx Research Program held an event to highlight the innovative research work carried out by Chairs of the Advanced Research Program as well as postdoctoral researchers supported by IdEx.

The event also provided the opportunity to present the IdEx Postdoctoral Research Award. Seven young researchers from different laboratories at the university presented their work to a jury made up of members of the IdEx Steering Committee.



Romain Filhol (URMIS), Winner of the IdEx Young Researcher Award 2024

Following the presentations, the prize was awarded to Romain Filhol (URMIS laboratory) for his project entitled "The tomato can: analyzing the trajectory of an object produced by and for migrants".

INNOVATION PROGRAM

The IdEx Innovation Program's mission is to promote the transfer of technology and expertise from academic research teams at Université Côte d'Azur, by supporting collaborative R&D and the creation of innovative DeepTech companies.

In 2024, the program was based on schemes such as the DeepTech Startup and Innovation Partnership calls for proposals, while seeking to consolidate its support with that of other university entities dedicated to innovation and business creation, such as UniCA Entreprendre, Ulysseus and IMREDD.

Université Côte d'Azur acquired the status of Major Public Scientific Institution (EPSCP, *Etablissement public à caractère scientifique*) by Decree no. 2024-845 issued on July 16, 2024. The role of IdEx in innovation was also highlighted in the Hcéres evaluation report that followed. Université Côte d'Azur, "backed by IdEx, is perfectly integrated into the ecosystem supporting innovation, transferring research results, and creating businesses across the region."

Recognized by the academic and economic community, the Innovation Program will continue to play a growing role in 2025.

The Innovation Program supports Université Côte d'Azur's initiatives to create innovative companies

IdEx has granted UniCA Entreprendre €133,000 euros for four actions:

- 1) Covering part of the payroll costs (€55,000) to extend the 12-month employment contract of its Operations Director.
- 2) Additional funds allocated to sourcing DeepTech projects (€4,000) to experiment with new themes:
 - Impact and the Social and Solidarity Economy
 - Digital technology
 - Health
 - Cultural and Creative Industries
- 3) Entrepreneurial support (€24,000) to help identify entrepreneurs and introduce them to key entrepreneurial issues.

Actions	Examples
Develop entrepreneurial acculturation events in conjunction with research laboratories	<ul style="list-style-type: none">• Create "48 Chrono IMPACT" 2024 with NUCLEATE• Creative Week with the PhD Club• Webinars: IdEx Academies of Excellence
Develop strong local involvement for our student entrepreneurs	<ul style="list-style-type: none">• Design and implement the first public Consultation on the future of student entrepreneurship• Implement actions resulting from this consultation with all ecosystem stakeholders
Create and lead an entrepreneurial community	<ul style="list-style-type: none">• Create and empower a Université Côte d'Azur entrepreneurial community• Build and coordinate networks in Université Côte d'Azur's entrepreneurial ecosystem• Create tools to help connect student entrepreneurs



4) International entrepreneurship (€20,000)

The cooperation between IdEx and UniCA Entrepreneurs is set to be strengthened in 2025 with Lean Start-Up support and company creation via new business models.



IdEx takes the initiative in the University Innovation Hub (PUI)

On January 1, 2024, the IdEx entrusted the Med'Innov PUI with the task of leading the UniCA J.E.D.I. Innovation and Valorization Commission (CUIV), subsequently renamed the CIV (Commission Innovation Valorization).

IdEx initiated the creation of the Prematuration call for proposals, which was issued in 2024. This grant may be considered a preliminary to IdEx's DeepTech Startup program. Two projects were supported by this action.

IdEx referred the project APT-AETA to the PUI's Prematuration scheme, before studying its potential suitability for the IdEx program. The project leaders of the Inert-Serpine project have identified technology transfer to Roca Therapeutics as a possible route to commercialization. This startup is partnered with the Nice Institute of Chemistry (ICN), in the project Fight NGV, which is funded by an Innovation Partnership grant to fight neovascular glaucoma.

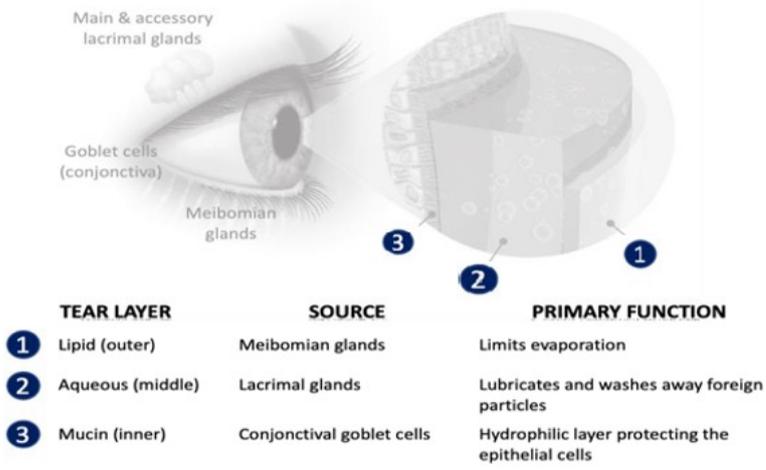
In addition, the BFT Lab program funded by the BPI is exclusive to the PUI. It helps startup projects to position themselves in the market.

Of the five projects awarded BFT Lab assistance through the Med'Innov PUI, three came from IdEx and one was financed by the Young Enterprise Project. A total of €432,700 has been awarded under this program, whose impact has significantly improved with projects from IdEx and Labex Signalife.

Since the amount allocated to a BFT Lab is limited to the funding already granted to the project by a research and knowledge dissemination organization (ORDC), these grants could not have been awarded to the startups without the prior contributions from IdEx or its members.

The Innovation Program: the driving force behind DeepTech startups

The CIV has already approved one application for IdEx startup funds. The project, led by Guillaume Sandoz in the Valrose Institute of Biology (IBV), focuses on the treatment of dry eye disease (DED).



This chronic disease is linked to various factors, such as the aging of the world's population and the increased use of screens, which lead to an imbalance in the eye's layers, causing inflammation that amplifies the syndrome, creating a vicious circle. Artificial tears and other current treatments do not halt the progression of the disease.

Tears are composed of three distinct layers of film.

The technology developed by Guillaume Sandoz's team stimulates the production of natural tears, by targeting an endogenous chloride channel which, when activated, naturally stimulates water secretion. A natural peptide of 13 amino acids (Nter13) has been identified.

The rolling out of calls for proposals in the framework of the national strategy for acceleration (SNA), the PUI's Partnership Research program and the SATT SE's focus on the maturation of business projects, have prompted IdEx to intensify its efforts to create startups by increasing the grants offered under the DeepTech Startup call.

The 2024 call is still aimed at projects that will transform a DeepTech technological concept into an innovative product within a startup company. The amounts granted can now reach up to €100K, divided into two tranches of funding for a maximum duration of two years.

The first tranche of funding of up to €60K will be allocated during the first twelve months of the project. The second tranche of up to €40K is intended to support an additional 6 to 12 months of further development. The second tranche is conditional on achieving certain objectives, such as:

- An increase of the developed technology to a higher TRL, or the development of a new asset identified during the first tranche;
- The registration of a company with evidence of sufficient equity or incubation of the project;
- The creation of a financing plan and presentation of a roadmap that includes the production of a prototype, minimum viable product (MVP) or demonstrator.

In order to avoid competition between IdEx schemes and new programs dedicated to public/private research partnerships, the Innovation Partnership call will be integrated into the DeepTech Startup call for proposals in 2025.

Following the end of its funding, the 3IA Côte d'Azur's Start-It-Up call will also be integrated into IdEx schemes for the coming year.



Identifying potential startup projects



Changes in the economic, environmental or geopolitical context could at first glance discourage potential entrepreneurs. At the same time, however, they also open up new opportunities, encouraging innovation in industrial sectors.

Nevertheless, all IdEx partners have noted a decline in requests for support for the creation of startups. Therefore we need to improve our tools for identifying potential projects, such as the new service offering technology positioning studies, which increase the chances of achieving this objective.

This initiative has been a real success. Available to the entire IdEx research community, it has benefited more than a dozen projects. Project leaders have expressed their interest in this type of support, highlighting in particular the help they can provide in making strategic decisions about the direction of the work to be carried out. Improvements and enhancements of this service in 2025 are currently being considered.

INTERNATIONAL AND EUROPE PROGRAM

In 2024, we continued to support the development of strategic international collaborations, notably by strengthening the mirror campuses, diversifying thematic partnerships and making the partnership with University of Utah more comprehensive.

In terms of science diplomacy, IdEx actions have helped to strengthen Université Côte d'Azur's position on the international scene, notably through its election as Secretary General of the U7+. In parallel, the second edition of the On the road to the COP (*En route vers la COP*) initiative involved a number of highlights and united the community around climate issues.

Finally, Europe remains at the heart of the program's priorities, with two main actions: strong involvement in the Ulysseus European Alliance and coordination of the Joint European Office.

Strategic international collaboration to raise Université Côte d'Azur's profile

Mirror Campuses

The **Balkan Institute for Science and Innovation (BISI)** has contributed to the creation of a master's degree in marine resources at the University of Montenegro, building on the experience of the IdEx MARRES program. At the end of the year, an exploratory visit by the Flavors, Fragrances and Cosmetics Innovation and Partnership Institute (**ZIP APC**), identified the opportunity to support the University of Montenegro in reestablishing its Flavors, Fragrances and Cosmetics program. This action will also contribute to ZIP's international reputation. At the same time, BISI ran its annual competition, which gave students the opportunity to experiment with new technologies. From next year, this initiative will be extended to the Balkan region, with the support of the AUF. Finally, as a key player in the Western Balkans Cyber Capacity Center (WB3C), BISI has continued to support French diplomatic initiatives, while also playing an important role in the development of the Ulysseus Innovation Hub dedicated to cybersecurity that is hosted by Université Côte d'Azur.



Throughout the year, numerous discussions and initiatives were undertaken to support the building of the strategic partnership between the University of Danang and Ulysseus. On a more bilateral level, Université Côte d'Azur joined with the University of Danang to celebrate its 30th anniversary during which an international scientific conference was organized jointly with Danang International Institute of Technology (DNITT) on "**Sustainable development of universities: Opportunities and challenges.**"



An international conference entitled "Smart Cities for ASEAN: Experience and Innovation" (ISSCEI - 2024) and the international final of the Asia-Pacific Smart Campus Competition 2024 (SCAPA - 2024) were also held. Also through the DNITT, 32 Université Côte d'Azur master's students had the opportunity to spend three to five months on a research internship at one of University of Danang's member institutions. Lastly, an exploratory mission was led by Geoazur in conjunction with LEAT and IMREDD to develop a future project on landslides and flooding in the Danang region.

The Franco-Indian Campus, run by EUR LIFE in collaboration with Ashoka University, the Indian Institute of Science (IISc) and the Indraprastha Institute of Information Technology Delhi (IIITD), has made significant progress in just two years. Ten six-month master's student exchanges between Université Côte d'Azur and its Indian partners, as well as three visits to Université Côte d'Azur by Indian PhD students were organized. The program has also promoted researcher mobility, with three post-doctoral exchanges and three scientific collaborations, supported by external funding such as CEFIPRA grants, including a Raman Charpak Fellowship, and three STRF grants. Our financial commitment has been strengthened by our participation in Erasmus Mobility outside Europe and an additional €200K leveraged from the French Ministry of Europe and Foreign Affairs. Students representing the Campus participated in this year's SophIA Summit and won first prize in the Poster category, further enhancing the reputation of the International Program. Like last year, the Franco-Indian Campus brought an international flavor to the Winter School, by contributing students and a guest lecturer. Finally, Université Côte d'Azur delegations involving 25 participants conducted four visits to India from which several scientific projects emerged, notably with IISc, IIITD and Ashoka University. Among the major developments in the pipeline is the opening in September 2025 of a double master's degree in bioinformatics between Université Côte d'Azur and IIITD, with an annual intake of six students.

Thematic strategic partnerships



The partnership set up with the University of Costa Rica (UCR) with IdEx support has led to the creation of a Franco-Costa Rican Chair on social and environmental challenges. After a period of partnership building – marked by the mobility of more than 50 teacher-researchers and students between Nice and San José, the development of several research projects and programs, and the securing of additional co-funding of around €250,000 – the end of 2024 saw the start of a more structuring phase with the identification of three central themes: "Minorities and the Environment", "Marine Sciences" and "Sustainable Food."

A trip to San José in 2025 enabled us to take stock of our achievements, establish contact with UCR's new governing body, which took office on January 1, and strengthen ties with the French diplomatic mission in Costa Rica.





The international doctoral program in Economics between Université Côte d'Azur and the Sant'Anna School of Advanced Studies has been renewed, with funding granted for the recruitment of two doctoral students, while the rollout of a **doctoral program in Vision, Imaging and Robotics** with the University of Melbourne, announced at the end of 2023, was postponed to 2025.

Following the **prospecting carried out in 2023** to develop one or more strategic partnerships with Japan, a first thematic partnership is being established with Osaka University through the IPMC and the Global Center for Medical Engineering and Informatics (MEI). A framework agreement was signed following the visit of an MEI delegation, and the first edition of a joint symposium aimed at building scientific collaborations will take place as early as 2025. Furthermore, in line with commitments made, the international program has put in place an incentive scheme to encourage collaborations with Japan by offering matching funds to research projects that obtain JSPS grants. The first researcher to benefit from this scheme visited Osaka University for a few months in early 2025.

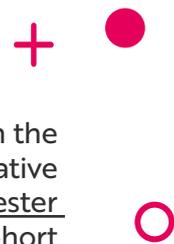
Transversal strategic partnerships

The partnership with Université Laval continues to grow, with increasing resonance within the community. Scientific collaborations were particularly noteworthy, with 17 new publications (mainly in health, IT and physics), the organization of four joint symposia and more than 30 academic exchanges. Substantial efforts, initiated at the very end of 2024, will support the development of new collaborations in health research. On the education side, double degrees continue to be rolled out, as well as the Educational Leadership Chairs (CLEs) in educational design and Women's Health, while the InfoCritique module is now offered as a University Diploma (DU) available to practitioners and medical students. Finally, strong cooperation has been fostered in the area of entrepreneurship, aimed at aligning the relevant programs offered by each university.



At an institutional level, two governance delegations were formed: the first in Nice and the second in Quebec City. Members of the IdEx leadership also attended COP29 in Azerbaijan and the DG2 summer school in Brazil. The year 2024 came to a close with a ceremony awarding the title of Doctor Honoris Causa to Professor Jacques Simard. This distinction recognizes his **outstanding contributions** to cancer research, his commitment to the advancement of scientific knowledge, and his significant impact on public health on an international scale.





Following the strategic directions set at the end of 2023, the strategic partnership with the University of Utah underwent a transformation in 2024. Firstly, a cultural and creative industries component was developed with the creation of an International Semester Program for University of Utah students wishing to study film in Cannes. The first cohort comprised 15 students. A second component involved collaborating in IT and more broadly on the issue of data management, including in the context of our commitment to open science. Finally, the two universities, with the support of the PACA Regional Council and the State of Utah, have embarked on the development of a research program around the Olympic and Paralympic Winter Games, which will be hosted by our regions in France and the US in 2030 and 2034, respectively. Pre-seed funding has been provided to select the first four research projects that align with the four main themes adopted: 1/Sustainable environment and biodiversity, 2/Sustainable infrastructure and planning, 3/Sustainable socio-economic impact, 4/Sustainable health and well-being. In addition, a Hackathon organized locally by Polytech led to the selection of five students to take part in an international Hackathon organized by the Wilkes Center for Climate Science & Policy in early 2025.

A growth in science diplomacy activities

Second edition of the On the road to the COP initiative. Under this initiative, a delegation of six representatives took part in COP29. This is the third year Université Côte d'Azur has participated in the COP climate change conference, and its second year as co-organizer of the Science for Climate Action Pavilion hosted by the MERI Foundation, the Intergovernmental Panel on Climate Change (IPCC) and the United Nations World Meteorological Organization (WMO). In addition to taking part in various panels, the delegation co-organized an event under the auspices of the United Nations Framework Convention on Climate Change, in conjunction with the U7+ and other university networks.



Furthermore, a collection of videos explaining the COP and university action at the COP was published, together with a report on the role of science at the COP. Université Côte d'Azur also continued its commitment, on behalf of the U7+, to the network of university networks committed to the climate, to ensure that higher education and research are included in the agenda of the COP Presidency. In parallel with its participation in COP 29, IdEx once again organized a local mirror COP with a large number of university component institutes and services, including awareness-raising workshops, film debates, round tables, etc. This second edition ended with a discussion morning with special guest glaciologist Heidi Sevestre.

Université Côte d'Azur plays a larger role within the U7+ Alliance of Presidents. At the U7+ Summit held at the University of Bocconi, the presidents of 46 U7+ universities formally committed to the U7+ 2024 Statement on Global Access to Higher Education, which was delivered to Anna Maria Bernini, Italian Minister of University and Research, as a representative of the Italian government hosting the Group of Nations (G7) in 2024. In the spring, Université Côte d'Azur was elected to take over the General Secretariat at the end of Northwestern University's term.



Contribution to the European Commission's Week of Cities and Regions. Jointly with the PACA-Sud Region, the University of Genoa, the Liguria Region and the European Commission, Université Côte d'Azur held a round table dedicated to Artificial Intelligence and innovation ecosystems during the European Commission's European Week of Cities and Regions. This round table emphasized the role of universities as drivers of regional development, players in the digital transformation of territories and sources of knowledge.

Science diplomacy at the heart of a partnership with the *Agence Universitaire pour la Francophonie (AUF)*. The UFMOODS project (*Universités, francophonie et multilatéralisme : objectifs et outils de diplomatie scientifique*; Universities, Francophonie and multilateralism: objectives and science diplomacy tools) represents a partnership in the field of Francophone science diplomacy between Université Côte d'Azur (as part of its Initiative of Excellence; IdEx) and the *Agence universitaire de la francophonie - Europe occidentale*, coordinated by the Institute for Peace and Development (IdPD). The first part of the project, completed at the end of 2024, involved the creation of a MOOC titled "Science diplomacy: challenges and prospects." This online course, offered in an entirely asynchronous format, is available on the national France Université Numérique platform (FUN MOOC). It is completely free of charge, and participants who complete the course are awarded a badge of achievement recognizing the knowledge they have acquired. The second part of the project, completed at the beginning of 2025, involved the organization of an international negotiation simulation exercise, in French, for selected students from partner universities that are members of the Université Côte d'Azur and AUF strategic networks: Université de Sherbrooke and Université Laval (Canada), University Mohammed VI Polytechnic (Morocco), Université de Lausanne (Switzerland), Institut National Polytechnique Félix Houphouët-Boigny de Yamoussoukro (Côte d'Ivoire) and Université d'Etat d'Haïti. An initial stage of preparation for the selected students and supervisors took place in October, 2024, and the simulation itself took place in March 2025 in Brussels on the AUF premises.

Europe still at the heart of the International and Europe Program

The Joint European Office is continuing its efforts to strengthen the university community's engagement in European initiatives, with many events throughout the year. Furthermore, the launch of the UniCAccelerator project, financed under the PIA ASDESER program, has supported the ramp-up of European activities, while also enabling the launch of several new experiments, notably in monitoring initiatives (Research Connect) and support for young researchers (PhD Europe Ambassador).

In addition to UniCAccelerator, the Joint European Office has also launched LEADuRope Flagship, aimed at optimizing the existing mechanisms for supporting PI-centric calls for proposals for projects of Excellence (ERC and AMSC) and coordinating collaborative projects. In addition, LEADuRope also aims to support grant winners to promote their European success within the university community.

Doctoral students in the second cohort of the COFUND BoostUrCareer e-health program, co-funded by the PACA-Sud Regional Council, the European Commission and IdEx, have successfully defended their theses, which marked the end of the project.

FOCUS – Ulysseus European University



In 2024, the Ulysseus European Alliance strengthened its position as a major player in international university cooperation.



Ulysseus Summit in Nice. On November 13 and 14, 2024, Université Côte d'Azur's Valrose campus in Nice hosted the Ulysseus Summit, the alliance's key annual event that brings together academic leaders, researchers and experts from the eight partners to discuss Ulysseus issues. A significant new development was the launch of the Ulysseus Student Association (UlySA), aimed at increasing student participation in the alliance.

Initiatives in education. Ulysseus continued to promote educational innovation and collaborative research.

Events such as the "Ulysseus Entre Camp 2024" in Nice brought together 40 students from the eight partner universities to develop innovative solutions focused on well-being and aging. Efforts to develop joint courses and encourage mobility have also led to the accreditation of two new joint master's courses, the publication of five joint courses and the funding of seventeen Collaborative Online International Learning courses. In close connection with its education programs, Ulysseus has set up a number of initiatives to support mobility efforts, such as Blended Intensive Programs (BIPs), an international impact label and virtual courses.

Research and innovation initiatives. Throughout the year, Ulysseus experts, led by teams from the University of Kosice, have worked on putting in place a strategy to create Ulysseus research groups. To this end, an expertise platform has been set up, along with a seed fund that will be open from 2025. On a more local level, the Scientific Committee of Université Côte d'Azur's Aging and Well-being Innovation Hub has awarded two doctoral contracts:

- Deciphering the role of the genome maintenance machinery in the extreme longevity of the sea anemone *Nematostella vectensis* – Dilara Diken
- Gut microbiome dysbiosis triggered by telomere shortening causes age behavior defects of zebrafish – Pauline Colibert

Also in connection with the Innovation Hub, a dedicated startup program has been devised to support innovative startups to develop solutions in digital health, aging and well-being. It was launched in 2025.

Joint Structures. With the renewal of Ulysseus, Université Côte d'Azur took over leadership of the International Project Office, which is responsible for proposal submission by Ulysseus universities. Within this framework, an ambitious roadmap was adopted to assist members with the submission process, with particular emphasis on Horizon Europe projects. The other shared services – digital, communications, mobility and coordination – are continuing their decentralization efforts to create a common approach while drawing on the strengths and expertise of each member. Finally, two new innovation hubs have been launched, Cybersecurity at the University of Montenegro and Socio-environmental sustainability at the University of Munster, while the other Innovation Hubs continued to consolidate their presence. Thanks to the support of IdEx, the Aging and Well-Being Innovation Hub is expanding, with a new facility located closer to the Faculty of Medicine but still near the Nice University Hospital.





Global expansion and science diplomacy. On April 24, 2024, Ulysseus organized the online conference "Beyond Europe: Joining European Universities Alliances as R&I International Partners." This initiative highlighted the importance of science diplomacy and international collaboration in addressing global challenges. Partnerships with institutions such as Danang University and Université Laval have been established, illustrating Ulysseus' commitment to inclusive global cooperation.

Creation of a shared vision. The Ulysseus local seed fund, supported by IdEx, aims to foster the development of research and innovation networks and projects and has funded six new projects:

- Synthesis and characterization of biomass-derived sustainable polymers (SCABIOPOL), Nathanaël Guigo
- Voyage, Voyage, Julien Gaertner and Alice Bousquet
- Les Pénélopes, Barbara Meazzi
- Summer school: Systems thinking and innovation for the prevention of noncommunicable diseases and a healthy ageing population in the WHO European Region, Anne Vuillemin
- Characterization of bone in 4F rejuvenated mice (BONE-4F), Georges Carle
- *Droit et technologies de l'information* (Law and information technology), Frédéric Constant





EDUCATION PROGRAM

The IdEx Education Program plays a strategic role in the visibility and attractiveness of Université Côte d'Azur. In addition to supporting and consolidating the 100% English-language interdisciplinary degree programs (Masters of Science) created by IdEx, it is progressively offering its support and experience to other Université Côte d'Azur courses in English.



The MSc International Office

The **MSc International Office (MIO)** is dedicated to international students. It supports students from their first contact through to their full integration into Université Côte d'Azur, and coordinates all IdEx education programs, in constant liaison with the university's central services. With its team of six multilingual staff (including one educational engineer), a single email point of contact and physical reception offices on several campuses (Nice, Sophia-Antipolis and Cannes), the MIO is a real strategic asset in the Université Côte d'Azur's quest for visibility and international appeal: it creates a functional and reassuring environment for international students.

The MIO also supports Université Côte d'Azur academic programs wishing to expand internationally, for example by pooling its international communication channels or sharing its expertise in managing students from all over the world.

Finally, the pedagogical engineer, who works in collaboration with the Center for Active Pedagogy (CAP), assists MSc teams in renewing their pedagogical approach, to make it always more innovative. This work has led, for example, to the redesign of the University Degree (DU) Skills & Training to Ensure Professional Success and the hybridization of the European MSc in Molecular Pathology for international students who work while they study.

UCA^{J.E.D.I.} Foundation degrees and programs

The Master of Science (MSc) programs are interdisciplinary, research-based courses taught in English on its various campuses and in different fields. They provide an international showcase for Université Côte d'Azur's degrees, and consolidate its position as an interdisciplinary university. This strategy of focusing on the professions of the future, combined with a strong research base, enhances the attractiveness of Université Côte d'Azur's programs as a center of academic excellence, and positions its graduates as key players in a constantly evolving professional world.

The MSc programs are attracting more and more applicants every year, offering clear career prospects for tomorrow's talent.

Other master's degrees as well as University degrees (DE/DU) are actively supported by IdEx: these courses, most of which are taught exclusively in English, embody the values underpinning Université Côte d'Azur's strategy.



The 2024 MSc program in figures

11 MSc programs (including 8 Master's degrees and 3 accredited by 3IA Côte d'Azur), plus 3 DU programs.

More than 2,300 applications received in 2024 for IdEx international academic programs; their visibility and attractiveness continue to increase year on year.

More than 380 students enrolled, 84% of them international (including EU – excluding France), spread across all continents.

It is worth noting that the MSc Data Science & Artificial Intelligence continues to grow in appeal, with 898 applications in 2024, an increase of almost 60% in one year (93% of applicants outside the EU – particularly from India and Pakistan).



Origin of MSc students in 2024

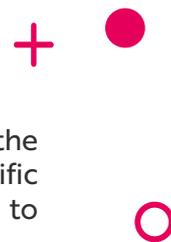
2024 Highlights

IdEx is strengthening the interdisciplinarity of its academic programs by promoting collaborations between students in the MSc Biobanks & Complex Data Management and students in the MSc Biocontrol Solutions for Plant Health at the Sophia AgriBiotech Institute.



MSc 1 BB and BOOST students at ISA





The European MSc in Molecular Pathology has entered into a partnership with the American company ThermoFisher Scientific, a world leader in the supply of scientific and medical research equipment and technologies, to offer excellence scholarships to two students in the program.

The MSc Ocean Science, Conservation & Innovation (MARRES) has initiated a collaboration with the CEA center in Cadarache, Europe's largest research and development center for nuclear energy, new energy technologies and plant biology, making it to date one of the only courses that allows its students of all nationalities access to the premises and an insight into the workings of the center.

The MSc Data Science & Artificial Intelligence has increased its intake capacity, with 42 students enrolled in 2024, of these 31 in their first year, demonstrating its strong appeal. The program also welcomed 3 students from the Danang International Institute of Technology (DNIIT) in Vietnam, a partner of Université Côte d'Azur and member of the Ulysseus network.

The University Degree Science Booster, initially created to bring students from different backgrounds up to the level necessary for the MSc MARRES program, is becoming increasingly attractive as a stand-alone course for students and professionals wishing to develop their skills in biology and marine protection.

The MSc programs Management of the Flavor & Fragrance Industry, Modeling for Neuronal & Cognitive Systems and Environmental Hazards & Risks Management held their graduation ceremonies at the end of 2024. These events, which bring together several graduating classes and teaching teams, help expand the MSc Alumni network and highlight the achievements of graduating students, whether they have stayed in France or in the region or have returned to their country of origin.



MSc RISKS, M4NC and FF graduation ceremonies



MSc Alumni

One of the aims of the MSc programs was to create a strong network connecting students with the university, as well as with companies and professionals, both nationally and internationally. With this in mind, MSc graduates benefit from targeted career guidance, reflected in the high employment rate observed among MSc alumni: 93% at 12 months.

While some companies that have become partners welcome interns from IdEx programs each year, other companies such as Thales and Amadeus recruit our students after they have graduated; MSc students' profiles are particularly desirable to such companies, because of their interdisciplinary background and their new skills that are still relatively rare on the market.

The majority of MSc graduates find employment in the private sector (mainly executive/engineering positions) or, depending on the MSc, in the public sector, NGOs, associations or in entrepreneurship roles.

19% of MSc alumni go abroad and 81% stay in France, including 50% in the PACA region.

Moreover, an increasing number of MSc alumni are choosing to continue their university education: 11% of graduates go on to a doctorate, either in France (including at Université Côte d'Azur) or abroad.

UniCA Junior and Champion Jedi Programs

In addition to the MSc and MIO programs, the IdEx Education Program has other strategic missions, such as the Jedi program.

The "*Cordées de la Réussite* UniCA Junior Jedi" program helps middle and high school students from disadvantaged areas with career guidance and school subject choices, to encourage them to pursue higher education. The program is run in partnership with four schools and offers 48 middle school students and 24 high school students the opportunity to learn about different careers and degrees (particularly those related to current issues), to meet professionals, researchers and students, and to take part in various workshops.



The UniCA Jedi Champion program is an initiative designed to support deserving students in difficult socio-economic circumstances, by awarding them scholarships for the duration of their studies at Université Côte d'Azur. In 2024, this project supported 22 students.

Workshops for the "Cordées de la Réussite UniCA Jedi Junior" program



ACADEMIES OF EXCELLENCE



ACADEMY 1 NETWORKS, INFORMATION AND DIGITAL SOCIETY

2024 highlights



- ADVANCED COMMUNICATION NETWORKS
- ELECTRONICS AND PHOTONICS
- DIGITAL SCIENCES
- MASSIVE DISTRIBUTED DATA
- DIGITIZATION AND SOCIETY
- DIGITAL LAW

Academy 1 "Networks, Information and Digital Society" (RISE) federates over 200 researchers and faculty from 16 research units working on digital science and society. Its objectives are to support the emergence of innovative and ambitious research projects, to encourage transdisciplinary initiatives and to strengthen the outreach of Université Côte d'Azur, both locally and internationally, notably by organizing scientific events and international exchanges for students and researchers.

In 2024, the RISE Academy supported:

- Five research projects under the Idées 2024 call for expressions of interest (AMI) (€296K)
 - SMA-Sync – A heterogeneous modeling approach for systems biology
 - KG-bot – Large language model-based Interaction with metabolomics knowledge graphs
 - CIIAM - Improving argument mining by synthesizing contextual information
 - GLORIVALS - Global rivalries and firm dynamics in the technology-trade multiplex
 - PRFL - Privacy-preserving and robust federated learning
- Five international doctoral stays under the DocWalker program (€17.5K)
 - Karlsruhe Institute of Technology, Germany
 - Fondazione Bruno Kessler, Italy
 - European Space Agency, Netherlands
 - University of Surrey, United Kingdom
 - Swiss Federal Institute of Technology (ETH Zurich), Switzerland
- Five local scientific events (€13.5K)
 - National Microwave Days
 - Biological Image Processing and Analysis
 - Mons Theoretical Computer Science Days
 - IFIP International Internet of Things Conference
 - What legal approaches are needed to regulate total innovations?
- Two guest researcher stays (€6K)
 - Prof. Tomas Gedeon, Montana State University
 - Ass. Prof. Rich Nguyen, University of Virginia, USA
- Nine Forum Numerica scientific seminars on digital sciences and their impact on society and humanity (€3K).

In addition, the RISE Academy:

- Organized a Research Forum, which gave researchers the opportunity to discuss the progress of research projects supported by the Academy.
- Contributed to the Doctoral Sessions of the DS4H Graduate School - Digital Systems for Humans, attended by close to one hundred students (video).

Examples of projects



GLORIVALS

Investigates whether, and how, companies' invention strategies evolve in response to changes in their imports and exports, which are themselves influenced by structural changes in international dependencies, notably those linked to the growing geopolitical fragmentation of the global economy.



Simone Vannuccini, Faculty member, GREDEC; Flora Bellone, Professor of Economics, GREDEC - Director of the DESPEG Doctoral School



Economics of artificial intelligence and innovation, law, economics, management



Technological innovation, international trade, geopolitics, patents, economic fragmentation

KG-BOT

This project is developing a general-purpose AI chatbot for interactive exploration of knowledge graphs combining natural language and extended language models with a proof of concept in chemistry/metabolomics.



Louis-Félix Nothias (Nice Institute of Chemistry, Université Côte d'Azur); Fabien Gandon (Wimmics Université Côte d'Azur, Inria, CNRS, i3S)



Artificial intelligence, natural language interaction, large language model, knowledge graphs, Earth sciences



Knowledge graphs, chatbot, metabolomics, SPARQL, large language model



Chuan Xu, Researcher and Associate Professor, i3S/Inria



Privacy and robustness in Federated Learning (FL)



Distributed algorithms, privacy, robustness, federated learning

PRFL

This project aims to develop new algorithms to strengthen privacy and security in Federated Learning (FL). It explores the use of compression to improve computational efficiency while ensuring an optimal balance between privacy, robustness and model performance.



Nadia Achiche-Mimouni, associate professor in computer science, i3S CNRS-7271 Laboratory, Université Côte d'Azur DR CNRS, INPHYNI



Chronobiology, circadian rhythms, chronotherapy, circadian desynchronization



Multi-agent systems, heterogeneous formalisms (discrete/continuous), large-scale modeling

SMA-SYNC

This project is developing a multi-agent system to coordinate different modeling formalisms applied to various biological networks (clocks, metabolism or homeostasis) on different scales. The challenge is to achieve large-scale modeling in chronobiology.



FOCUS

High-level linguistic analysis for a better understanding of natural language

Objective

Pre-trained language models, which have been widely adopted in recent years, have played a key role in the progress achieved in the processing and automatic understanding of natural language. However, these models are not always able to capture the full depth of knowledge required for detailed contextual understanding.

A pragmatic analysis of utterances has been developed and automated to fill this gap. It makes deductions based on the wider context: the immediate meaning of a message, but also possible inferences when the literal meaning does not correspond to the situation (who is speaking, to whom, with what intention, in what setting, etc.).

Automation of this analysis is a real challenge, as this linguistic dimension requires complex multimodal knowledge - circumstantial, epistemic, linguistic and social - that is difficult to define and apply. The task involves modeling meaning-making processes comparable to those used by humans.

Method

Drawing on cutting-edge techniques in text generation and prompting, such as formulating instructions or examples in natural language to guide models such as ChatGPT, this project aims to overcome the limitations of current methods, notably by addressing cultural variations and implicit messages. To address this issue, the range of stimuli needs to be enlarged to teach language models how to reason by combining both the knowledge required to construct the overall meaning and the processes involved in creating this meaning. A concrete example would be the transcription of grammatically encoded cues, social signals and elements related to beliefs, desires and intentions, as described in speech act theories. This need for contextualization is particularly crucial in automatic language processing tasks sensitive to subjectivity such as sentiment analysis or hate speech detection. For example, depending on the context, aggressive content can be perceived as either implicit, subtle, or apparently neutral. The challenge, then, is to use this abstract information to build an explicit contextual framework for each utterance, and thus enable language models to gain a finer, more nuanced understanding of interactions.

This project aims to develop techniques for automatically constructing contextual frameworks that capture the multimodal dimensions of communication, in order to improve the understanding of natural language utterances.



Anaïs Ollagnier,
assistant professor,
i3S laboratory



Machine learning
and natural
language
processing (NLP)



Machine learning, natural language
processing (NLP), detection of
cyberbullying, high-level linguistic
analysis, dialogue modeling

ACADEMY 2 COMPLEX SYSTEMS

In 2024, the Academy strengthened its actions by focusing on long-term initiatives for the research community.

Grants were provided to 14 projects, for a total investment of €251K.

The Academy has three types of activities:

14 projects funded in 2024



2 thematic semesters



8 doctoral stays



3 Junior Boosters



1 Tremplin Complex



Scientific outreach with the Complex Days 2024

Research monitoring and activation

The call for Thematic Semester proposals is a funding scheme that encourages multidisciplinary approaches in emerging, high-risk scientific themes, through various educational and scientific activities. It provides funding between €50K and €70K per project.

The Doctoral Stays program provides grants of €2,500 per month to international PhD students interested in short stays of 1 to 3 months for their PhD research.

Leverage effect and attractiveness

The Tremplin Complex call offers up to €5K in financial support to collaborative projects aiming for a Horizon Europe or bilateral ANR grant.

The Booster Junior call for proposals allocates grants of up to €30K per project to help young researchers get started.

Scientific community leadership and organization

One of the Academy's missions is to unite and develop the Complex Systems community by promoting interdisciplinary approaches.

One of its initiatives is the organization of the Complex Days, an annual event designed to offer a unique opportunity for doctoral students, postdocs and established researchers to share their ideas and strengthen collaborations within the academy.

The 4th Complex Days were held on February 5 and 6, 2024, at the Crowne Plaza Hotel. They were attended by close to 90 participants.

Two doctoral students were recognized for the quality of their posters and were awarded a grant to travel to an international conference and present them.

Examples of projects



INIDIS

Doctoral stay of Nathan Magnan from Cambridge University - UK. Study of planetary migration, notably the destabilization of a protoplanetary disk, a gaseous structure that rotates around young stars, in the presence of a massive planet.



Héloïse Meheut - Lagrange Laboratory
Senior Researcher
Theory and Observations in
Planetology Team



Planet formation, numerical simulations,
protoplanetary disks



Vincent Calcagno - ISA Laboratory
Senior Researcher
M2P2 team



Functioning and behavior of organisms,
dynamics and evolution of populations
and epidemics

MOBI

Doctoral stay of Sara Aissani from the École Normale Supérieure de Kouba, Algeria. Her research focuses on understanding the factors controlling insect diversity and distribution, particularly those predicting the presence or absence of insect populations.

ODER (Booster Junior)

The ODER project develops new decentralized, low-precision algorithms on a network, to solve optimization problems online, where data is collected continuously.



Roula Nassif - Associate Professor - I3S
Laboratory
MediaCoding team



Multi-agent systems, decentralized
learning, stochastic optimization,
constraints on communication resources



Minh Tuan Dau - Associate Professor -
CRHEA Laboratory
2D+ team



Growth and electronics of 2D materials,
bio-inspired computing, AI/machine
learning

IDEAL (Booster Junior)

The IDEAL project aims to develop metal-based synaptic transistors used for designing ultra-compact, energy-efficient devices. The project explores their use in artificial neural networks for information processing and bio-inspired learning.

FOCUS

ICON Thematic Semester



Gian Luca LIPPI, Professor at the INPHYNI laboratory, coordinator of the Thematic Semester.



NON-LINEAR CELL PHOTONICS - ICON

International context

Université Côte d'Azur is actively involved in several interdisciplinary projects at the intersection of the life sciences and photonics, and has established close collaborations with international partners.

The ICON project is designed to strengthen existing links and encourage new collaborations by fostering intensive interactions through this initiative. The goal of this strategic effort is to enlarge the network of interdisciplinary research within the university community and with its international collaborators, and therefore contribute to advances at the intersection of life sciences and photonics.

Scientific objectives

- Unify ongoing research initiatives at Université Côte d'Azur that combine different facets of photonics and life sciences, including experimental, applied, numerical and modeling approaches.
- Strengthen interdisciplinary initiatives through internships and scientific stays.
- Organize an international workshop to enrich these activities with the ideas and expertise of colleagues outside the university, and present the project's research activities to the outside research community.

Innovative and interdisciplinary approach

ICON aims to be inclusive and open to all interdisciplinary research activities in the life sciences, without being limited to photonics-related projects. The goal is to achieve a critical mass of research activities at Université Côte d'Azur and increase the institution's visibility on a national and international scale.

By encouraging collaboration and cross-fertilization, ICON aims to unleash the hidden potential of projects that do not yet use photonics but could greatly benefit from its versatile properties. Known for its precision, accuracy, speed, ease of use and non-invasiveness, photonics is a tool that can be adapted to a wide range of research topics. This semester encourages the discovery of new opportunities and promotes the wider application of photonics in different areas of research, with the aim of making Université Côte d'Azur an innovative interdisciplinary research center in this field.

Management board: G.L. Lippi (INPHYNI), F. Brau (IPMC), S. Lanteri (INRIA), C. Medioni (IBV), A. Burger (ICN)

The ICON project explores the intersections between life sciences and photonics. It aims to reinforce existing connections and foster new collaborations at the national and international level, stimulated by intensive exchanges during the thematic semester.



Gian-Luca Lippi
Full Professor at the INPHYNI
laboratory
Team: Complex photonic
materials and systems



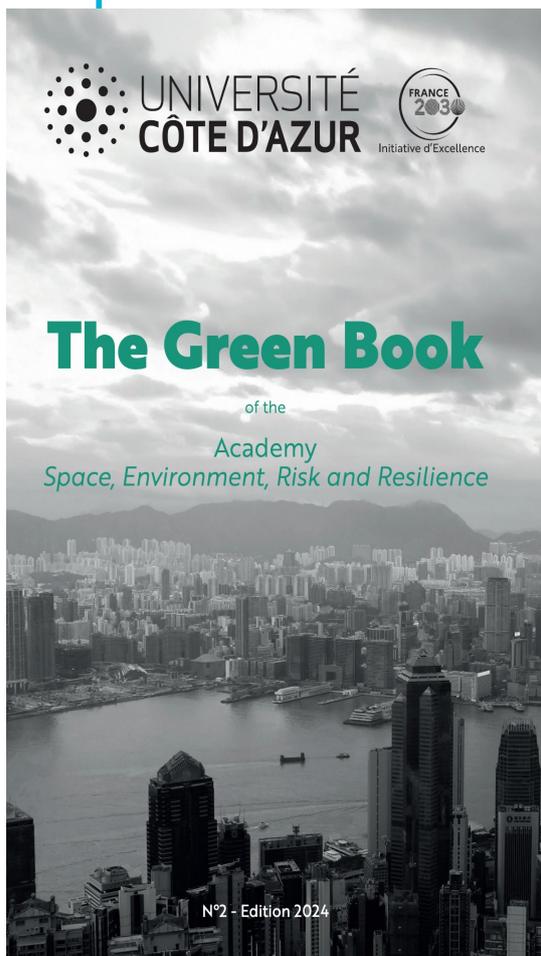
Laser physics,
non-linear
dynamics, light-
matter interaction



Biophotonics
Photonic techniques for life and
health sciences
AI and advanced modeling
techniques for biophotonics

ACADEMY 3 SPACE, ENVIRONMENT, RISKS AND RESILIENCE

2024 highlights



Research

Academy 3 coordinates research initiatives focusing on natural and man-made hazards and their social and environmental impact. To develop its leadership role within the scientific community and maintain its scientific policy of promoting transdisciplinary efforts, the Academy issued two benchmark calls for proposals in January 2024: the First call and the Consortium call.

These grants have provided support to 11 new research projects in 2024 and have funded the renewal of four major Consortium projects for a total of €281,400.

Scientific outreach

Three highlights stand out among the Academy's scientific activities this year: the Thematic Day on the theme of Exposure & Pollution (May), the Opening Seminar 2024 (September) featuring three scientific experts from outside the university, and the closing morning session of the On the Road to the COP (*En route vers la COP*) initiative (December) which gave a scientific perspective on the climate issues raised at COP 29 in Baku. At the latter event, renowned glaciologist Heïdi Sevestre gave a one-hour talk presenting her research on the condition of glaciers, their vulnerability to climate change, and short- and medium-term prospects.

In addition, as part of the Academy's policy of ongoing funding, support was provided to five scientific outreach projects in the Côte d'Azur region.

Scientific dissemination

The projects supported by Academy 3 and their results have been showcased in Open Science publications:

- Second edition of the Green Book in September 2024. The Green Book is a 125-page collection of all the interdisciplinary research projects and scientific events supported by the Academy over the last four years, co-authored by the project leaders and the Academy's steering committee.
- The Cahiers Espace, Environnement, Risques et Résilience: this "hybrid" magazine highlighting one of Academy 3's strategic themes along with an "Expert voice" video on the theme is published on the Epi-Revel open science platform.

Examples of projects



EDU-DELO

The EDU-DELO project, recipient of a First grant, is quantifying the impact of climate change on water reserves by installing meteorological stations and humidity sensors in Cameroon. The project also includes "educational" activities, such as Geoazur's EduMed-Obs, with the participation of students and civil society.



Alessandra Ribodetti - GEOAZUR



Earth Sciences - Hydrology



Electrical data, education, weather stations, groundwater monitoring, sustainable water resource management.



Sonia Dagnino - TIRO-MATOs



Human and environmental health, health risks



Exposome, air pollution, health, epidemiology

NICE AIR

The NICE AIR project (First grant recipient) aims to map air pollution in the Greater Nice area using a vehicle equipped with innovative on-board monitoring devices. The high spatial resolution of the vehicle's positioning brings an unprecedented level of detail to street-level air pollution mapping.

PROMAB

The PROMAB project (First grant recipient) is carrying out a revolutionary study of marine biofilms to uncover the impact of micro-organisms on ocean ecosystems. Its goal is to gain a deeper understanding of environmental changes affecting microbial community structures and biofilm functions. It will also provide essential knowledge on the interaction between the environment, biofilms, benthic ecosystems, health and fish communities.



Christine Risso & Cécile Sabourault - ECOSEAS



Environmental sciences, marine ecology, engineering



Marine ecosystems, biofilm diversity, bioindicators, ecological quality, ecotoxicology



Sébastien Migeon & Margot Chapuis & Louise Purdue - GEOAZUR, ESPACE and CEPAM



Earth sciences, geography, social sciences



Storm Alex, sediment transfer, extreme events, land-sea continuum, risk management

Sts-SEALEX

The Sts-SEALEX consortium project is studying how sediment is being transferred and hydro-sediment flows have been managed in the Roya watershed following storm Alex. Its original approach combines a sedimentary analysis in the land-sea continuum with an innovative interdisciplinary perspective that brings together marine geology, geoarchaeology, fluvial geomorphology, biogeography and socio-ecology.

FOCUS

CORA(i)L: AI-Based Image Recognition for Coral Reef Health Monitoring



Objective

CORA(i)L is a consortium project that aims to improve methods for monitoring coral reef health by developing new tools for potential use in reef preservation and restoration programs run by local communities and industry stakeholders.

CORA(i)L has three objectives:

- Develop a database that uses AI-based image analysis to determine coral health trajectories.
- Determine whether cross-referencing health data from several coral colonies on a reef can be used to diagnose its health.
- With volunteer members of diving centers, set up a citizen science program for real-time monitoring of coral reef health.

Method

The CORA(i)L project team designed a photo acquisition protocol based on photos taken during the Tara-Pacific expedition combined with images from Moorea (French Polynesia), Papua Barat and Raja Ampat Selatan (Indonesia). An interdisciplinary and collaborative initiative developed an AI-based tool from this dataset. The tool is capable of detecting nine key health-related characteristics from thousands of coral colonies in just a few seconds. This method is both time-saving and non-invasive.

The protocol developed as part of the project will provide new fundamental knowledge on how climate change affects coral health. It also opens up new avenues for rapid, cost-effective monitoring of coral reefs, and ultimately for their preservation and restoration.

Both academic and non-profit, participatory partners are engaged in the ambitious, interdisciplinary and international CORA(i)L project. Using an AI-based tool, they are improving methods for monitoring coral health and providing new tools for preservation and restoration programs for the benefit of local communities and the tourism sector.



Eric Rottinger & Eric Gilson - IRCAN



Marine ecology, environmental sciences



Ecophysiology of reef-building corals, coral reef health, artificial intelligence, citizen science program, tourism

ACADEMY 4 COMPLEXITY AND DIVERSITY OF LIVING SYSTEMS

Emerging, transdisciplinary research of
excellence in the life sciences



With its interdisciplinary steering committee and a scientific council representing over 44 institutional partners, Academy 4 is driving research in life sciences at Université Côte d'Azur and supporting projects ranging from biology to medicine, and from plants to the marine environment. It is funding projects of excellence that develop new and original experimental approaches with high added value, with the aim of creating a strong local bio-industry. Its activities focus on four main areas:

1. **Research** - With the aim of attracting excellent researchers to the Côte d'Azur region, Academy 4 co-funds the welcome package for new **teams** of senior and junior ATIP/Avenir researchers pre-selected to work on funded projects. In 2024, for example, a new emerging biology team including a junior professor chair joined the Université Côte d'Azur biology community to study signaling in pathology and aging at the Institute for Research on Cancer and Aging (IRCAN). In 2024, the Academy also co-funded one interdisciplinary **doctoral** project, in partnership with the LIFE Graduate School (EUR) in Life and Health Sciences.

2. **Education** - **Master's** internship projects completed by interdisciplinary pairs of students strengthen the Academy's transdisciplinary focus. For each project, two teams supervise two master's students from two different disciplines (biology or medicine along with another discipline such as mathematics, physics, chemistry, computer science, etc.). In 2024, five such interdisciplinary projects were funded for a total amount of €120K.

3. **Shared equipment** - Academy 4 is funding, supporting and staffing projects for developing shared **IT solutions** at Université Côte d'Azur. In 2024, a research engineer was hired to design a web portal for managing and storing omics bioinformatics analyses for the large-scale **EquipEx+ 4D-OMICS** project in partnership with Aix-Marseille University and to work on the **University-Hospital Institute** project in Nice, both led by Université Côte d'Azur.

4. **Scientific outreach and dissemination** - In 2024, Academy 4 funded ten scientific **congresses** targeting a general audience. It also organized annual and monthly meetings to present and promote the results of interdisciplinary projects and/or projects funded by the Academy.

Examples of projects



MARIN-KCNQ1

An interdisciplinary pair of master's interns worked on identifying innovative pharmacological tools derived from marine organisms capable of modulating the activity of the KCNQ1 potassium channel, which regulates the cardiac action potential, electrolyte and water secretion through epithelia, and tumor suppression in certain cancers.



Dr Raphaël Rapetti-Mauss, CNRS IBV Researcher & Mohamed Mehiri, Professor at Université Côte d'Azur, ICN



Marine biology, chemistry, molecule isolation, cell lines, patch clamps



Natural marine products, KCNQ1 channel, pharmacology



Dr Caroline Medioni, CNRS IBV Researcher & Dr Grégoire Malandrain, i3S Inria Senior Researcher



Biology, computing, genetic screening, confocal microscopy



Axonal regeneration, axonal trees detection algorithm, robust quantification

REGENER

An interdisciplinary pair of master's interns worked on the large-scale identification of proteins regulating RNA transportation and local translation - essential for axonal regeneration - using robust morphometric quantification of axonal trees. Their work will provide a deeper understanding of certain mechanisms of neural network repair and reconstruction.

KILLRAB

The overall aim of this PhD project carried out by Julie Te and funded for three years by Academy 4 and the HEALTHY Graduate School, is to identify compounds capable of repressing the Rab-dependent negative feedback loop on PPAR transcription in order to improve MAFLD therapies.



Dr Jérôme Gilleron, INSERM C3M Researcher & Dr Jérémie Topin, Université Côte d'Azur Professor and Researcher, ICN



Biology, chemistry, bio-informatics, in-silico drug design



T lymphocytes, adipose tissue, aging, electromyography neuromuscular function, exercise, motor neurons.



Dr Bernard Mari, CNRS IPMC Senior Researcher



Biology, therapy, genetics, molecular screening, oncology



CRISPR/Cas9 screening, functional genomics bioinformatics, automatic learning, machine learning

CRISPR DAY

A one-day scientific event held in Paris on September 24, 2024, to present how CRISPR/Cas9 technology has contributed to cancer discoveries. This screening system can be used to individually deactivate all the genes in the genome by means of targeted DNA cutting, and therefore can serve to characterize the genes involved in tumor cell survival and proliferation.

FOCUS

2i PROJECT: INSTABLE & INFLAMED



Objective

Dr Hervé Techer, leader of this research project, is focusing on the two key molecular features shared by aging and cancer, namely genomic instability and inflammation.

In July 2008, after obtaining a master's degree in molecular and cellular biology, with a specialization in genetics, from the Université Pierre et Marie Curie Paris VI, Dr Techer went on to complete his doctorate at the same university, under the supervision of Prof. Michelle Debatisse, defending his thesis in September 2012. He then turned his attention to the relationship between DNA damage response and DNA replication dynamics in mammals, notably the intra-S checkpoint.

As a postdoctoral fellow, he first joined Prof. Vincenzo Costanzo's laboratory at the FIRC Institute of Molecular Oncology in Milan, Italy, where he worked until 2018, focusing on characterizing the role of SAMHD1 in DNA repair and replication in *Xenopus* egg extracts. He then joined Dr Philippe Pasero's laboratory at the Human Genetics Institute in Montpellier, France, to study inflammation-induced DNA replication stress. He remained in this position until November 2023, when Hervé Techer was awarded a junior professor chair at Université Côte d'Azur. The following year he set up his laboratory at IRCAN on the Pasteur Campus in Nice, in the heart of the Côte d'Azur region. In October 2024, he obtained co-funding from Academy 4 to develop his research on the instability of the human genome in pathologies and aging.

Method

Since 2024, Dr Techer, with the help of Dr Samira Kemiha, a research engineer at Université Côte d'Azur, and Karim Hawillo, a master's student, has been attempting to uncover the molecular mechanisms linking DNA replication stress, the pro-inflammatory response, and cellular senescence, using models of TREX1 deficiency and senescence as the main experimental systems. His first step was to investigate the stress loop of DNA replication and inflammation in different types of senescence. Another challenge was to unravel the mechanism linking the C-terminal cleavage of TREX1 to pathophysiology. In the meantime, Hervé Techer is developing relevant animal models for auto-inflammatory disorders and aging. By bringing to light the molecular mechanisms linking replication stress, inflammation and senescence, this research aims to fill crucial gaps in knowledge about the biology of aging, interferonopathies and cancer pathogenesis.

After receiving a junior professor chair at Université Côte d'Azur in 2024, the young biologist, Hervé Techer, joined the Université Côte d'Azur biology community and set up his new team at IRCAN to investigate the molecular mechanisms linking replication stress, the pro-inflammatory response and cellular senescence.



Hervé Techer, IRCAN
research team leader,
junior professor chair (CPI)
Université Côte d'Azur.



Biology, genetics,
inflammation, aging,
senescence



Interferonopathies, genomic
instability, cytosolic DNA, DNA
replication stress, cGAS-STING,
TREX1, CRISPR / Cas9.

ACADEMY 5 HUMAN SOCIETIES, IDEAS AND ENVIRONMENTS

Les axes de recherche de l'Académie 5

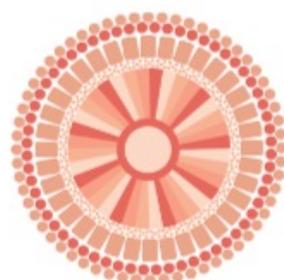
THEME 1 - Knowledge, ideas, language and society



THEME 2 - Changes in interaction with the environment



THEME 3 - Art, creation and science - Art and health



2024 highlights

In 2024, the leadership was renewed within Université Côte d'Azur's Academy 5 "Human Societies, Ideas and Environments". Arnaud Zucker, Professor of Greek Language and Literature at CEPAM, began his tenure by developing new collaborations with EUR ODYSEE with a jointly organized Study Day, and with EUR CREATES, by launching a joint call for proposals at the end of the year. Efforts have also been made to develop closer ties with art schools. A joint call was issued with them in coordination with CREATES and the leaders of the future IFR project on research-creation issues (led by J.-F. Trubert).

In 2024, Academy 5 issued four calls for proposals:

1. Research (€95K)
2. Events (€38K)
3. Master's internship packages (€30K)
4. Consortium (€91K)

In 2024, the Academy "Human Societies, Ideas and Environments" released the second tranche of funding for the two Consortium projects supported in 2023 and provided €307K to research of excellence in 16 Emerging Research Projects, 7 Master's Internship packages, and 4 large-scale, multi-year Consortium projects, as well as several scientific events for a total of €42K. It is currently funding four major interdisciplinary projects (€150K over three years).

Examples of projects



Theme 1 - FEHERIC

Consortium project on the history of feminist struggles. This project is developing a corpus of protest texts written by women in Italy and France between 1789 and 1917, and creating a map to visualize the networks they form.



CMMC - CRHI



Philosophy, Italian studies, women's studies



Emancipation, heritage, stories, revolutions, women



GREDEG - URMIS



Law, sociology, public health



Social benefits, vulnerable persons, digitization

Theme 2 - EMAPS

Consortium project for digitizing access to social benefits. This project studies and develops different digital methods for allowing social workers to activate social benefits on behalf of vulnerable people.

Theme 3 - DHAIME

This project is developing an innovative digital device that enables visually impaired and blind people to produce contemporary electroacoustic music by manipulating objects of different textures.



Conservatory of Nice, LEAT, CTELA, XR2C2



Musicology, education sciences, computer science



Musical creation, new interfaces, disability, accessibility



URMIS - LADIE - ERMES - LIRCES



Sociology, law, political science, cultural studies, arts



Migration, exile, scientific outreach

Spring of migrations

Six scientific outreach events provided an opportunity for artists, scientists, students, associations and the public to share their experience and knowledge on the issues of migration and exile.



FOCUS

Hip-hop pedagogy (Theme 3)



Academy 5 brought its support to the “Hip-hop pedagogy” project, which investigates the relevance, challenges and potential of hip-hop pedagogy in European education systems. Unlike in the United States, hip hop pedagogy remains relatively unexplored in Europe. The project therefore addresses a number of challenging issues faced by European schools and universities, such as migration, income inequality, and students’ declining academic results due to the pandemic.

Objective

The aim of the project is to develop an international network to submit a Horizon Europe grant proposal by gathering partners from academia, schools and the cultural sector into a transnational and transdisciplinary consortium. The consortium’s goal is to develop and disseminate pedagogical tools that provide students with better individualized support, closer to their real-life experiences, and help teachers to effectively manage diversity in the classroom while encouraging solidarity.

Network

A group of local researchers from different Université Côte d’Azur laboratories (LIRCES, URMIS, CTELA, LAPCOS, and LINE) have joined the project in partnership with an international network, the European Hiphop Studies Network (EHHSN - 260 members), created in 2018 by Sina Nitzsche, Head of the Department of Teaching Innovation, Dortmund University of Applied Sciences and Arts (Fachhochschule Dortmund).

During the scientific outreach event “Multiculturalism and Hip-Hop Pedagogy” (held on April 10, 2024, at the Recyclerie des Moulins, in Nice) as part of the Spring of Migrations festival, a podcast was recorded with the *Éveil, ton art* association from the Moulins district, the founder of the Rap Club at Jules Romain secondary school, and rappers Gak and Yass Sogo.

The research question is how hip hop as an art form (including rap, turntablism, beatboxing, dance, and graffiti) can be leveraged to achieve better equality in digital knowledge in various school and university settings throughout Europe.



Emilie Souyri –
LIRCES



Musicology, dance and
art ethnology, education
sciences



Hip-hop, pedagogy, digital
innovation, anti-
discriminatory teaching



**CENTER
FOR MODELING,
SIMULATION
AND INTERACTIONS**

CENTER FOR MODELING, SIMULATION AND INTERACTIONS

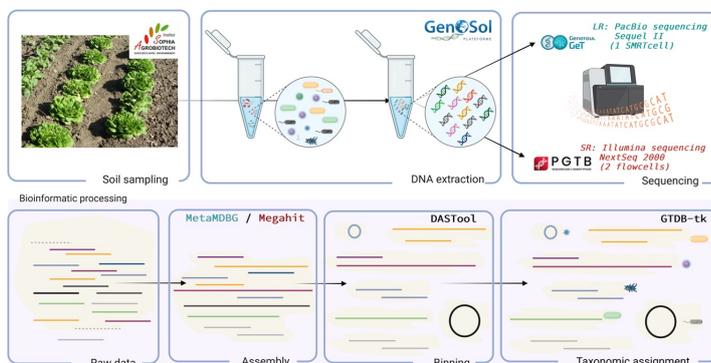
In 2024, the MSI team members included a director, a project manager, a computing center administrator and four engineers, two of them newly recruited.

MSI engineers were involved in several research projects:

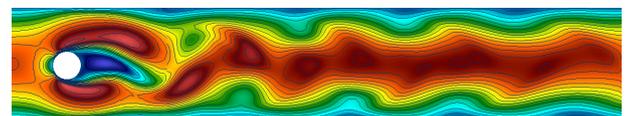
- The CORA(I)L project, a collaboration between IRCAN and several partners in France and Indonesia, notably universities, research centers, and NGOs, worked on the automatic and non-invasive diagnosis of coral reef health using AI-based image analysis.
- In the PAIRE archeological project, MSI used AI to develop a system for automatically matching archeological shells.
- The MetaBinMG project, led by the Sophia Agrobiotech Institute and members of the PEPR MISTIC consortium, developed tools for studying the microbial diversity needed for plant crop health.
- The LibVF project, led by the J. A. Dieudonné laboratory, developed an IT platform designed to gather all the numerical analysis research conducted on domain decomposition methods and make it available to the university community.



Matching archaeological shells



Soil metagenomic analysis protocol for reconstructing the microbial species genome



Fluid flow around an obstacle, simulated using the DDFV method



With the exception of the CORA(I)L project, these projects were all selected as part of the **Call issued by MSI in February for Expressions of Interest (CEI)** in support with computing, modeling, and data processing. This pilot call was renewed in the fall with the MIDI call (offering engineer assistance). In addition, a partnership with Academy 5 was set up as part of the Consortium and Research calls designed to simplify access to support from IdEx entities. In response to the needs in high-performance computing expressed by the university community, MSI, together with the IT Department, has maintained access to the resources of the Azzurra cluster and support in using it. In 2024, the cluster's activity report shows a 17% increase in the number of research projects (74) that received funding for resources, and a 26% increase in the number of users (180) who opened an account on Azzurra.

Education

In addition to assisting with the 2024 **MOMI** workshops and the **Mons Theoretical Computer Science Days**, MSI organized:

- A three-day training session on the **Message Passing Interface (MPI)**, facilitated by IDRIS instructors and aimed at PhD students.
- A training session on **Scientific Software Management and High-Performance Computing**, taught by an MSI engineer as part of the **DATAHYKING: Marie Curie Doctoral Network**, a project funded by the European Commission. A group of 17 doctoral and postdoctoral fellows from several European research institutes participated. This was the first time a training session was billed by MSI, providing a new source of income for MSI.

2024, a pilot year

After a period of reorganization in 2023, MSI implemented its new strategy in 2024, which includes a new format for calls for proposals, deployment of MSI engineers for short-term assignments, and coordination with the Academy 5 calls. The introduction of a fee-based training program has also been very satisfactory. These initiatives will be renewed and deployed on a larger scale in 2025.



**XR²C²
REFERENCE
CENTER**

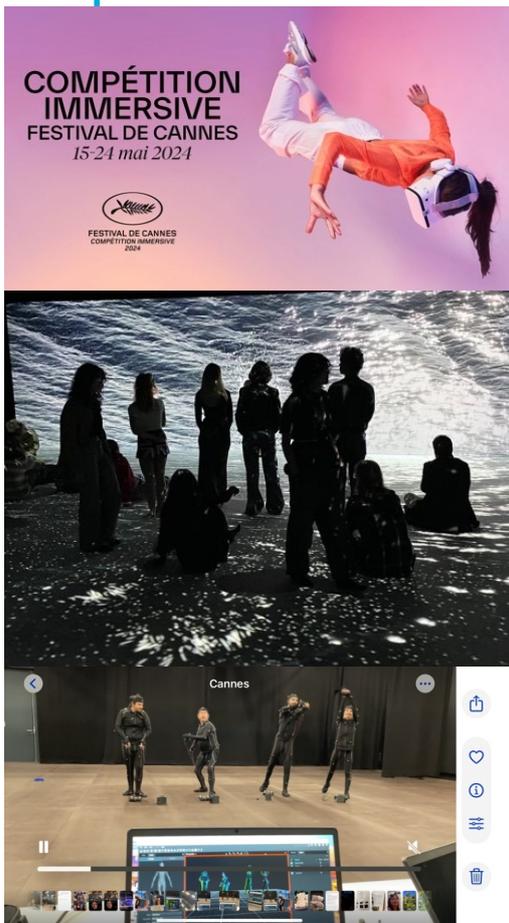


XR²C²

EXTENDED REALITY RESEARCH AND CREATIVE CENTER

Located on the Georges Méliès Campus in Cannes, the XR²C² reference center serves as link between 13 laboratories specializing in extended reality and thus plays a major role in coordinating local initiatives for developing immersive environments. Its activities lie at the intersection of artistic creation, media studies, health, and information and communication sciences and technologies.

Since its creation, XR²C² has benefited from the dynamic ecosystem of the Cultural and Creative Industries (CCI) in the region. It has developed academic programs through the Campus of Trades and Qualifications (CTQ) of Excellence and the FICCTION project, which led to a new master's program in immersive practices. In terms of innovation, the center is collaborating with the PEPR ICCARE program (CNRS) and is involved in European networks such as the Culture & Creativity EIT and the European Commission's AR/VR Coalition.



One of the highlights of 2024 was the partnership with the Cannes International Film Festival, which was the opportunity to present the immersive work *En Amour*—nominated in the immersive category—on the big stage of the Georges Méliès Campus, while XR²C² researchers held conferences during the *Marché du Film*, which contributed to greater international visibility of the IdEx-funded center. Another highlight was the residency of the international artist Huang Wei-Hsuan, who designed "Nonland," an immersive virtual reality experience scaled to an auditorium, in which spectators embark in a multi-narrative journey in the afterlife. This collaboration reflects the growing popularity of XR²C²'s artistic residencies. IdEx funding also supported doctoral projects. As part of the PhD Lab, Maxence Mercier and Rosa Cinelli created "Voices of Fragments: Making memories out of a difficult heritage," an immersive sound exploration of the archives of the V13 trial (of the perpetrators of the terrorist attacks on November 13, 2015). The students are currently preparing this exhibition for presentation at the National Archives in Paris. A final highlight was the study day organized by the center on the Polytech Campus, where the topic of virtual environments was addressed from a computer science perspective.

With these initiatives, XR²C² is confirming its strategic position at the crossroads of research, creation and innovation, and is strengthening its role as a major coordinator of immersive reality initiatives on a local, national, and European scale.

OTHER ACTIONS SUPPORTED BY IDEX



OTHER ACTIONS SUPPORTED BY IDEX

IdEx acts as a lever and driver of growth, contributing to the overall development and deployment of the target university. Through the UCA J.E.D.I. Foundation, IdEx Université Côte d'Azur has maintained its support in 2024 to the components and to some of the university's actions.

Graduate Schools (EURs)

In 2024, IdEx provided each EUR with €110K in financial support, allocated according to a roadmap aligned with IdEx objectives. IdEx also funded doctoral fellowships awarded by each EUR.

The use of IdEx funding depended on the objectives and needs of each graduate school.

At the LexSociété Graduate School, IdEx funding in 2024 covered the salary of a research engineer recruited in September 2023.

The support was instrumental in strengthening the Graduate School's multidisciplinary research by developing the Lexsociété journal, which gained unexpected visibility and achieved a major milestone in open science: inclusion in the Directory of Open Access Journals (DOAJ), a leading international authority. The grant also supported the Graduate School's scientific projects and actively assisted affiliated laboratories in developing multidisciplinary research initiatives and enhancing the visibility of their research.

In 2024, **the Odyssee Graduate School** used IdEx funding to carry out several significant initiatives.

These included the recruitment of a postdoctoral fellow in paleobotany and prehistoric archaeology at the CEPAM laboratory, following a call for applications open to all laboratories affiliated with the Graduate School.

On September 25 and 26, international events were organized around the Cocoa project, in partnership with the University of Costa Rica and the Technical University of Costa Rica. This project aims to establish an international value chain for the production, processing and marketing of organic cocoa and chocolate, based on fair, sustainable and eco-responsible trade.

From December 11 to 13, a scientific symposium was held on socio-environmental issues and territories, bringing together around 50 participants.

The Graduate School also supported the Néréides project, echoing the Oceans conference organized in Nice. This artistic and advocacy project, led by dancer and freediver Amal Alnabwany, raises awareness of marine pollution and the urgent need to protect the seabed and endangered species. Drawing inspiration from the Mediterranean, Amal weaves a link between her past life in Syria and her present life in France to deliver a powerful wake-up call.



Internship stipends were also granted to students as part of the Observatory of Migrations. 

The Graduate School continued to invest in international travel assignments, equipment purchases, and the ongoing development of the ODYSSEE document archives, in collaboration with the Carlone University Library.

The HEALTHY Graduate School used its IdEx grant to fund activities in three main categories: research, scientific outreach, and education.

The main priority was research, with four projects funded: two focused on aging - one of the EUR's areas of excellence - another on sports performance, and the fourth on the neural encoding of body movement.

A call for scientific outreach proposals led to the funding of an event focusing on women's health. The event featured a series of film screenings designed to raise awareness of discrimination, inform about healthcare services specifically for women, and train students in care practices, in collaboration with patients.

In the area of education, funds contributed to a pedagogical innovation project and notably the purchase of neuropsychological assessment kits.

In addition, IdEx funds supported the Healthy-Athon, an educational one-day event designed to develop healthcare pathways for partner patients. It was organized by students from various departments: sports, psychology, health engineering, physical therapy, nursing, and speech therapy. Thanks to IdEx funding, the event will become a permanent elective course in the EUR's degree programs starting in 2025. Finally, IdEx funds also supported renewal of the partnership with Ikigai with the aim of improving courses by integrating gamification.

The LIFE Graduate School has focused on increasing the attractiveness of its programs and fostering student camaraderie, notably by organizing doctoral and master's graduation ceremonies, and events such as an immersion day for high school students and the Biology Olympics. These initiatives have helped raise the university's profile. It has also encouraged student entrepreneurship, notably through the Nucleate France UniCA project, which allowed around 80 doctoral students to attend entrepreneurship seminars and provided assistance to two startup projects in the final stages of the Global Activator Program. Collaboration with key companies in the biotech sector, both in France and internationally, has further strengthened the visibility of Université Côte d'Azur. Finally, the Graduate School has intensified its efforts in international education, notably by securing Erasmus Mundus Joint Master grants for two projects, one in the field of aging and the other in membrane science, each worth €4 million.



The SPECTRUM Graduate School has awarded the following IdEx funding during the 2024/2025 academic year. First, it worked to increase the appeal of its laboratories by funding seven research internship stipends (€25K) and five Welcome Packages for new faculty members (€25K), thereby increasing the university community's research potential.

It co-funded six international scientific events in Nice, for a total amount of €15K, to showcase local expertise and develop new partnerships, including a growing partnership with the University of Chile.

Finally, to attract prospective students, the Graduate School introduced two excellence scholarships (€20K) for promising Masters students and funded effective communication campaigns, such as an online webinar on engineering careers that highlights the role of women in science today (€5K).

In 2024, **the CREATES Graduate School** issued several calls for proposals that resulted in the funding of 34 projects. Seven of these are in the emergence, innovation or incubation phase. Three projects were funded under a new call introduced in 2024 aimed at consolidating emerging projects. Seventeen projects involved the organization of scientific events, while two projects focused on theme-based academic programs. Additional support was provided for a publication project and four master's-level internship projects.

Funding was also allocated to a doctoral fellowship for a project co-directed by a researcher from the CMMC laboratory and a colleague from Rome's La Sapienza University.

The Graduate School also received funding for a doctoral fellowship in research-creation, co-sponsored with Villa Arson.

Finally, IdEx funds allowed the **ELMI Graduate School** to hire a postdoctoral fellow at GREDEG. Her work focuses on the dynamics of local cultural entrepreneurial ecosystems, using Nice and Cannes as case studies.

NeuroMod

The **NeuroMod** institute used its IdEx grant to fund two projects under its **Call for "Major international projects"**: NeuroMove received €23,200 and SemLex €22,600.

In addition, a **doctoral scholarship** of €144,000 was awarded to Thomas Chouly for his project on "The physiopathological roles of poorly understood myelin lipids in Alzheimer's disease". He is conducting his research at the IPMC under the supervision of H el ene Barelli and Marco Lorenzi.

Finally, four projects were funded for a total of €13,850 as part of the Institute's **ongoing call for small interdisciplinary projects** in line with its core research themes.





Innovation and Partnership Institutes

The Mediterranean Institute of Risk, Environment and Sustainable Development - IMREDD - was awarded an IdEx grant of €200K in 20234 that covered the salaries of three engineers: an engineer in experimental techniques, an embedded systems engineer and a smart home and energy engineer.



The Flavors, Fragrances and Cosmetics Innovation and Partnership Institute received €200K in 2024. This support is funding specialized research engineers qualified to rapidly take on projects of all sizes. Recently certified ISO9001, the FFC 2IP has seen an average annual increase of over 60% in the number of requests from the public and private sector since its creation. It has been able to generate a profit with direct or indirect leverage effects such as new CIFRE doctoral fellowships in affiliated laboratories.

+ ● LIST OF IDEX-FUNDED
PROJECTS LAUNCHED
IN 2024





Project title	Project leader's name	Leader's laboratory	Program / Structure	Amount of IdEx funds granted
Targeting the MELK oncogene to overcome resistance to immunotherapy and targeted therapies	Stéphane Rocchi	C3M	Research program - Excellence fellowships for young researchers	€123,488
Uncovering evolutionary processes of Martian moons by machine learning-based thermophysical modeling	Marco Delbo	Lagrange	Research program - Excellence fellowships for young researchers	€123,488
Towards a precise and self-consistent model of solar system dynamics in the Gaia era	Agnès Fienga	Geoazur	Research program - Excellence fellowships for young researchers	€123,488
Assessing vulnerabilities of Ancient Greek coastal settlements to global change and anthropogenic impact in the Western Black Sea region	Tatiana Theodoropoulou	CEPAM	Research program - Excellence fellowships for young researchers	€123,488
Mechanisms involved in plant cell injury recognition during pathogen attack: regeneration competence and biochemical responses - REGENEM	Janice Almeida-Engler	ISA	Research program - Excellence fellowships for young researchers	€123,488
Re-nano-PBR: Transforming plastic waste into nano-treasure	Nathanael Guigo	ICN	Research program - Excellence fellowships for young researchers	€123,488
Mathematical models for neurodegenerative diseases	Thierry Goudon	Inria / LJAD	Research program - Excellence fellowships for young researchers	€123,488
Surveying apathy profiles in early neurocognitive syndromes: SAPIENS	Valeria Manera	CoBTek	Research program - Excellence fellowships for young researchers	€123,488
An evolutionary framework to decipher the molecular basis of cellular aging	Gianni Liti	IRCAN	Research program - Excellence fellowships for young researchers	€123,488
Neuromodulation for obesity: Exploring the potential	Philippe Blancou	IPMC	Research program - Excellence fellowships for young researchers	€123,488
The professional field of international aid through the prism of spatial im/mobilities: expatriates, migrants and local intermediaries in Senegal	Federica Infantino	URMIS	Research program - Excellence fellowships for young researchers	€123,488
Primordial black holes and gravitational-wave background	Nelson Christensen	ARTEMIS	Research program - Advanced research program grant	€115,653
An interdisciplinary study of nuclear migration and packing for the establishment of developing multicellular systems	Matteo Rauzi	IBV	Research program - Advanced research program grant	€196,668
Mapping the synaptic signature of cognitive trajectory in aging	Paula Pousinha	IPMC	Research program - Advanced research program grant	€69,425
Dissecting the mechanism of Helicobacter pylori-induced genome instability and gastric carcinogenesis	Hervé Techer	IRCAN	Research program - Advanced research program grant	€72,000
Chair of Excellence - Multidisciplinary ocean monitoring on a global scale	Karin Sigloch	Geoazur	Research program - Advanced research program chair	€205,591
Collaboration that aims at advancing quantum biophotonics to improve healthcare and biological sciences	Gian-Luca Lippi	InPhyNi	Research program - Visiting researcher program	€9,600
Research collaboration to safeguard children after mass trauma exposure (RESCUE)	Florence Askenazy	CoBTek	Research program - Visiting researcher program	€9,600
The nonvanishing problem for K-trivial varieties	Andreas Horing	LJAD	Research program - Collegium grant	€45,702
Neuronal decoding of dynamic neurocognitive states	Ingrid Bethus	IPMC	Research program - Collegium grant	€43,739
Empowering social phase transitions	Paolo Zeppini	GREDEG	Research program - Collegium grant	€45,702
Rewiring of motivational and emotional processes: Relevance for mental disorders	Jacques Barik	IPMC	Research program - Collegium grant	€43,739

Project title	Project leader's name	Leader's laboratory	Program / Structure	Amount of IdEx funds granted
Funding for doctoral students	OCA COLTICE	/	Research program - Strategic program	€350,000
International symposium on surveillance technologies	Caroline Lequesne	GREDEG	Research program - Strategic program	€10,000
Junior professor chair welcome package	Marina Trad-Nery	ARTEMIS	Research program	€120,000
Junior professor chair welcome package	Véronique Angeli	C3M	Research program	€120,000
COFUND co-financing of doctoral scholarships	Thierry Goudon	LJAD	Research Program - COFUND Doctoral Program	€120,000
Postdoctoral award	Swanie Potot	URMIS	Research program - Postdoctoral award	€5,000
Postdoctoral extensions	Thierry Goudon	LJAD	Research program - Postdoctoral grant	€100,449
LIAROPSE grant	Paola Furla	ROPSE	LIA ROPSE - Master's degree scholarships	€24,114
APC	Vanessa Nurock	CRHI	Research program - IVS	€2,600
Nicolas Coltice - Geoazur Laboratory - IdEx MEDALS 2024 - JURY'S SPECIAL PRIZE	Nicolas Coltice	Geoazur	Governance	€20,000
Roxana Dinu - ICN Laboratory - IdEX MEDALS 2024 - JURY'S SPECIAL PRIZE	Alice Mija	ICN	Governance	€20,000
Neuromuscular and hemodynamic implications of physical exercise on health and hypertension: the role of group III-IV muscle afferents	Grégory Blain	LAMHESS	International program - Major partnerships	/
Partnership between Universidad de Costa Rica and Université Côte d'Azur	Christian Rinaudo	Other	International program - Major partnerships	/
SNE 2024 symposium	Carole Rovere	IPMC	International program - Major partnerships	€4,000
Utah Winter Olympics	Saranne Comel		International program - Major partnerships	€40,000
ULaval cooperation	Saranne Comel	Other	International program - Major partnerships	€2,296
On the road to the COP	Saranne Comel		International Program - Influence	€130,000
Towards a universal theory of quantum diffusion	Tony Jin	InPhyNi	International Program - ERC Booster	€2,600
Fate mapping the dual contribution of two different myeloid pathways to monocyte and macrophage generation	Alexandre Gallerand	LP2M	International Program - ERC Booster	€2,100
Unraveling multiscale embolism dynamics in plant leaves through biomimetic models	Ludovic Keiser	InPhyNi	International Program - ERC Booster	€800
Characterizing motifs of unknown function from the human proteome	Gergo Gogl	IBV	International Program - ERC Booster	€2,200
Habitability of ocean worlds in the solar system and beyond	Stephane Mazevet	Other	International Program - ERC Booster	€2,600
Light control of neuronal excitability	Guillaume Sandoz	IBV	International Program - ERC Booster	€2,600
Testis or ovary: identifying the molecular and cellular processes controlling sex determination	Marie-Christine Chaboissier	IBV	International Program - ERC Booster	€2,600
Measuring and calibrating AGN distances and masses to resolve the Hubble tension	Romain Petrov	Lagrange	International Program - ERC Booster	€1,600
ERC Consolidator Grant	Eva Ternon	Other	International Program - ERC Booster	€400
MOMI 2024 - The world of industrial mathematics	Haydar Jammoul	Inria	MSI - Other than grants	€2,000
Mons Theoretical Computer Science Days	Bruno Martin	I3S	MSI - Other than grants	€2,000



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Automatic matching of archaeological marine shells	Tatiana Theodoropoulou	CEPAM	MSI - AMI	/
Finite volume library on shifted grids and domain decomposition	Stella Krell	LJAD	MSI - AMI	/
MetaBinMG: Enhancing soil metagenome reconstruction using combined coverage information for binning	Etienne Danchin	ISA	MSI - AMI	/
CORA(i)L	Eric Gilson	IRCAN	MSI - Other than grants	/
EEG signal analysis underlying the affective and cognitive processes involved in understanding mental states in the schizophrenia spectrum.	Damien Vistoli	LAPCOS	MSI - AMI	/
Visit of Prof. Tomas Gedeon, Montana State University, USA, September 1-30, 2024	Madalena Chaves	Inria	Academy 1 - Networks, Information and Digital Society	€2,391
Visit of Prof. Olivier Pfister, University of Virginia, June 4-26, 2025	Virginia D'Auria	InPhyNi	Academy 1 - Networks, Information and Digital Society	€2,300
Heterogeneous modeling approach for systems biology	Nadia Abchiche-Mimouni	I3S	Academy 1 - Networks, Information and Digital Society	€18,643
Privacy-preserving and robust federated learning	Chuan Xu	I3S	Academy 1 - Networks, Information and Digital Society	€69,700
Large language model-based interaction with metabolomics knowledge graphs	Louis-Félix Nothias	ICN	Academy 1 - Networks, Information and Digital Society	€70,000
Third French conference on artificial intelligence for biomedical imaging, March 17-18, 2025, Nice, France	Laure Blanc-Féraud	I3S	Academy 1 - Networks, Information and Digital Society	€2,500
Brain Awareness Week on the Côte d'Azur, March 10-16, 2025	Jacques Noël	IPMC	Academy 1 - Networks, Information and Digital Society	€1,000
Second workshop "Better regulation of online tracking with transdisciplinary research" (BALANCE), April 2025	Nataliia Bielova	Inria	Academy 1 - Networks, Information and Digital Society	€1,676
Winter school "Antennas and rectennas for IoT applications (ARIA)," February 24-28, 2025	Fabien Ferrero	LEAT	Academy 1 - Networks, Information and Digital Society	€2,500
19th Mons Theoretical Computer Science Days, Valrose, Nice, September 2-6, 2024	Sandrine Julia	I3S	Academy 1 - Networks, Information and Digital Society	€2,500
7th IFIP "Internet of Things" International Conference, Sophia Antipolis, November 6-8, 2024	Gaetan Rey	I3S	Academy 1 - Networks, Information and Digital Society	€2,000
Week-long conference, November 12-15, 2024, "What legal approaches for the regulation of 'total' innovations?"	Marina Teller	GREDEG	Academy 1 - Networks, Information and Digital Society	€2,500
Global rivalries and firm dynamics in the technology-trade multiplex	Simone Vannuccini	GREDEG	Academy 1 - Networks, Information and Digital Society	€67,850
RISE Academy Research Forum on November 19, 2024	Nathalie Currid	Other	Academy 1 - Networks, Information and Digital Society	€723
Doctoral stay of Victor Guillot at the Department of Chemistry and Applied Biosciences, ETH Zurich, Switzerland, May 31 to August 31, 2024	Edi Assoumou	Other	Academy 1 - Networks, Information and Digital Society	€4,000
Doctoral mobility of Sara Frusone at the Karlsruhe Institute of Technology (KIT), Computational Cardiac Modeling group, Germany, from May 6 to July 31, 2024	Vincente Zarzoso	I3S	Academy 1 - Networks, Information and Digital Society	€4,000
Doctoral mobility of Olivier Malafrante at the University of Surrey, Guilford, England in May and October 2024	Sabrina Loufrani	GRM	Academy 1 - Networks, Information and Digital Society	€2,800
Doctoral mobility of Nicolas Benjamin Ocampo at the Language and Dialogue Technologies Bruno Kessler Fondazione, Trento, Italy, from March 29 to June 24, 2024	Elena Cabrio	I3S	Academy 1 - Networks, Information and Digital Society	€2,620

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Doctoral mobility of Lionel Tombakdjian at the European Space Agency, ESTEC, Noordwijk, Netherlands, from April 7 to July 8, 2024	Fabien Ferrero	LEAT	Academy 1 - Networks, Information and Digital Society	€4,000
Improving argument mining by synthesizing contextual information	Anaïs Ollagnier	IBS	Academy 1 - Networks, Information and Digital Society	€70,000
Instability of massive protoplanetary disks	Héloïse Meheut	Lagrange	Academy 2 - Complex Systems	€7,500
ILIADES	Nicolas Papaiconomou	ICN	Academy 2 - Complex Systems	€7,500
Next-generation models for star clusters	Médéric Boquien	Lagrange	Academy 2 - Complex Systems	€2,500
Modeling insect biodiversity	Vincent Calcagno	ISA	Academy 2 - Complex Systems	€7,500
The fractional Navier-Stokes equation	Dario Vincenzi	LJAD	Academy 2 - Complex Systems	€7,500
Natural active ingredients: Active solvents serving active ingredients	Nicolas Papaiconomou	ICN	Academy 2 - Complex Systems	€4,800
Optimization of algae-bacteria consortia via PMP-hybrid: in search of new optimal conditions for depollution - OPTI-Abh	Walid Djema	Inria	Academy 2 - Complex Systems	€30,000
Large-scale high-mobility 2D materials for low-energy analog artificial intelligence hardware	Minh-Tuan Dau	CRHEA	Academy 2 - Complex Systems	€29,949
Efficient decentralized optimization with low-precision representations	Roula Nassif	IBS	Academy 2 - Complex Systems	€14,915
Nonlinear cell photonics	Gian-Luca Lippi	InPhyNi	Academy 2 - Complex Systems	€69,500
Population dynamics - from fundamental to applied sciences	Henry Christophe	Inria	Academy 2 - Complex Systems	€60,000
Cognitive networks in progressive multiple sclerosis	Bianca Silva	IPMC	Academy 2 - Complex Systems	€3,500
Enhanced fiber lasers and amplifiers using integrated hollow-core fibers	Bernard Dussardier	InPhyNi	Academy 2 - Complex Systems	€3,750
Intercomparison of SEM-CL measurements and sample preparation for mineral extracts	Ileana Lenuta Florea	CRHEA	Academy 2 - Complex Systems	€2,500
Flood and drought hazards in East Africa	Carlo Mogni	Geoazur	Academy 3 - Space, Environment, Risks and Resilience	€4,500
Quality of water resources in New Caledonia	Aurélie Barats	Geoazur	Academy 3 - Space, Environment, Risks and Resilience	€6,500
Le Teil earthquake and fluid circulation in the La Rouvière active fault	Christophe Matonti	Geoazur	Academy 3 - Space, Environment, Risks and Resilience	€2,500
Educational Unit - DELO (Groundwater detection and sustainable aquifer management in Cameroon)	Alessandra Ribodetti	Geoazur	Academy 3 - Space, Environment, Risks and Resilience	€5,000
Long-term monitoring of the dynamic response of cultural heritage monuments in Cusco (Peru)	Diego Mercerat	Geoazur	Academy 3 - Space, Environment, Risks and Resilience	€7,000
Mapping air pollution in the Nice metropolitan area with mobile monitoring	Sonia Dagnino	TIRO MATOS	Academy 3 - Space, Environment, Risks and Resilience	€5,000
Profiling marine biofilms	Christine Risso	ECOSEAS	Academy 3 - Space, Environment, Risks and Resilience	€6,900
Revisiting coral health assessments: from AI-based image recognition to next-generation reef monitoring	Eric Röttinger	IRCAN	Academy 3 - Space, Environment, Risks and Resilience	€47,500
Source-to-sink sediment transfers and management of hydro-sediment fluxes after Storm Alex in the Roya catchment	Sébastien Migeon	Geoazur	Academy 3 - Space, Environment, Risks and Resilience	€41,300
The world of industrial mathematics	Haydar Jammoul	Inria	Academy 3 - Space, Environment, Risks and Resilience	€1,000



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Ecological transition and sustainable, responsible consumption	Damien Bazin	GREDEG	Academy 3 - Space, Environment, Risks and Resilience	€1,500
International Symposium on Metal Complexes 2024	Maria-Rosa Beccia	ICN	Academy 3 - Space, Environment, Risks and Resilience	€2,000
Summit meetings: The Mercantour and climate change	Philippe Charvis	Geoazur	Academy 3 - Space, Environment, Risks and Resilience	€1,890
46th Symposium of the Society of Neuroendocrinology	Carole Rovere	IPMC	Academy 3 - Space, Environment, Risks and Resilience	€1,000
Experimental analysis and mathematical modeling of 12-hour biological oscillations	Franck Delaunay	IBV	Academy 4 - Complexity and Diversity of Living Systems	€24,000
Identification of innovative pharmacological tools drawn from marine organisms to modulate KCNQ1 potassium channel activity	Raphael Rapetti-Mauss	IBV	Academy 4 - Complexity and Diversity of Living Systems	€24,000
Identification of the interaction site of patched efflux inhibitors and mechanistic study	Stéphane Azoulay	ICN	Academy 4 - Complexity and Diversity of Living Systems	€24,000
Large-scale identification of new players involved in axonal regeneration and robust morphometric quantification of axonal trees	Caroline Medioni	IBV	Academy 4 - Complexity and Diversity of Living Systems	€24,000
Regulation of stress-induced chirality changes in a living organism	Agnès Banreti	IBV	Academy 4 - Complexity and Diversity of Living Systems	€24,000
12th Congress of the French-Speaking Autophagy Club (conference and academic program)	Guillaume Robert	C3M	Academy 4 - Complexity and Diversity of Living Systems	€2,500
46th Symposium of the Society of Neuroendocrinology - Joint France-Canada Symposium - SNE2024 (international scientific symposium)	Carole Rovere	IPMC	Academy 4 - Complexity and Diversity of Living Systems	€1,500
2024 EMBO workshop "The molecular and cellular basis of regeneration and tissue repair" (scientific research meeting)	Eric Röttinger	IRCAN	Academy 4 - Complexity and Diversity of Living Systems	€1,500
Colloquium and conferences organized by OMCNC (Observatory of Non-Conventional Complementary Medicine)	Véronique Mondain	Nice University Hospital	Academy 4 - Complexity and Diversity of Living Systems	€1,000
Plenary days of the MicroNanoFluidics research group (symposium)	Céline Cohen	InPhyNi	Academy 4 - Complexity and Diversity of Living Systems	€1,500
Nonlinear cell photonics research workshop	Frédéric Brau	IPMC	Academy 4 - Complexity and Diversity of Living Systems	€1,500
One-day meeting: CRISPR screening in cancer discovery (research conference)	Bernard Mari	IPMC	Academy 4 - Complexity and Diversity of Living Systems	€1,500
Franco-Taiwanese scientific meeting on ion channels of therapeutic interest and marine biology (research and teaching)	Emmanuel Deval	IPMC	Academy 4 - Complexity and Diversity of Living Systems	€2,500
2025 Brain Week on the Côte d'Azur (scientific outreach, participatory research, science and society)	Jacques Noël	IPMC	Academy 4 - Complexity and Diversity of Living Systems	€1,000
Third Inflammation & Disease Symposium (research conference)	Jean-Ehrland Ricci	C3M	Academy 4 - Complexity and Diversity of Living Systems	€1,500
Uncovering the neural circuits for the attenuation of ethological traumatic memories	Bianca Silva	IPMC	Academy 4 - Complexity and Diversity of Living Systems	€50,000
An experimental and computational single-cell integrative omics approach for accessing the specialized metabolites produced by the microbiome	Louis-Félix Nothias	ICN	Academy 4 - Complexity and Diversity of Living Systems	€50,000



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Instable and inflamed (2i): Unraveling the role of TREX1 and cytosolic DNA signaling in human pathologies and aging.	Hervé Techer	IRCAN	Academy 4 - Complexity and Diversity of Living Systems	€50,000
Julie Te's thesis: Exploring the potential of RabX inhibition to treat MAFLD	Jérémie Topin	ICN	Academy 4 - Complexity and Diversity of Living Systems	€72,500
8th Meeting of African Studies in France	Marie-Pierre Ballarin	URMIS	Academy 5 - Human Societies, Ideas and Environments	€5,000
International and European Law Summer School 2024	Anne Millet-Devalle	LADIE	Academy 5 - Human Societies, Ideas and Environments	€5,000
CMC Corpora Conference	Céline Poudat	BCL	Academy 5 - Human Societies, Ideas and Environments	€4,700
Peyresq S&F - Peyresq Science and Fiction 2024: From idea to image... from image to idea	Jean-Luc Gautero	CRHI	Academy 5 - Human Societies, Ideas and Environments	€3,000
Spring of migrations	Federica Infantino	URMIS	Academy 5 - Human Societies, Ideas and Environments	€3,000
Epistemology and discourse on the links between research and creation in literature and the performing arts	Marina Nordera	CTELA	Academy 5 - Human Societies, Ideas and Environments	€3,000
The Vandals and the others	Giampiero Scafoglio	CEPAM	Academy 5 - Human Societies, Ideas and Environments	€1,800
Contemporary usage of amateur film #3 - Social networks: a reservoir of images available for reuse?	Christel Taillibert	LIRCES	Academy 5 - Human Societies, Ideas and Environments	€3,000
Race FM - Rap, R&B, Afro-Caribbean music and race - In France and the Mediterranean area	Emilie Souyri	LIRCES	Academy 5 - Human Societies, Ideas and Environments	€3,000
44th International meeting of Nice Côte d'Azur archeology and history	Claire Delhon	CEPAM	Academy 5 - Human Societies, Ideas and Environments	€5,000
Third Improvisation Summer School	Alice Godfroy	CTELA	Academy 5 - Human Societies, Ideas and Environments	€3,000
Study Day on "Belonging & Anxiety"	Thomas Morisset	CRHI	Academy 5 - Human Societies, Ideas and Environments	€3,000
Influence on Internet users' behavioral reactions of puns used by Community Managers in their brand posts and online communications	Catherine Aussilhou	GRM	Academy 5 - Human Societies, Ideas and Environments	€4,940
Evolving urban commercial practices in the age of dematerialized commerce	Giovanni Fusco	ESPACE	Academy 5 - Human Societies, Ideas and Environments	€4,559
Comics in the service of science and the scientific approach in elementary school	Jean-Luc Gautero	CRHI	Academy 5 - Human Societies, Ideas and Environments	€5,500
The Mondeval de Sora Mesolithic burial site (Dolomites, Italy): a transdisciplinary approach to objects associated with the deceased	Henry Auréade	CEPAM	Academy 5 - Human Societies, Ideas and Environments	€2,780
The disappearance of the deceased. Saint Dalmas de Tende cemetery after storm Alex	Agnès Jeanjean	LAPCOS	Academy 5 - Human Societies, Ideas and Environments	€1,045
The voice of women: Inventory and mapping of Italian women lecturers (1900-1925)	Barbara Meazzi	CMMC	Academy 5 - Human Societies, Ideas and Environments	€5,000
Disseminating philosophy & research-creation	Thomas Morisset	CRHI	Academy 5 - Human Societies, Ideas and Environments	€4,531
Analog haptic device for teaching electroacoustic music	Gilles Mottet		Academy 5 - Human Societies, Ideas and Environments	€10,000
The Palaeolithic of the Marche region, Italy	Elisa Nicoud	CEPAM	Academy 5 - Human Societies, Ideas and Environments	€10,000
International emigration, family and social dynamics	Jean-Luc Primon	URMIS	Academy 5 - Human Societies, Ideas and Environments	€9,978
Audiovisual environments: the influence of repetition	Matteo Treleani	SIC LAB	Academy 5 - Human Societies, Ideas and Environments	€7,500
Capturing musical gestures, models and experiences	Jean-François Trubert	CTELA	Academy 5 - Human Societies, Ideas and Environments	€9,116
Analysis of dance movement: the contribution of AI	Valeria Manera	CoBTek	Academy 5 - Human Societies, Ideas and Environments	€5,000



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Hip hop pedagogy	Emilie Souyri	LIRCES	Academy 5 - Human Societies, Ideas and Environments	€5,000
Producing attachment: theater, performance, performing arts - original-impact	Brigitte Joinnault	CTELA	Academy 5 - Human Societies, Ideas and Environments	€5,000
Promoting physical activity among women victims of sexual violence	Stéphanie Meriaux	LAMHESS	Academy 5 - Human Societies, Ideas and Environments	€5,000
Music and language learning in kindergarten	Bruno De Cara	LAPCOS	Academy 5 - Human Societies, Ideas and Environments	€4,058
Automatic recognition of Central American Fabaceae wood: potential for the anthracology of Mesoamerican and Isthmo-Colombian societies	Lydie Dussol	CEPAM	Academy 5 - Human Societies, Ideas and Environments	€3,307
The digital practices of unaccompanied minors: a case study in Alpes-Maritimes from the perspective of sexual health.	Marie Lesclingand	URMIS	Academy 5 - Human Societies, Ideas and Environments	€4,662
Validation of gamified career matching	Dirk Steiner	LAPCOS	Academy 5 - Human Societies, Ideas and Environments	€4,292
Statistical modeling of FDI in the EU-27	Anna Tykhonenko	GREDEG	Academy 5 - Human Societies, Ideas and Environments	€4,683
Micadôme	Frédéric Vinot	LAPCOS	Academy 5 - Human Societies, Ideas and Environments	€4,570
Symposium: Residence abroad and language learning: Where are we now?	Amanda Edmonds	BCL	EUR CREATES	€3,001
Does word order have style? (19th-21st centuries)	Marie-Albane Watine	BCL	EUR CREATES	€600
CMC Corpora Conference	Simona Ruggia	BCL	EUR CREATES	€2,000
Medical Humanities (HuMed)	Véronique Montagne	BCL	EUR CREATES	€7,000
Archeological excavation field school: the urban heritage of indigenous cities facing Romanization, two parallel cases (Pompeii and Cumae)	Sandra Zanella	CEPAM	EUR CREATES	€3,000
The "portfolio" from every angle. Archiving and preserving working documents (1680s-1820s)	Simon Dolet	CMMC	EUR CREATES	€1,000
NapELMed - Naples and the Mediterranean today: geohistory, representations, narratives (90-'10)	Daniela Vitagliano, Barbara Meazzi	CMMC	EUR CREATES	€2,000
Symposium: Futurists and fascism	Serge Milan, Barbara Meazzi, Jeremy Guedj	CMMC	EUR CREATES	€2,000
Experimentation and the avant-garde: the fascinated eye of Noëmi Blumenkranz-Onimus and Luciano Caruso. Publisher: Presses Universitaires Savoie Mont Blanc.	Barbara Meazzi	CMMC	EUR CREATES	€2,000
The voice of women: Inventory and mapping of Italian women lecturers (1900-1925)	Barbara Meazzi, Daniela Vitagliano	CMMC	EUR CREATES	€3,000
Jean-François Mattéi (1951-2014): ideals, vision and transcendence	Grégori Jean	CRHI	EUR CREATES	€1,000
Belonging and anxiety: philosophical and literary concerns	Morgan Morcel	CRHI	EUR CREATES	
ProPhilia - Philosophy dissemination and research-creation	Thomas Morisset	CRHI	EUR CREATES	€7,500
Kingdom of France, States of Savoy. Festivals, shows and creations in the County of Nice under the Ancien Régime: cross-border issues	Emanuele De Luca	CTELA	EUR CREATES	€1,000
Epistemology and discourse on the links between research and creation in literature and the performing arts – EPISTEMARTS	Marina Nordera	CTELA	EUR CREATES	€1,000



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On our relations with rivers: perceiving, representing, imagining Session 3 (Oct. 24) - River policies and communities	Stéphane Hervé	CTELA	EUR CREATES	€1,000
Literature and politics, through the prism of philology	Frédéric Detue	CTELA	EUR CREATES	€1,000
Ecocriticism and race theories in the humanities from the 16th to the 18th century	Emmanuelle Peraldo	CTELA	EUR CREATES	€2,000
Temporal adaptation of technology to the performer's action in live performance	François Paris	CTELA	EUR CREATES	€10,000
Political and social demands in contemporary Latin American performing arts	Arianna Berenice De Sanctis	CTELA	EUR CREATES	€10,000
Writing and professionalization, a four-step laboratory	Sandrine Montin	CTELA	EUR CREATES	€5,270
Naked Juliet	Caroline Bouissou	CTELA	EUR CREATES	€6,600
Third Improvisation Summer School "Revelations" – Special Edition "Fabulous Techniques"	Alice Godfroy	CTELA	EUR CREATES	€7,000
On our relations with rivers: perceiving, representing, imagining	Stéphane Hervé	CTELA	EUR CREATES	€1,300
On our relations with rivers: experiencing, saying, dreaming, from the Canadian journal Persées Explorations in the performing arts, coordinated by members of the Ttepic program (Theater & transition - deep and intelligent collective ecology).	Brigitte Joinnault	CTELA	EUR CREATES	€1,950
Producing attachment: theater, performance, performing arts	Brigitte Joinnault	CTELA	EUR CREATES	€5,000
Failure in English-language print and audiovisual culture	Isabelle Licarni-Guillaume	LIRCES	EUR CREATES	€2,000
Contemporary usage of amateur film #3 - Social networks: a reservoir of images available for reuse?	Sophie Raimond	LIRCES	EUR CREATES	€2,000
Inter- and transdisciplinary initiatives in film festival research: perspectives, issues, limits	Christel Taillibert	LIRCES	EUR CREATES	€2,000
Search - exhibit - find. Heuristic logics of expographic writing	Patrizia Laudati	SIC LAB	EUR CREATES	€1,000
Research seminar "Museums and reinvented societies"	Marine Thébault	SIC LAB	EUR CREATES	€1,500
The South as resistance: Creating a new imaginary perception	Nicolas Pelissier	SIC LAB	EUR CREATES	€10,000
Cultural third places: the French paradigm compared with international experiences / preparation of an ERC-Starting Grant application	Stamatina Magkou	SIC LAB	EUR CREATES	€4,150
Production of curating research. Project led by Camille Béguin, supervised by Patrizia Laudati	Patrizia Laudati	SIC LAB	EUR CREATES	€3,250
Exploring qualitative indicators of experience, focusing on non-formal learning. The project also looks for ways to involve "non-public audiences" in cultural practices and venues from which they may feel distant.	Marine Thébault	SIC LAB	EUR CREATES	€1,950
Doctoral contract of Eléonore Dodivers - AI as an economic agent	Agnès Festré	GREDEG	EUR ELMI	€143,890
Postdoctoral grant for Magkou Stamatina - Dynamics of the emergence of territorial cultural entrepreneurship ecosystems: case study of Nice and Cannes	Rani Dang	GREDEG	EUR ELMI	€81,444
Prevention of running-related structural and functional damage through specific exercising of the hamstring muscles: Influence of biological sex	Enzo Piponnier	LAMHESS	EUR HEALTHY	€20,190
Decoding the neural code of movement to enhance the control of human-machine interfaces	François Hug	LAMHESS	EUR HEALTHY	€144,000
Non-invasive measurement of the neural code of movement: towards a new generation of human-machine neural interfaces	François Hug	LAMHESS	EUR HEALTHY	€20,041



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Study of the impact of aging and physical activity on walking economy using an experimental and modeling approach	Pauline Gerus	LAMHESS	EUR HEALTHY	€19,073
Behavioral and mobile EEG study of the effects of cognitive and motor aging on spatial abilities in relation to action spaces	Stephen Ramanoël	LAMHESS	EUR HEALTHY	€23,597
Women's Health Week	David Darmon	RETINES	EUR HEALTHY	€3,000
Identification of cellular circuit alterations in the airways at different stages of chronic obstructive pulmonary disease (COPD) - Doctoral thesis of Paola Porracciolo	Laure-Emmanuelle Zaragosi	IPMC	EUR LIFE	€72,041
Exploring the potential of RabX inhibition to treat MAFLD - doctoral thesis of Julie Te	Jerome Gilleron	C3M	EUR LIFE	€72,041
White doctoral school grant - doctoral thesis of Anaïs Bini	Jacques Noël	IPMC	EUR LIFE	€145,000
Ecological niche models to reconstruct long-term socio-environmental trends: Humans and Birch (Betula pendula) forests in Western Europe (ECOHUB)	Barbara Mas Velez	CEPAM	EUR ODYSSEE	/
Costa-Rica space	Elisabeth Cunin and Christian Rinaudo	URMIS	EUR ODYSSEE	€2,000
Costa-Rica URMIS	Elisabeth Cunin and Christian Rinaudo	URMIS	EUR ODYSSEE	€900
Ethnographic inquiry in Greece and Turkey	Stélios Moraïtis	URMIS	EUR ODYSSEE	€1,000
Planning for complexity using the language of patterns. Analytical, project-based and communicative approaches	Grégoire Picard	ESPACE	EUR ODYSSEE	€145,000
EUR ODYSSEE Scientific Meetings from December 11 to 13	Christian Rinaudo	URMIS	EUR ODYSSEE	€1,353
Nereides project	Christian Rinaudo	URMIS	EUR ODYSSEE	€12,000
Postdoctoral contract	Auréade Henry	CEPAM	EUR ODYSSEE	€60,000
Doctoral contract	Benoit Derijard	ECOSEAS	EUR ODYSSEE	€14,000
Cocoa Project - Meetings in September 2024	Christian Rinaudo	URMIS	EUR ODYSSEE	€3,558
Nice Physics Doctoral Days (JDPN) 2024	Lucas Sarrazin	InPhyNi	EUR SPECTRUM	€1,300
Conference for the development of collaborations between Chile, INPHYNI and Massimo Giudici	Massimo Giudici	InPhyNi	EUR SPECTRUM	€5,000
Doctoral scholarship for Maïder Bloch	Frédérique Leclerc	Geoazur	EUR SPECTRUM	€72,000
Doctoral scholarship for Alex Guinard	Anthony Memin	Geoazur	EUR SPECTRUM	€72,000
Doctoral scholarship for Nathan Lecaron	Olivier Alibart	InPhyNi	EUR SPECTRUM	€72,000
Doctoral scholarship for Amélie Lam	Héloïse Meheut	Lagrange	EUR SPECTRUM	€72,000
Internship stipend 2024-2025 / First wave: Mahima Srivastava	Antoine Reserbat-Plantey	CRHEA	EUR SPECTRUM	€2,640
Internship stipend 2024-2025 / First wave: Satish Govindlal Gupta	Julien Brault	CRHEA	EUR SPECTRUM	€3,960
Internship stipend 2024-2025 / First wave: Allaeddine Amraoui	Morgan Abily	Geoazur	EUR SPECTRUM	€3,960
Internship stipend 2024-2025 / First wave: Alexandre Caplette	François Michaud	Geoazur	EUR SPECTRUM	€3,960
Internship stipend 2024-2025 / First wave: Adrien Guerin	Jade Dussart-Gautheret	ICN	EUR SPECTRUM	€3,960
Internship stipend 2024-2025 / First wave: Jakob Lehmann	Céline Cohen	InPhyNi	EUR SPECTRUM	€3,960
Internship stipend 2024-2025 / First wave: Amira Bouikni	Alexis Matter	Lagrange	EUR SPECTRUM	€2,640



Project title	Project leader's name	Leader's laboratory	Program / Structure	Amount of IdEx funds granted
Internship stipend 2024-2025 / First wave: Thomas Oudeville	Simona Rota Nodari	LJAD	EUR SPECTRUM	€2,640
CSI 2024 - JAP2025	Sylvain Antoniotti	ICN	EUR SPECTRUM	€1,000
CSI 2024 - DREAMS25	Yves d'Angelo	LJAD	EUR SPECTRUM	€3,000
CSI 2024 - JTAG	Joachim Yameogo	LJAD	EUR SPECTRUM	€2,000
CSI 2024 - JEF25	David Chiron	LJAD	EUR SPECTRUM	€2,000
CSI 2024 - TurnBridges	Jérémie Bec	InPhyNi	EUR SPECTRUM	€1,000
SPECTRUM Attractivity Packages - Ursula Beate Ludwig	Ursula Beate Ludwig	LJAD	EUR SPECTRUM	€5,000
SPECTRUM Attractivity Packages - Reda Chhaibi	Reda Chhaibi	LJAD	EUR SPECTRUM	€5,000
SPECTRUM Attractivity Packages - Baptiste Blanc	Baptiste Blanc	InPhyNi	EUR SPECTRUM	€5,000
SPECTRUM Attractivity Packages - Maxime Henriquet	Maxime Henriquet	Geoazur	EUR SPECTRUM	€5,000
SPECTRUM Attractivity Packages - Sara El-Bouch	Sara El-Bouch	Lagrange	EUR SPECTRUM	€5,000
Organization of the "World of applied and industrial mathematics" workshop 2024	Haydar Jammoul	Inria	NeuroMod	€1,000
Trajectories of neuro- and socio-cognitive disorders after ischemic stroke in young subjects	Damien Vistoli	LAPCOS	NeuroMod	€4,835
Artificial Intelligence techniques in extended reality: Multiplayer serious games for training complex abilities	Valeria Manera	CoBTek	NeuroMod	€4,800
46th Symposium of the Society of Neuroendocrinology - Joint France-Canada Symposium - SNE2024	Carole Rovere	IPMC	NeuroMod	€3,050
Computational outcomes from network neural connectivity and task-specific input	Samuel Deslauriers Gauthier	Inria	NeuroMod	€5,000
Unraveling the neural code of movement for restoration and augmentation	François Hug	LAMHESS	NeuroMod	€22,500
Lexical constellation through the lens of semantics	Fanny Meunier	BCL	NeuroMod	€22,600
Physiopathological roles of poorly understood myelin lipids in Alzheimer's disease	Hélène Barelli	IPMC	NeuroMod	€142,000
Internet of Performing Arts	Gaël Navard	CTELA	CDR5 XR2C2	€4,000

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