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CNRS : AN ESSENTIAL RESEARCH PARTNER

A European research performing
organization with a strong
international dimension

Francesca Grassia
CNRS-DERCI



P. 01

CNRS - AN ESSENTIAL RESEARCH CONTRIBUTOR

- CNRS is a **national scientific and technological public organization** under the responsibility of the French Ministry of National Education, Higher Education and Research
- It is the largest research performing organization in Europe
- It generates frontier knowledge which spans from novel concepts to forerunner applications
- It targets on pushing back the frontiers of science
 - | Tools to strengthen interdisciplinarity
 - | Important means dedicated to very large-scale research infrastructures (national, European and international – **Canada-France-Hawai Telescope**)
 - | Key commitment in the setting up of a European research area
 - | Active international policy



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CNRS COVERS ALL AREAS OF KNOWLEDGE



- It carries out and evaluates omnidisciplinary cutting-edge research through **10 thematic institutes**
 - mathematics
 - physics
 - information technology
 - nuclear and particle physics
 - earth sciences and astronomy
 - chemistry
 - biology
 - human and social sciences
 - ecology and the environment
 - engineering
- It contributes to society by addressing societal concerns and by **transferring results** and enriching culture
- It trains for and through research



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Jules Hoffmann



Serge Haroche



RESOURCES AND RESULTS

- Nearly **90,000** total research personnel, of which **34,000** on direct CNRS payroll, including **25,500** permanent personnel, **11,400** researchers and **14,100** engineers, technicians and administrative staff at the service of research and its monitoring
- 2012 Budget: **3.3** billion euros, including **2.5** billion euros from state subsidies and **766** million euros financed by CNRS-generated income
- Nearly **1,100** research units throughout France
- **94% of research** is performed in partnership with universities, national, European and international research performing organizations as well as private companies **within joint research units**
- **about 30,000** publications each year on average in international peer review magazines
- **18** Nobel prize and **11** Fields Medal winners



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AN INTENSE INTERNATIONAL ACTIVITY

CNRS' worldwide reach supporting collaboration, networking and labs throughout the world in partnership with other European and international research organizations

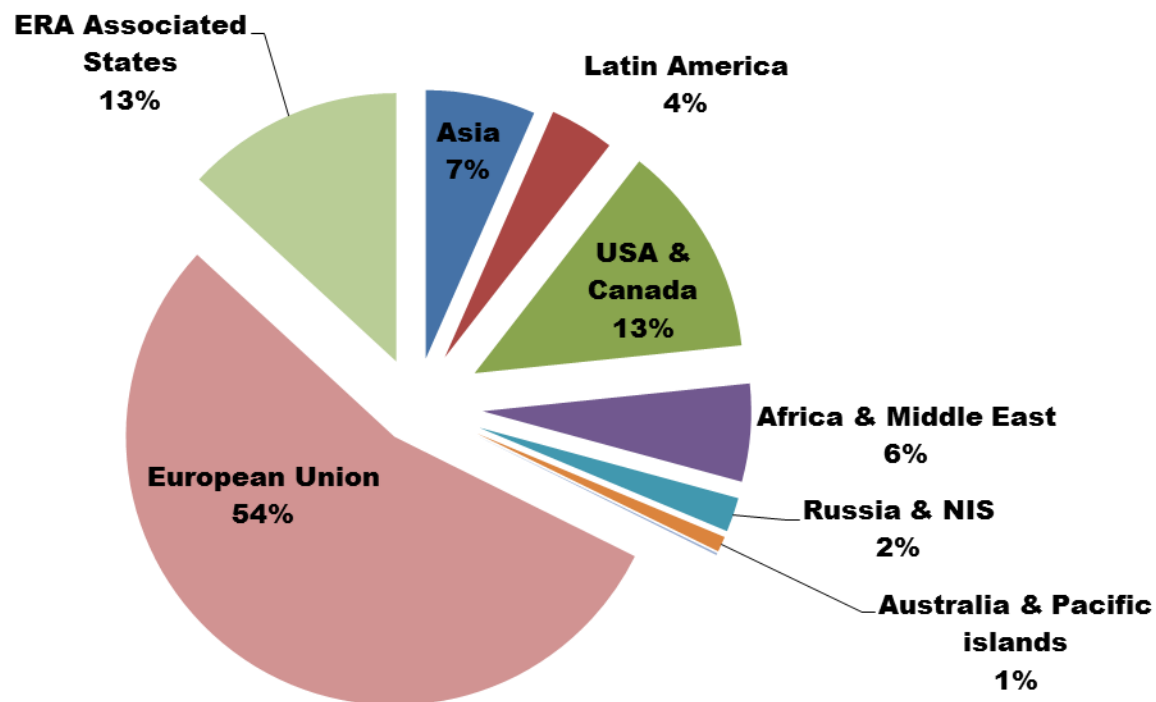
- **I** The label « CNRS » is worldwide well known for cutting edge and interdisciplinary research activities
- **I** About **30,000** publications in 2011* (representing **55 %** of French publications, **7,7 %** of ERA publications, **3.2 %** of international publications)
- **I** of which more than **57 %** are co-authored with partners abroad and **36 %** with partners based in European research area's countries
- **I** **1st participant** in the EU FP6/FP7 programs and major actor in building the European research area (203 ERC +35 StG & 18 AdvG in 2012)

* Social Science and Humanities excluded



AN INTENSE INTERNATIONAL ACTIVITY

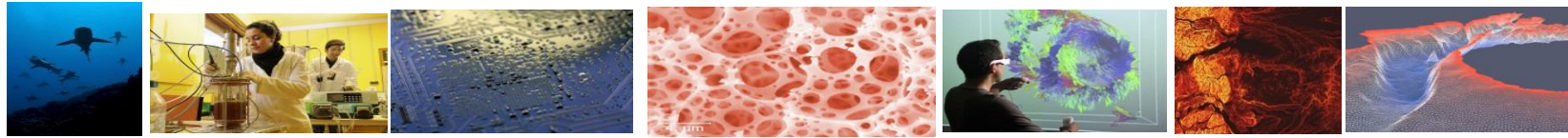
CNRS missions abroad in 2011 per geographical area



56,100 missions abroad in 2012



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AN INCREASINGLY INTERNATIONAL CNRS STAFF

- **6,500** PhD students (1/3), Post-Docs and researchers (more than 1/2) holding foreign nationality hosted in CNRS laboratories for temporary positions
- **1,687** permanent researchers holding foreign nationality, **348** engineers and technicians (65% from Europe)
- Over 327 **30 %** international researchers recruited 2012 at CNRS (80% from Europe)
- About **200** CNRS researchers on leave in research organizations or companies abroad



CNRS INTERNATIONAL TOOLS

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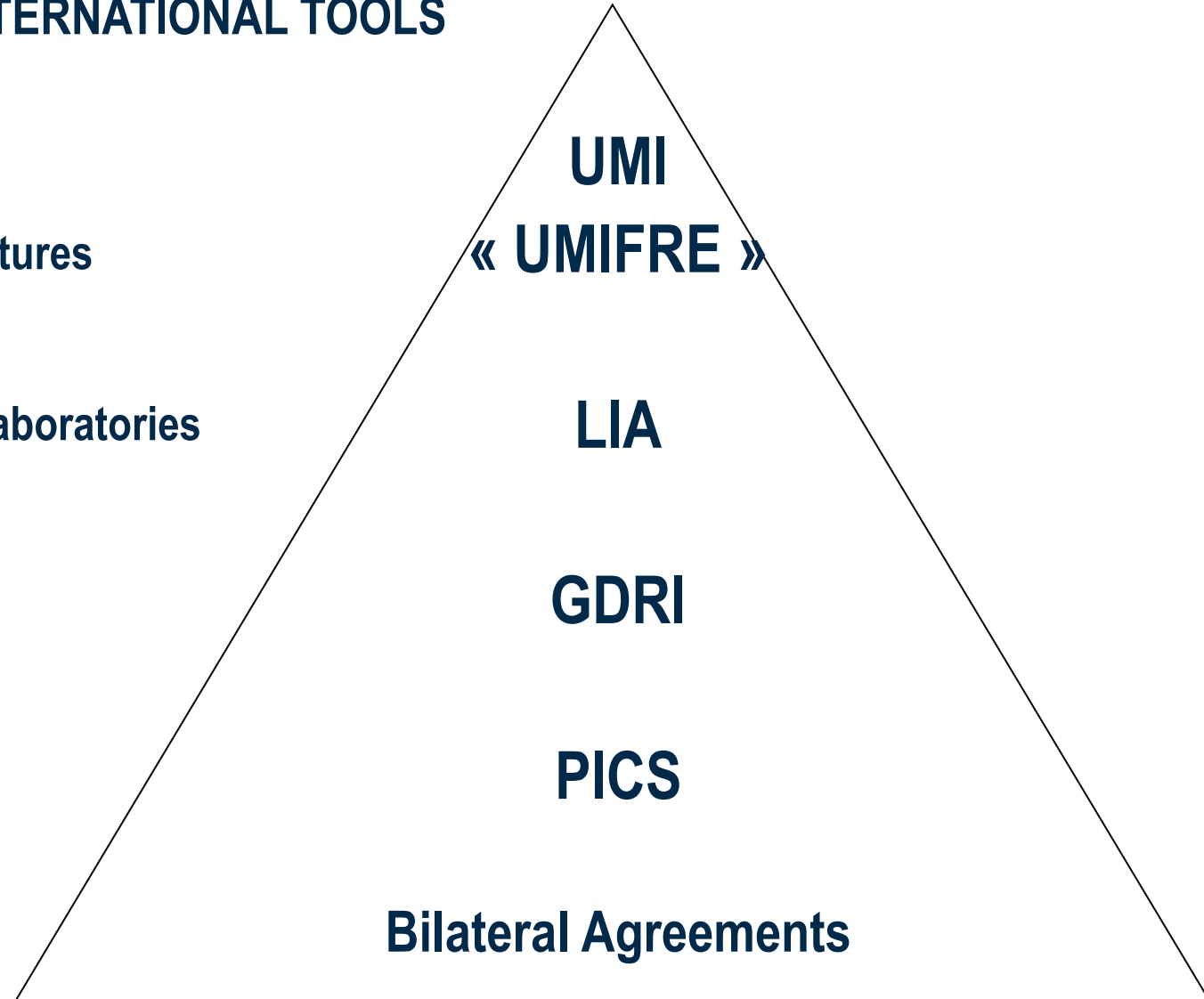
**International Joint Units
+ « mirror localized » structures**

International Associated Laboratories

**International Scientific
Coordination Networks**

**International Scientific
Cooperation Programme**

**Bilateral exchange
/PICS programmes**





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WORLDWIDE CNRS COOPERATION - KEY FIGURES 2012 (& on going in 2013 with Canada, Portugal, Swiss and Luxembourg)

- **50** bilateral agreements (with 40 countries) (**0**, **1** with the FST, **0**, **1** with the FNR)
- **327** International Projects for International Cooperation (**PICS**) (**17**, **2**, **5**, **2**)
- **139** International Associated Laboratories (**LIA**) (**6**, **0**, **1**, **1**)
- **104** International Networks (**GDRI**) (**7**, **4**, **8**, **2**)
- **30** International Joint Units (**UMI**) (**4**, **0**, **0**, **0**)
- **26** Joint Units abroad with the French Ministry of Foreign Affairs (**UMIFRE**)
- **11** CNRS Representation Offices abroad

11 CNRS REPRESENTATION OFFICES



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30 INTERNATIONAL JOINT UNITS (UMI)



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10 North America, 5 Latin America, 5 Europe, 8 Asia, 1 Russia, 1 Africa

26 CNRS-MINISTRY OF FOREIGN AFFAIRS MIXED UNITS (UMIFRE) (Social Sciences and Humanities)



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**10 Middle-East and North Africa, 4 Central and South Africa,
5 Europe, 1 Russia, 6 Asia, 2 Latin America**



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ENCOURAGE CONTACTS – EXCHANGE PROJECTS

• | Objective:

Promote cooperation with countries with which formal links are still weak (e.g. in the ERA: EU12, UK, DK, IL...)

• | Means:

Exchange agreement with partner organization in target country
Annual bilateral calls for proposals, with budget earmarked by country (**FST interrupted in 2010**).
Joint selection procedure.

• | Action:

Support a first contact between teams
through travel grants running over 1 or 2 years, renewable once.



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STRENGTHEN COLLABORATIONS : RESEARCH PROJECTS

• | Objective:

Reinforce a running collaboration (after a first joint publication), to create a pool of high-quality partnerships, supporting the scientific priorities of each Institute.

• | Means:

PICS: Annual calls for proposals, with no geographic constraints.
Projects selected by each CNRS Institute.
Possibility of co-funding by partner
(in the ERA : **FNR**, joint calls with Italy, Israel, Romania).

• | Action:

Funding of visits, meetings, seminars and expenses for the collaboration.
Duration 3 years.



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LONG-TERM COMMITMENT : ASSOCIATIONS OF LABORATORIES

• | Objective:

Develop a thematic area through common work with an International laboratory recognized for its excellence.

• | Means:

LIA: A « laboratory without walls »:

An association of two laboratoires in France and abroad, pooling resources on a common research programme. A contract with the partner institution defines operation and intellectual property rights.

• | Action:

Funding by CNRS and the partner institution of the additional cost for the collaboration, visits, seminars, post-docs, small equipment, etc.

Duration: 4 years, renewable once.



STRONG PARTNERSHIPS - JOINT UNITS



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- **Objective:**

Establish a close partnership with a leading International institution to set up and manage together an internationally competitive laboratory.

- **Means:**

UMI: A laboratory « within walls ».

Located on a single site (possibly with a 2nd « mirror » location in the partner country), managed and run by CNRS and the partner institution to carry out a scientific programme.

It is an operational structure with scientific and budgetary autonomy.

- **Action:**

Allocation of human, materiel and financial resources by the two partner institutions, based on a contract defining operation, governance, management and intellectual property rights.

Duration: 4 years, renewable.



ORGANIZING COMMUNITIES: NETWORKS



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- **Objective:**

Bring together laboratories from two or more countries to coordinate their research on a particular thematic area.

- **Means:**

GDMI: A network of key laboratories working in the area.
Exchange of information and practices, coordination of activities.

- **Action:**

Funding of conferences, seminars, workshops, thematic schools, working meetings, visits, exchange of information, ...
Duration 4 years, renewable once.



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***THANK YOU
FOR YOUR ATTENTION !***



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AN IMPORTANT ACTOR IN ECONOMIC LIFE

- **CNRS develops long term relations with industrial partners, helps laboratories to carry out applied research activities and transfers technologies to the economic world**
 - | **25** framework agreement with major industrial groups
 - | **4,477** primary patent families, 383 new patents published in 2011 (+95% since 2006) and **891** active licences (+60 per year)
 - | **670** innovative companies set up since 1999 (+ **61** in 2011) 80% being still active
 - | member of **95%** of French competitiveness clusters
 - | **5th** largest patent filer in France in 2012 – 1st amongst public research organizations