

Univ. Grenoble Alpes



Univ. Grenoble Alpes : a figurehead of Grenoble's ecosystem

2018 Japan-France symposium in Higher Education



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7th September, 2018

UNIV. GRENOBLE ALPES

■ Key figures

- ▶ 1 university, 3 higher education schools, 5 research centers, 1 teaching hospital
- ▶ 50,000+ students
- ▶ 3,700 doctoral students, of which 45% international
- ▶ 12,000 employees, of which 5,500 academic



UNIV. GRENOBLE ALPES: LABELED « INITIATIVE OF EXCELLENCE » (IDEX)

- The Initiative of Excellence was launched in 2010 by the French government in order to support the **creation of 5 to 10 highly visible research universities** and to ensure the competitiveness of French HE&R institutions at an international scale.

WHAT WORLD-CLASS UNIVERSITIES HAVE THAT REGULAR UNIVERSITIES DO NOT

- Highly qualified Faculty;
- Excellence in Research;
- Quality Teaching;
- High levels of governmental and non-governmental sources of funding;
- International and highly-talented students;
- Academic Freedom;
- Well-defined and autonomous governance structures;
- Well-equipped facilities for teaching, research, administration;
- Student life

(Altbach 2004; Khoon et al. 2005; Niland 2000, 2007)



UNIV. GRENOBLE ALPES IN INTERNATIONAL RANKINGS

■ *Shanghai 2018*

10th in Geography

12th in Remote Sensing

18th in Earth Sciences

21st in Metallurgical Engineering

Top 50 in Physics, Computer Science & Engineering, Water Resources, Materials Science & Engineering, Atmospheric Science, Electrical & Electronic Engineering, and Automation & Control Engineering

■ *QS World Ranking*

Top 100 universities in Earth & Marine Sciences

Top 200 in Natural Sciences, Physics & Astronomy, Environmental Studies, Chemistry, Material Sciences

■ **4th** in France's "Best Global Universities" (*US News and World Report 2018*)

■ **28th** "Most Innovative University in Europe" (*Thomson Reuters 2018*)



A UNIVERSITY FIRMLY GROUNDED IN ITS CITY

■ 3 main campus sites in Grenoble

- ▶ The growth of the city and territory of Grenoble echoes the dialogue of **research, science and industry**
- ▶ From the glove industry to hydroelectricity (the “houille blanche”), and now micro- and nanotechnologies, software and energy, **Grenoble follows the rhythms of innovation.**

Scientific Polygone campus



Health campus

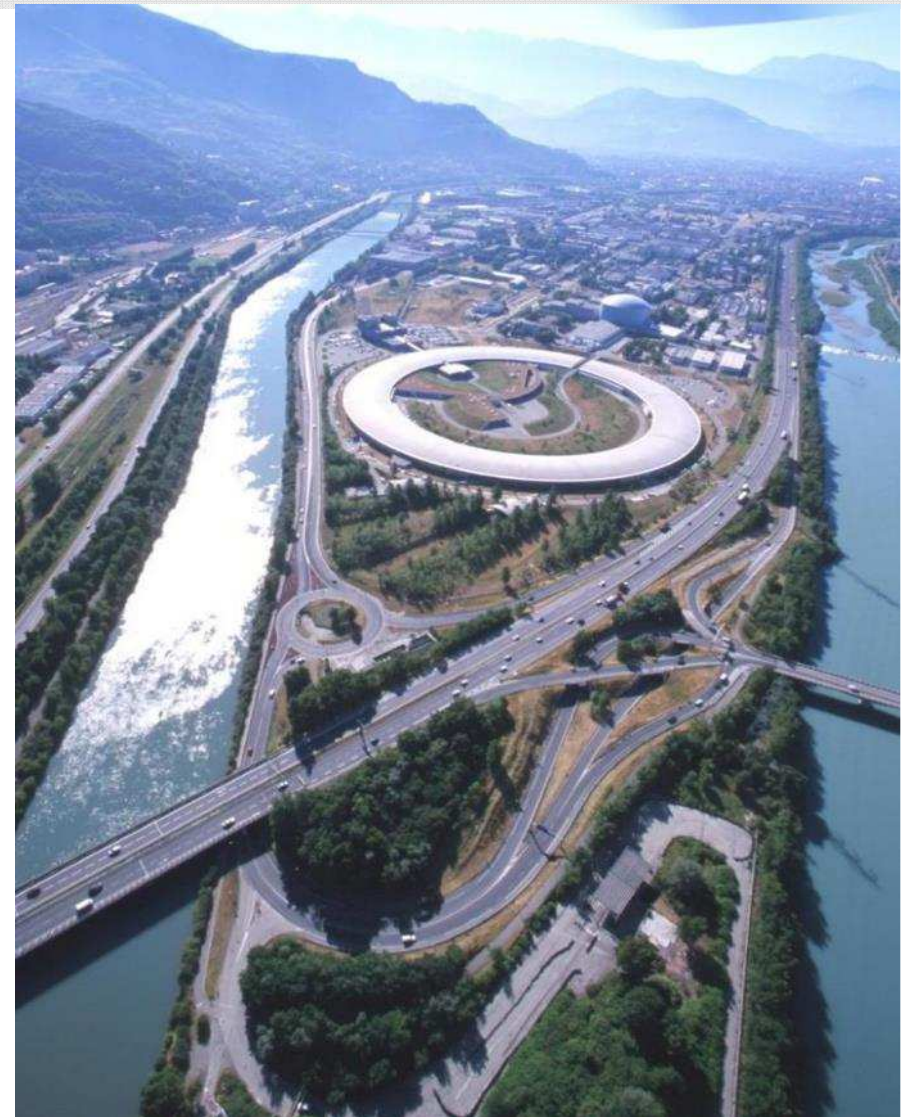


East campus



AN EXCEPTIONAL ENVIRONMENT

- 5 International facilities
 - ▶ ESRF, ILL, EMBL, GHMFL, IRAM
- 9 National research organizations
 - ▶ CNRS, CEA, Inria, Inserm, Irstea, INRA, CRSSA, IRD, CEN/CNR
- R&D business partners
 - ▶ Sun Microsystems, HP, Orange, STMicroelectronics, Schneider Electric, Alstom, Xerox, Thales...



INNOVATION ECOSYSTEM

■ Grenoble, City of Innovation

- ▶ 7,1% of the population works in R&D (2nd in France)
- ▶ 5th most inventive city in the world (*Forbes* 2013)
- ▶ 3rd European city of the future (*The Financial Times*)
- ▶ Top finalist for the European iCapital “Capital of Innovation Awards” (2014)
- ▶ 84th most innovative university in the world (*Thomson Reuters* 2015)

■ A Wealth of Thriving Business

- ▶ Over **470** international companies in Grenoble and **78,000** jobs in the Isère area



ECOSYSTEM: STATE OF AFFAIRS

- Grenoble's ecosystem is highly performing, yet
- There is a constant need for regeneration and for boosting its attractiveness
- There is also a need for inclusiveness

A recent study conducted by the Metropole showed that:

- *There is an increasing gap between the perception of the highly qualified persons and their relatives on one hand and the less qualified population on the other hand*
- *Company leaders expectation #1 is the improvement of Grenoble's image and the emergence of a vision shared by all stakeholders*
- *Students are extremely happy about study and living conditions*
- *A rich and inspiring scientific environment*

UNIV. GRENOBLE ALPES@2020: LEADER OF ITS ECOSYSTEM

International recognition and visibility

- International recognition and visibility in order to **attract companies and people**

Strategy

- Be a **spearhead of the ecosystem to develop new ecosystem pillars**: Quantum Engineering, MedTech, AI, Green Chemistry, Circular Manufacturing, ...

Innovation

- **Create and accelerate start-ups**
- **Fostering the links between companies and labs**
- **Developing PI and expertise** needed by the ecosystem

Skills

- Provide **high profile skills** for existing and new economic sectors

Coordination of stakeholders

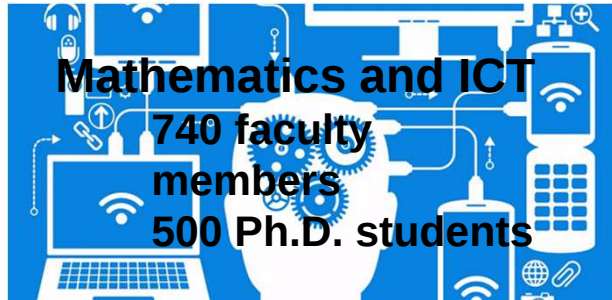
- **To share a mid- and long-term strategy with local stakeholders** (local authorities, industries, etc.)
- **Sharing information** so that each one can be an ambassador

THE ECONOMIC IMPACT OF FRENCH RESEARCH-INTENSIVE UNIVERSITIES

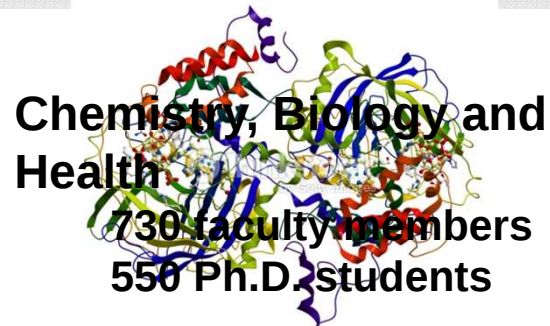
In 2016, the French research-intensive universities were estimated to have contributed **€42,5 billion GVA** (Gross Value Added) and **362,150 jobs** globally (étude BIGGAR, CURIF).

For each **€ 1** generated through their direct operations in GVA terms, they created **€ 5** in total benefits for the French economy

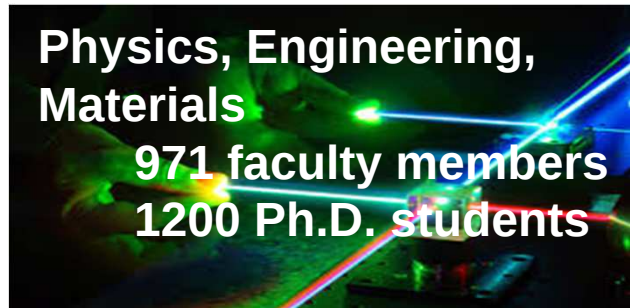
RESEARCH@UNIV. GRENOBLE ALPES



Mathematics and ICT
740 faculty members
500 Ph.D. students



Chemistry, Biology and Health
730 faculty members
550 Ph.D. students



Physics, Engineering, Materials
971 faculty members
1200 Ph.D. students



Law, politics, economy, management, social sciences
370 faculty members
550 Ph.D. students



Particles, Astrophysics, Geosciences, Environment and ecology
500 faculty members
400 Ph.D. students



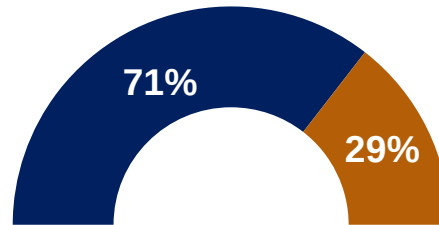
Arts, literature, languages, humanities, cognition
500 faculty members
640 Ph.D. students

COMMITMENTS OF THE IDEX UNIV. GRENOBLE ALPES

Consolidated budget: 282 M€

Funding 37,5 M

:



Human resources
26,8 M€

160 PhD
10 junior chairs
121 post-docs
87 staffs

Other costs 10,7 M€

Equipment
Traveling
Internships
Dissemination
Communication

RAISED FUNDING: 2017

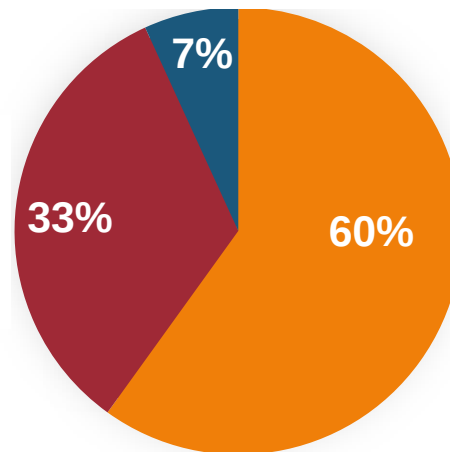


45 M€ of raised funding

■ 7% private sector (1,6 M€)

■ 33% international funding (8 M€)

- ▶ Europe : 6,7 M€
- ▶ Hors Europe : 1,3 M€



■ 60% public funding (14,5 M€)



More than 100 publications



Innovative actions towards PhD students

FUNDING RESEARCH AND VALORISATION

Cross Disciplinary Program	Scientific and socio-economic challenges oriented interdisciplinary projects
Scientific Equipment	Co-funding of scientific community equipment
Innovation Grant	Foster innovation ; common labs with cultural and socio-economic actors, transfer acceleration
Initiatives de Recherche Stratégique	Support new comers and emerging ideas
Chaires IDEX UGA	Attract young talented people with ERC profile
Postes environnés IDEX UGA	Attract talented people on permanent positions

KEY SUCCESS CRITERIA FOR RESEARCH IN GRENOBLE

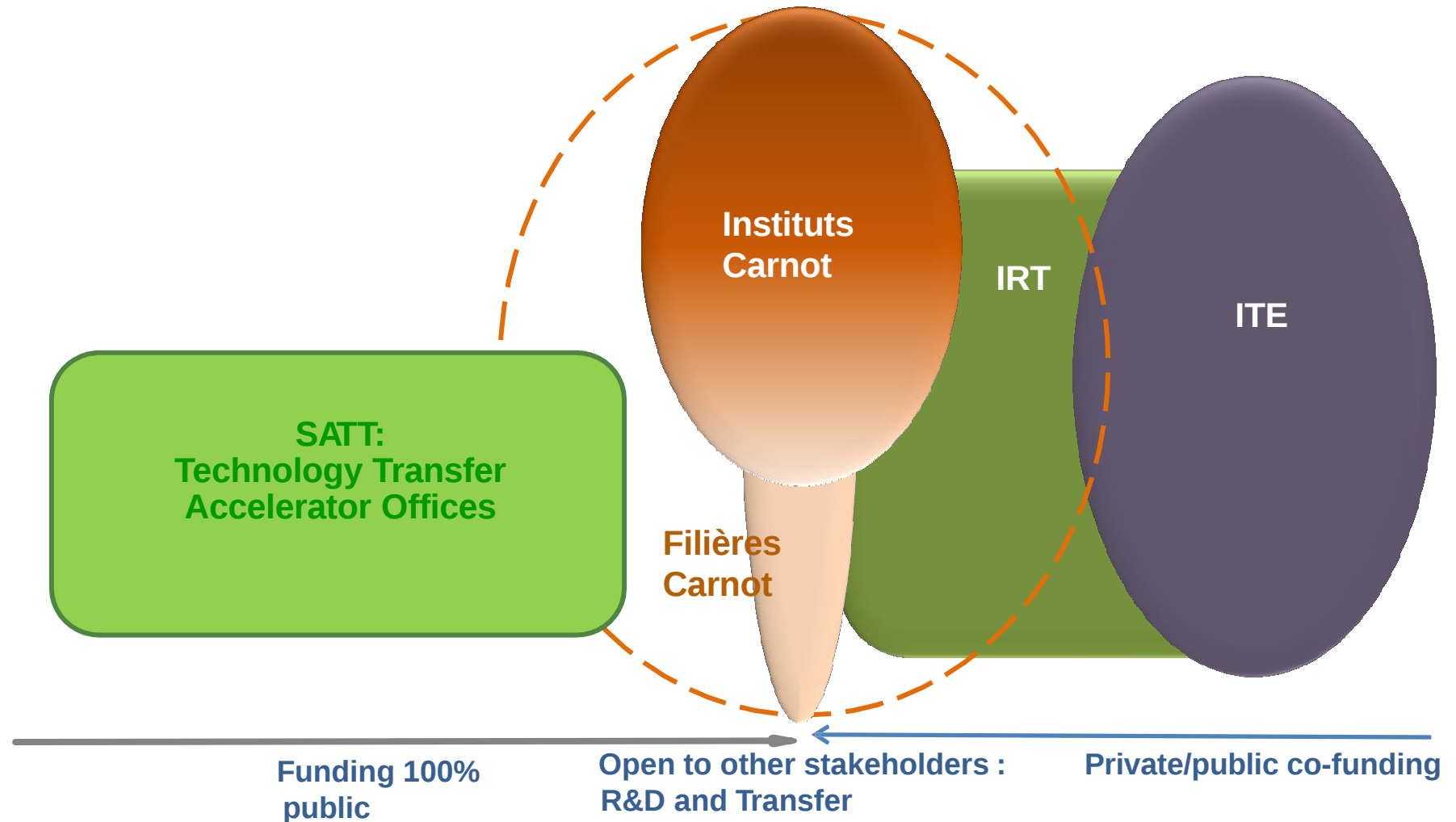
- Visibility, ranking
- ERC
- Funding
- Socio-economic partnership

COMMERCIALIZATION AND TRANSFERT

- 96,1 M€ funding in 2017 excluding IP revenues and LLL
- Transfer and commercialization

Action	2014-2015	2015-2016	2016-2017
Start-ups		26	28
SATT Linksium projects	27	24	25
Patents	621	656	652

TRANSFER STRATEGY: DIFFEREND KINDS OF INSTRUMENTS



UNIV. GRENOBLE ALPES: INVOLVEMENT IN NUMEROUS LARGE PARTNERSHIPS FOR RESEARCH AND TRANSFER

■ Instituts Carnots :



(Partnerships between higher education institutions and private companies to promote the **private-public research**)

■ IRT Nanoelec: 115 partners, 30 ongoing projects, 180 ETPT, 400 M€

(Long term partnerships between higher education institutions and private companies to intensify the **Industry-Research-Training dynamic** and that way, enable real **innovations and technological leaps**)



■ ITE : Supergrid

(Interdisciplinary platforms in the field of low-carbon energy, gathering skills of industry and public research in co-partnerships, with private/public co-fundings)

■ SATT Linksium Grenoble Alpes

(Public funded structure that evaluate, market and license technology from University and Public Research Organizations)

■ 3 « Pôles de compétitivité »

(Competitiveness clusters: H.E. institutions + public research + small, middle and large companies) :



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Thank you for your attention!