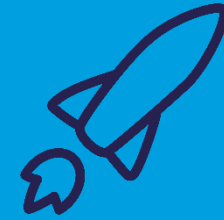


2018

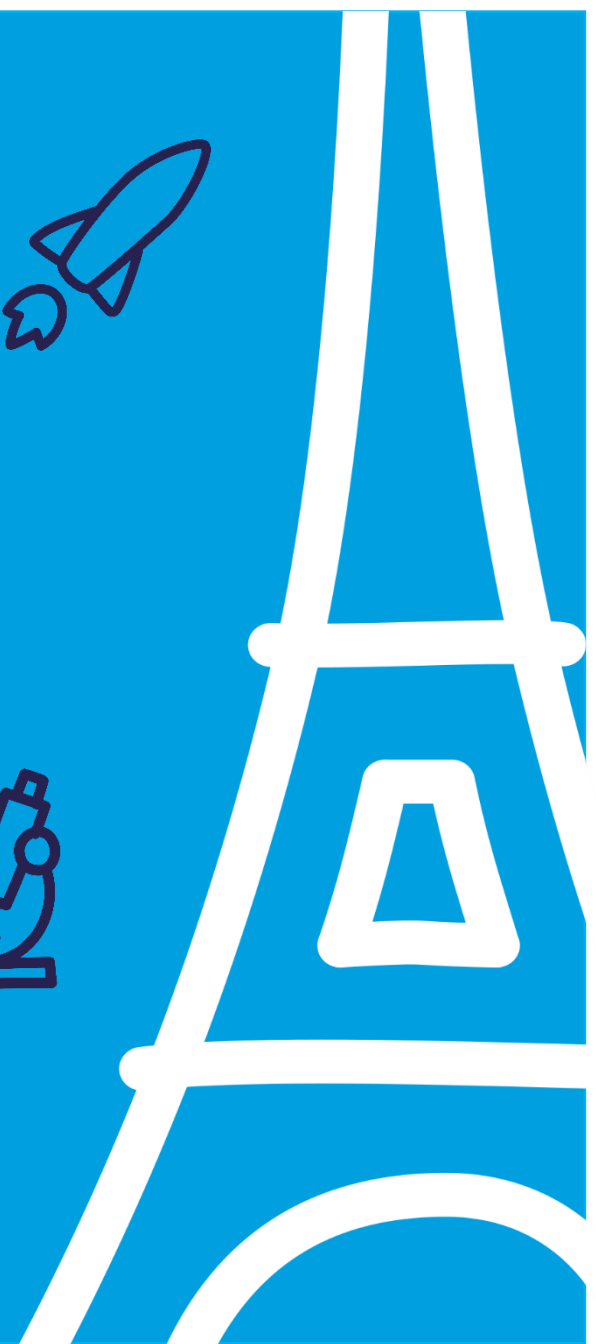
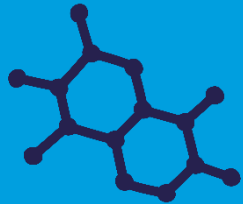
$\sqrt{2}$



RESEARCH LANDSCAPE

IN

IN FRANCE



INNOVATION IN FRANCE

A TOP PRIORITY

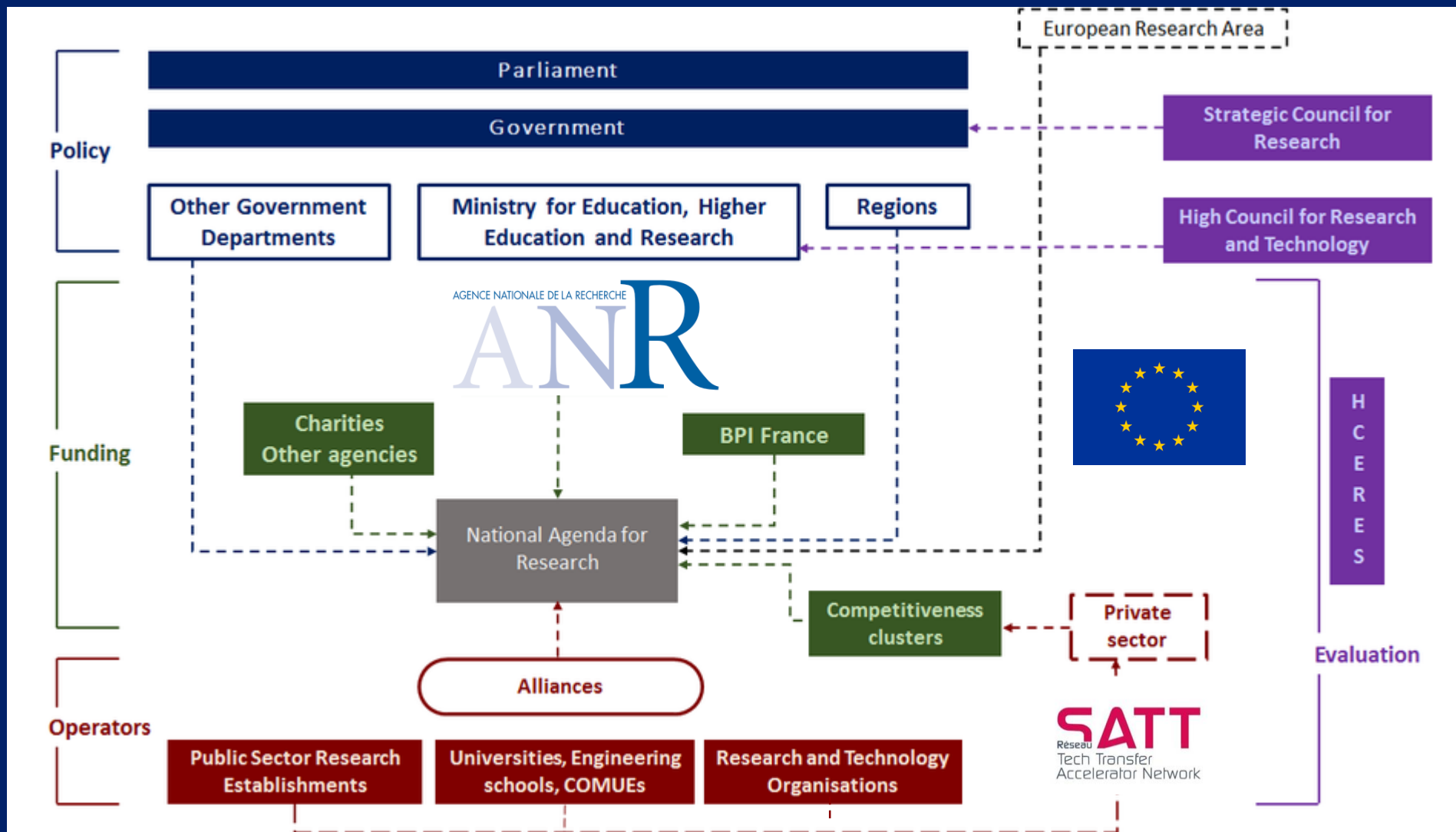
- World's 3rd leading innovator after Japan & United States in 2017 (Top 100 Global Innovators, Thomson Reuters)
- French publications are ranked 4th in the world for impact
- 400,000 people engaged in research-related activities
- Deeptech start-ups need research-based technologies
- Facilitate mobility of researchers for creating start-ups
- 27 M€ to support start-up contest
- Fields: artificial intelligence, climate, mobility 2.0, health

Station F



START-UP NATION

Research & Innovation Landscape



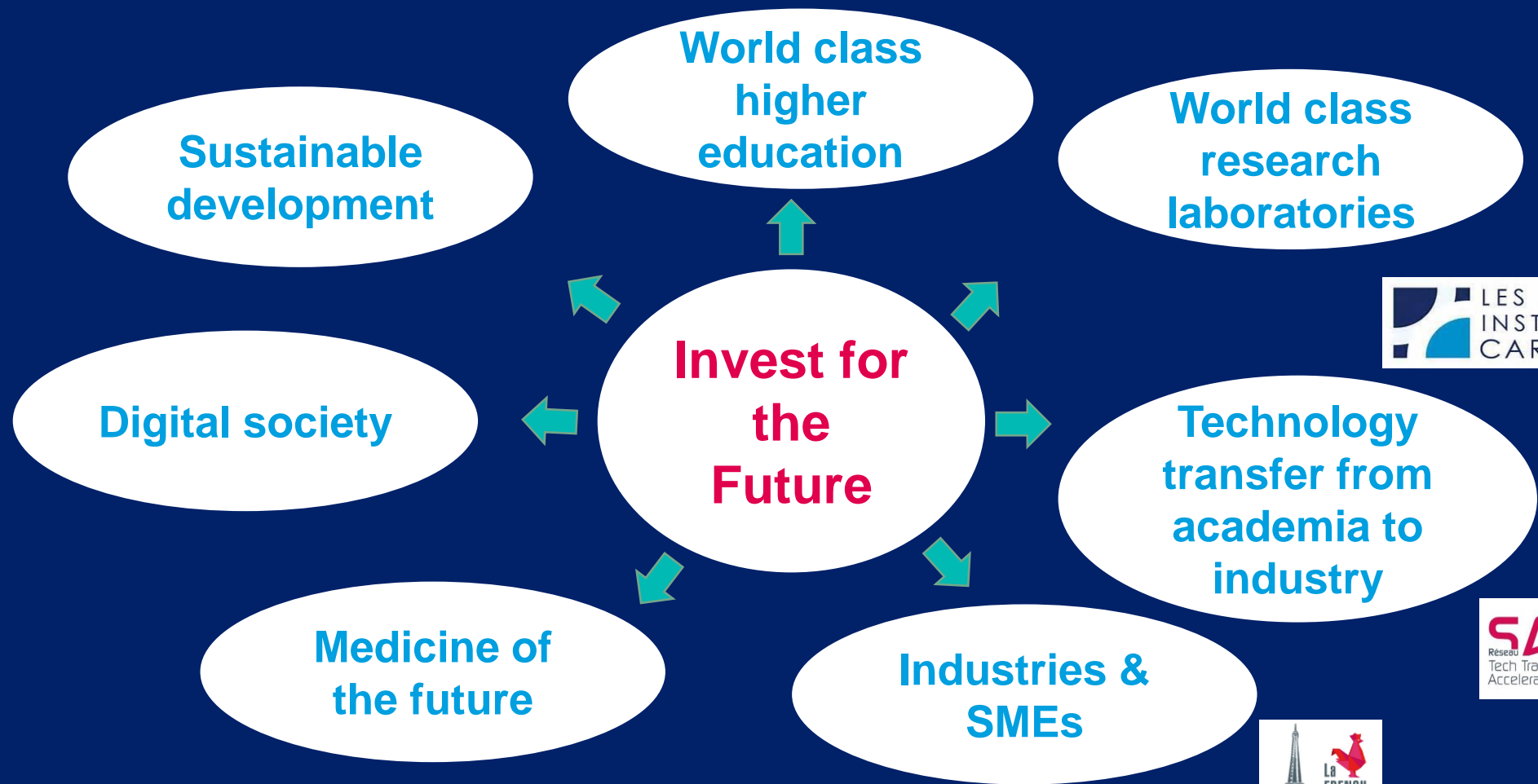
THE INTERNATIONAL HEART

OF FRENCH RESEARCH

- France holds **1st place in international research collaboration**, with 51% of publications involving at least one foreign lab (Scimago 2017)
- **17% of researchers in the public sector are international**
5% in the corporate world
- **41% of France's doctoral candidates are from outside France**
- French research bodies maintain **more than 250 facilities** around the world
- French research teams receive 11% of the financing provided under the **Horizon 2020** European framework program



INVESTMENT FOR THE FUTURE



Focus on collaborations at PhD level

CIFRE Contracts



- Objective: **foster the development of public-private partnership research and place doctoral students in an employment situation**
- A PhD program with a **joint supervision by an academic lab that allows firms to obtain financial assistance if they hire a doctoral candidate** (minimal gross annual salary around € 24 000 / annual subsidy amounts to €14,000 per year and not subject to VAT and in addition, the company could get a tax research credit)
- Managed by National Association of Research and Technology (ANRT) and Ministry of Higher education, Research and Innovation
- Fellow works in a company as well as a laboratory, thereby **gaining valuable experience in both worlds, understanding their different research aims and approaches**



Focus on collaborations at PhD level

Cotutelle

- Program at doctoral level offered by **two higher education institutions (HEIs)**
- Allows to graduate with a double degree or a joint PhD degree
- Research work overseen by two thesis supervisors, one from each partner institution
- **Unique opportunity to gain knowledge about the research methods and scientific approaches**
- **Facilitates establishment and strengthening of collaborations between research laboratories**
- French legislation offers **great flexibility** and authorizes HEIs to bypass French mechanisms if needed

FRANCE EXCELLENCE

SCHOLARSHIP PROGRAM

BOURSES FRANCE EXCELLENCE

프랑스 정부 장학금 "FRANCE EXCELLENCE" 2018

주한 프랑스대사관에서 2018년도
프랑스 정부 장학금 France Excellence 장학생을 선발합니다.

본 장학금은 프랑스 고등교육기관
석, 박사 과정으로 진학하는 우수한 한국 학생들을
지원하는 장학프로그램입니다. 2018년도에는 주한
프랑스대사관에서 후원하는 여름 단기 프로그램도
장학금이 지원될 수 있습니다.

Master

PhD

Summer Schools



지원 대상

2018년 9월
프랑스 고등교육기관 석사 1,
2학년 또는 박사 입학 예정자.
대사관에서 후원하는
프랑스 여름 단기
프로그램에 참가하고자 하는
학사 3, 4학년 학생.



전공 분야

이공계, 경제, 경영,
정치학 및 법학 전공 우선 선발



지원 내용

생활비, 왕복 항공권, 학생 보험,
학비 일부



지원 마감

2018년 5월 18일

CNRS – INTERNATIONAL COOPERATION

INTERNATIONAL RESEARCH NETWORK (IRN)

Seeding

Scientific coordination network gathering research teams in European and non-European countries
Devoid of any legal status
Set-up for a 4-year period, renewable twice

INTERNATIONAL ASSOCIATED LABORATORY (LIA)

Consolidating

A “laboratory without walls”, which allows a French research team and a foreign research unit to work on a defined joint project
2 co-directors, a scientific management committee and a steering committee
Runs for 4 years, renewable once

INTERNATIONAL JOINT UNITS (UMI)

Structuring

Association of foreign laboratories with French laboratories
Staffed by personnel from both the CNRS and the partners
Headed by a director jointly named by CNRS and foreign partners

CNRS & SOUTH KOREA

INTERNATIONAL RESEARCH NETWORKS (IRN)

Nano and Micro Systems (NAMIS)

Functional Material for Organic Optics, Electrics and Devices (FUN MOOD)

Reaction-Diffusion Network in Mathematics and Biomedicine (ReaDiNet)



INTERNATIONAL JOINT LABORATORIES (LIA)

Functional Nanostructures: Morphology, Nanoelectronics and Ultrafast Optics

France-Korea Particle Physics Laboratory (FKPPL)

FK Mathematics

INTERNATIONAL MIXED UNITS (UMI)

Building Blocks for Future Electronics Laboratory: UMI 2B-FUEL

Joint research programme with NRF



CARNOT INSTITUTES NETWORK

ACADEMY-INDUSTRY LINKAGE



RESEARCH &
INNOVATION
for INDUSTRY

29 Carnot institutes & 9 associated Carnot

Objective: boosting technology transfer and public-private cooperation in the areas of R&D and innovation / scientific and technological excellence serving innovation & the ability to prepare the responses of tomorrow by anticipating market requirements

Key figures (2016)

- 18% of the French public laboratory workforces
- 50% of the R&D funded by companies in French public research
- Over 25,000 peer-reviewed articles in 2016 (1/3 of the French peer-reviewed articles)
- 65 spin-off companies spun off per year
- 1,050 priority patents filed in 2016 (First French IP actor)



CARNOT INSTITUTES NETWORK

ACADEMY-INDUSTRY LINKAGE

To partner with Carnot Institutes:

- Contract research
- Collaborative projects
- Joint laboratories
- Advice and expertise
- Access to platforms



FISCAL INCENTIVE TO SUPPORT R&D

RESEARCH TAX CREDIT (CIR)

Objective: boosting businesses' R&D effort, through tax cut

- **The most important incentive for private R&D expenditures** (representing €5.9b in tax cut in 2014, for 24,300 beneficiaries)
- Tax cut: 30% up to €100m in expenses (then 5%) and topped to 60% when expenses are subcontracted to public research
- Social security contributions and salaries paid to **junior final-year doctoral and post-doctoral research personnel on their first permanent contract are quadruple-counted, for two years.**



MAKE OUR PLANET GREAT AGAIN



4 new programs with the label "Make Our Planet Great Again" were launched in March 2018



A co-financed program for **doctoral contracts**: institutions will receive co-financing up to 50,000€ to host a doctoral student for 3 years. **About 20 doctoral students** will receive fundings for thesis starting in 2018.

A co-financed program of **post-doctoral research contracts**: host institutions will receive co-financing up to 25,000€ for a year and 50,000€ for two years to host a post-doctoral student in research. **20 to 40 post-doctoral students** will receive fundings for stays starting in 2018.

A **research short stays program**: funding mobility from 14 days to 5 months for doctoral students or researchers in France. **At least 40 mobilities** financed for stays solely in 2018.

A **Master scholarships program** up to 1,060€/month for students who want to come for 2 years in Masters course or one year in Masters 2 course (granting a degree equivalent to the grade of Masters'): **about 50 scholarships** for the start of academic year 2018.

FRANCE-KOREA PROGRAMS

Science and Technology Amicable Relationships

- Program between French Ministry of Foreign Affairs & NRF
- Objective: **strengthen the bond between France and Korea through the development of scientific projects that contribute to scientific and technological exchange**
- ~ 150 projects since 2005
- **15 new projects per year** for 2 years
- Scientific excellence, **mobility for young researchers**
- Call publication around October each year
- Fields: new material and nanotechnology, life science and biotechnologies, ICT, basic sciences, aeronautics and space sciences, humanities and social sciences, environmental sciences

STAR

FRANCE-KOREA PROGRAMS

France-Korea Joint R&D Projects



- Program between Bpifrance, the French public investment bank, and KIAT
- Objective: **developing innovative products and applications in market oriented technological and application areas**, which have a significant market potential for France and Korea
- Call managed in cooperation and in line with the international procedures of EUREKA
- **Deadline for submission: 31st August 2018**
- At least one French & one Korean market oriented R&D performing commercial companies (research institutes may also be allowed to join the consortium)
- Fields: biotechnologies and medical technologies, energy and environment technologies, robot, automobile and machinery systems technology, materials and nano technologies, ICT



감사합니다!

MERCI !

