

A photograph of an astronomical observatory dome at night. The sky is dark with a visible Milky Way galaxy. A person is silhouetted on a ladder leaning against the dome. The foreground shows the structure of the observatory with some red-lit interior spaces visible through openings.

# INTERNATIONAL RESEARCH CENTER CNRS - USP

**CNRS -  
KEY  
FIGURES  
2023**

**RESSOURCES**

**32 000**

Employees

**28 000**

Scientists (researches, ing., tech.)

**BUDGET**

**4,0**

Billions of euros in 2023

**1,0**

Millions of euros of own resources

**RESEARCH**

**+1 000**

Laboratories in France

**10**

Scientific divisions

**INNOVATION**

**+240**

Joint research structures  
CNRS / companies

**80 to 100**

Start-up created  
per year

**1<sup>st</sup>**

Patent filers in co-deposit with  
companies (INPI)

**PUBLICATIONS**

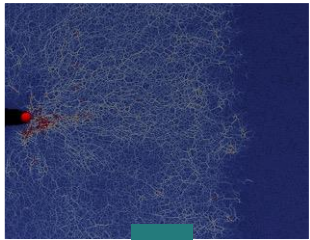
**2/3**

of publications are with a  
foreign laboratory

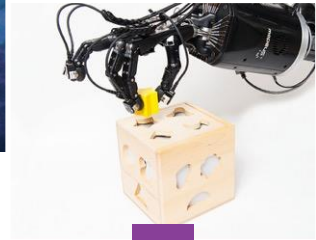
**94 %**

publications  
are in open access

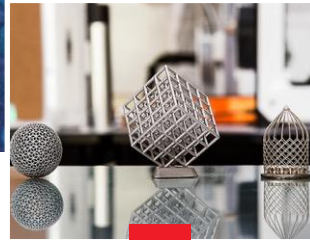
# 10 SCIENTIFIC DIVISIONS



**Mathematical sciences & their interactions**



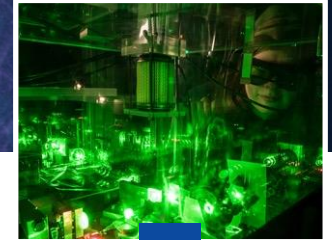
**Information Sciences & Technologies**



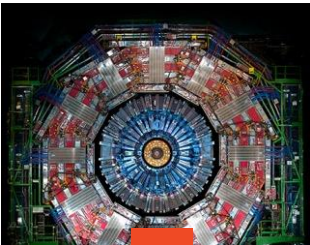
**Engineering & Systems Sciences**



**Chemistry**



**Physics**



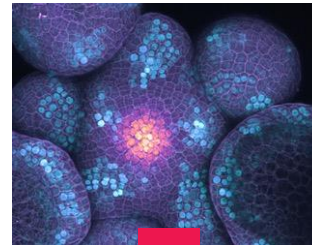
**Nuclear & Particles Physics**



**Earth Sciences and Astronomy**



**Ecology & Environment**



**Biological Sciences**



**Humanities & Social Sciences**



# **BASIC RESEARCH**

**FOR THE BENEFIT OF THE SOCIETY**

# BASIC RESEARCH...



- To recruit and form **talents**

## COP

- To progress in the **study of our some 40 thematic priorities**



- To promote **open science**



- To preserve **scientific integrity and deontology**



- To support **research infrastructures**

# SOME OF OUR SCIENTIFIC PRIORITIES

- Engineering
- Matter, waves and particles
- Digital
- Planet and Universe
- Societies
- Life

# ... FOR THE BENEFIT OF THE SOCIETY



- Global social challenges



- Economic world



- Support for decision-making and understanding

A close-up, artistic photograph of a microscope's objective lens and eyepiece, rendered in a dark, moody blue color palette. The lighting highlights the metallic textures and the precision of the instrument.

# A BOOSTER FOR INNOVATION

**+240** joint CNRS/company  
research structures

THALES



RENAULT



Air Liquide



FLCEN



AIRBUS



# THE CNRS INTERNATIONAL TOOLBOX

## Exploring

**International  
Emerging  
Actions  
(IEA)**

2-year **PI-to-PI  
research projects**

Building a capacity to  
develop strategic  
orientations

## Consolidating

**International  
Research  
Networks  
(IRN)**

5-year **multi-  
team scientific  
coordination  
networks**

Strengthening a collaboration  
  
Simplifying international agreement  
processes

**International  
Research  
Projects  
(IRP)**

5-year **labs-to-labs  
collaborative  
research projects**

Bottom-up approach

## Structuring

**International  
Research  
Laboratories  
(IRL)**

5-year **joint research  
laboratories**

Highlighting iconic  
operations decided at a  
strategic level and  
implementing a strongly  
localized international  
presence

Laboratory approach

## Integrating

**International  
Research  
Centres  
(IRC)**

**PhD joint programmes**

Joint institutional  
steering

Institutional approach

# INTERNATIONAL RESEARCH LABORATORIES & CNRS OFFICES ABROAD



10  
representation  
offices

More than 70 IRL  
4 with a company

**SOLVAY**    **THALES**  
**SAINT-GOBAIN**    **NAVAL GROUP**

# CNRS INTERNATIONAL RESEARCH CENTERS

- **University of Arizona: France-Arizona Institute for Grand Global Challenges**

Scientific focus: the natural, social and digital environment, supported by structures such as the iGlobes IRL, one of the 5 CNRS IRLs with the United States, and the "Pima County" International Human-Environment Observatory.

Further information: <https://fainstitute.arizona.edu/>

- **Imperial College: CNRS-Imperial International Research Center**

Thematic areas: mathematical sciences, the Internet of Things (IoT), artificial intelligence (AI), data sciences and engineering systems. There are also growing collaborations in materials science, DNA data storage, medicine, food and nutrition.

Further information: <https://www.cnrs.fr/fr/cnrsinfo/le-cnrs-et-imperial-college-london-lancent-un-nouveau-centre-de-recherche-international>

# CNRS INTERNATIONAL RESEARCH CENTERS

- **University of Tokyo: "CNRS-UTokyo International Research Center"**

Thematic areas: mathematical sciences, geology and seismology, digital humanities, energy transition and gender equality.

Further information: <https://www.cnrs.fr/fr/le-cnrs-et-luniversite-de-tokyo-lancent-un-nouveau-centre-de-recherche-international>

- **University of Chicago: Discovery International Research Center**

Thematic areas: particle physics, humanities and social sciences, including economics and political science, and astronomy.

Further information: <https://www.cnrs.fr/fr/cnrsinfo/un-nouvel-international-research-center-entre-le-cnrs-et-luniversite-de-chicago>

# A FIFTH INTERNATIONAL RESEARCH CENTER : WHY USP?

## USP em números

Fonte: Anuário Estatístico USP 2020 (fonte de dados 2019)

**2.483.493**

Participantes em atividades de cultura e extensão

**48**

Bibliotecas

**97.325**

Alunos matriculados  
(graduação e pós-graduação)

**1.368**

Prêmios e outras distinções recebidas por docentes

**232.166**

Atendimentos em serviços de saúde e educação

**5.383**

Docentes

**13.368**

Técnicos-administrativos

**88**

Unidades e outros órgãos



### Campus

- > São Paulo
- > Bauru
- > Lorena
- > Piracicaba
- > Pirassununga
- > Ribeirão Preto
- > São Carlos
- > Santos

São Paulo	9.232
Paraná	1.258
Rio de Janeiro	1.185
Bahia	409
Santa Catarina	373
Minas Gerais	248
Goias	168
Ceará	159
Pernambuco	133
Distrito Federal	130
Paraíba	126
Amazonas	120
Rio G. do Sul	85
Maranhão	83
Mato G. do Sul	82
Rio G. do Norte	82
Mato Grosso	68
Pará	66
Espírito Santo	54
Piauí	19
Sergipe	16
Roraima	11
Alagoas	9
Amapá	4
Tocantins	1
Acre	1
Rondônia	0

### ...E QUAL FOI O INVESTIMENTO DOS ESTADOS

Dispêndios em pesquisa e desenvolvimento em 2020 (em R\$ milhões)



FORTE COORDENAÇÃO  
GERAL DE INDICADORES DE  
CIÊNCIA E TECNOLOGIA/MCTI

## DISCIPLINES SAMPLING AMONG THE 250 SUB-THEMES (WEB OF SCIENCE FIELDS) OF CNRS-USP CO-PUBLICATIONS (2017-2022)

Discipline	Articles
Astronomy & Astrophysics	575
Physics, Particles & Fields	573
Ecology & Environment	312
Physics, Nuclear	266
Immunology	158
Physics, Multidisciplinary	111
<i>Human and Social Sciences</i>	60
...	...

# 7 CNRS INTERNATIONAL ACTIONS AND PROJECTS @ USP

2023 - 2024

## Human Sciences

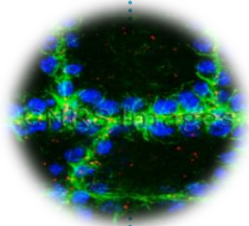
TAME method in linguistics  
*International Action*  
LLING Nantes/FFLCH USP



2019 - 2023

## Biological Sciences

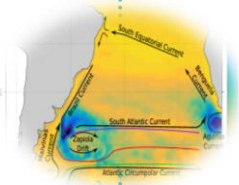
Immune response to danger signals  
*International Project*  
IEM Orleans/Faculdade de Medicina USP



2023 - 2027

## Earth Sciences and Astronomy

Drivers of past changes in South Atlantic Circulation  
*International Project*  
LOCEAN Paris/USP



**2021 - 2025**

**Human Sciences**

Archives-Medias-Images-Societies

*International Project*

LRHRA Lyon/Escola de Comunicação USP



**2022 - 2026**

**Human Sciences**

Passions, Actions and Reactions in the Antic World

*International Project*

Centre Leon Robin Paris/FFLCH USP



**2022 - 2026**

**Human Sciences**

Latin America Contributions to a Common Right

*International Project*

Centre Malher Paris/ Centro de Pesquisa de Direito Sanitario USP



**2022 - 2026**

**Ecology and Environment Sciences**

Diversity and biotechnology of Marine Algae

*International Network*

LBIMM Roscoff/USP





# HISTORY OF THE CREATION OF IRC CNRS-USP

**GABINETE DO REITOR**

**IMHEA CNRS**  
Enseignement supérieur • Ribeirão Preto, SP • 36 abonnés

**FAPESP**

**FAPESP Program f Présentation**

The CNRS/“Immunologie et Neurogénétique Expérimentales et Moléculaires” (CNRS-INEM) laboratory and the USP/ Center of Research in Inflammatory Diseases (CRID) are creating an International Research Laboratory located in Ribeirão Preto, SP, Brazil which will start in January 2024.

**Anto CNRS**

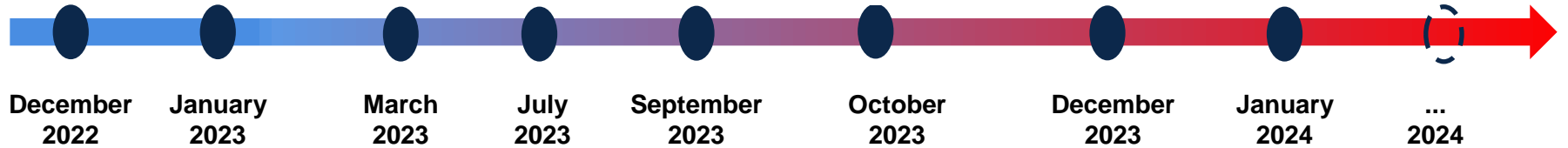
This international laboratory called IMHEA will focus on the regulation of host responses and immune health.

**Synopsis:** Immune responses need to be tightly regulated to provide effective protection against infectious or non-infectious threats, but at the same time, avoid overwhelming inflammatory reactions that have the potential to cause extensive immunopathology and tissue damage, as seen in many infectious and autoimmune diseases. How immune cells achieve this balance at the subcellular level is the overall focus of our research.

**Programa FAPESP PROASA**  
Atlântico Sul e Antártica

**(PROASA)**

discuter de



# DISCIPLINARY ARCHITECTURE OF IRC CNRS-USP



# “MAISON DU CNRS” AT THE UNIVERSITY OF SAO PAULO



**FOR FURTHER INFORMATIONS: LIVIU-PETRU.NICU@CNRS.FR**