

Research Landscape of the UK

Stephanie Dos Santos

stephanie.dosssantos@ambascience.co.uk

Higher Education, Research & Innovation Department
French Embassy in the United Kingdom

FRENCH EMBASSY

Higher Education
Research & Innovation Department



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RÉPUBLIQUE FRANÇAISE





Excellence of UK higher education & research



UK universities in world rankings:

- 2 Univ. in Top10 (Shanghai 2017)
- 3 Univ. in Top10 (THE 2017)
- 4 Univ. in Top10 (QS 2017)



≈ 70 Nobel Prizes for science since 1901
2nd in the world



565 ERC Advanced Grants since 2008
1st in the EU



The 4 universities receiving the most funding from H2020 are British (Oxford, Cambridge, UCL, Imperial).



UK's influential scientific institutions:

UK's National Academies (*Royal Society, British Academy, etc.*), Learned Societies

... despite low public spending

R&D expenditure (% of GDP):

- 1,72% in the UK
- 2,26 % in France
- 2,84% in Germany
- 2 % in average in the EU

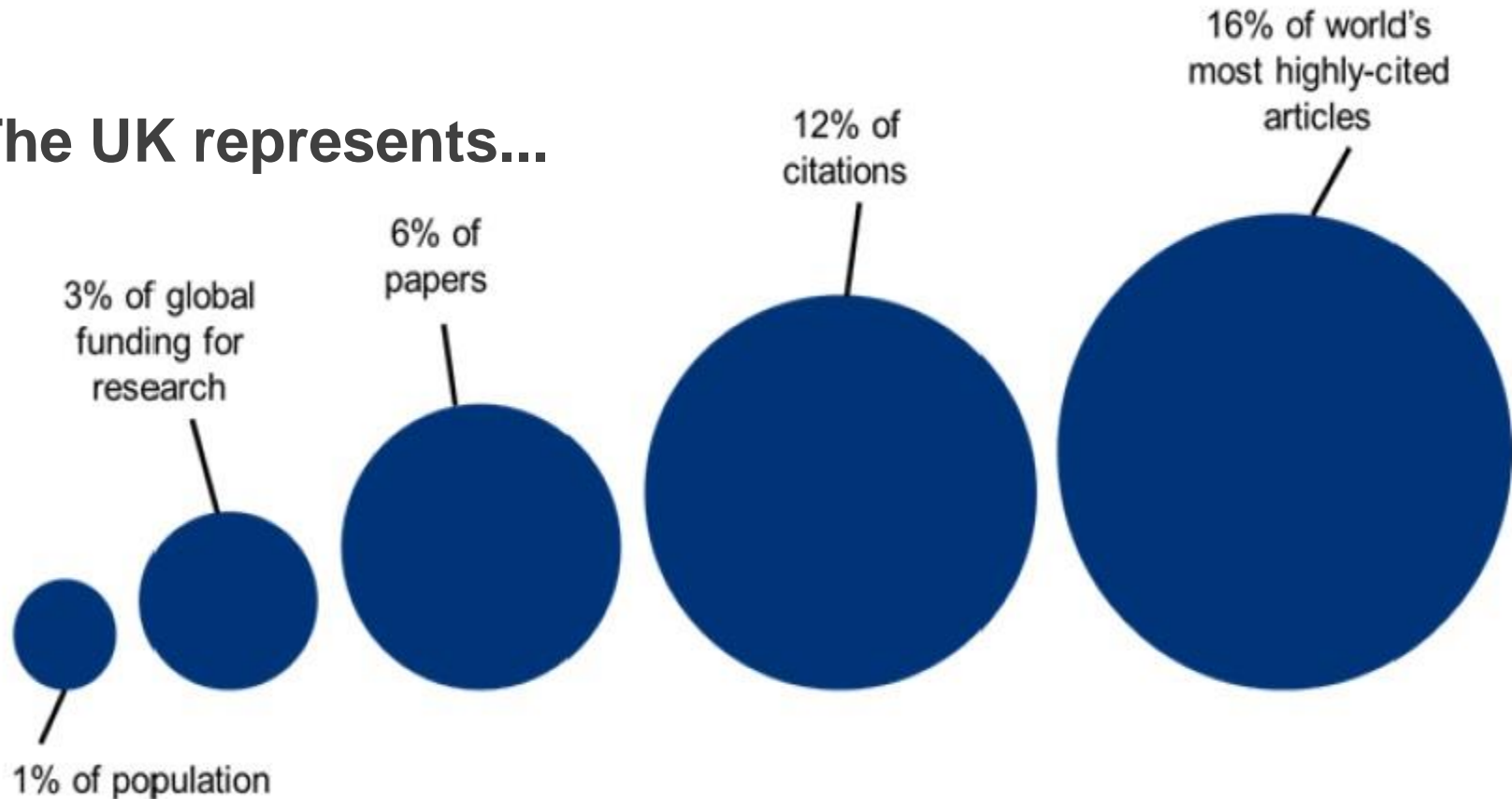
... but expensive tuition fees

£9,250 a year for UK and EU students
(≈76% of univ. charging the full amount)



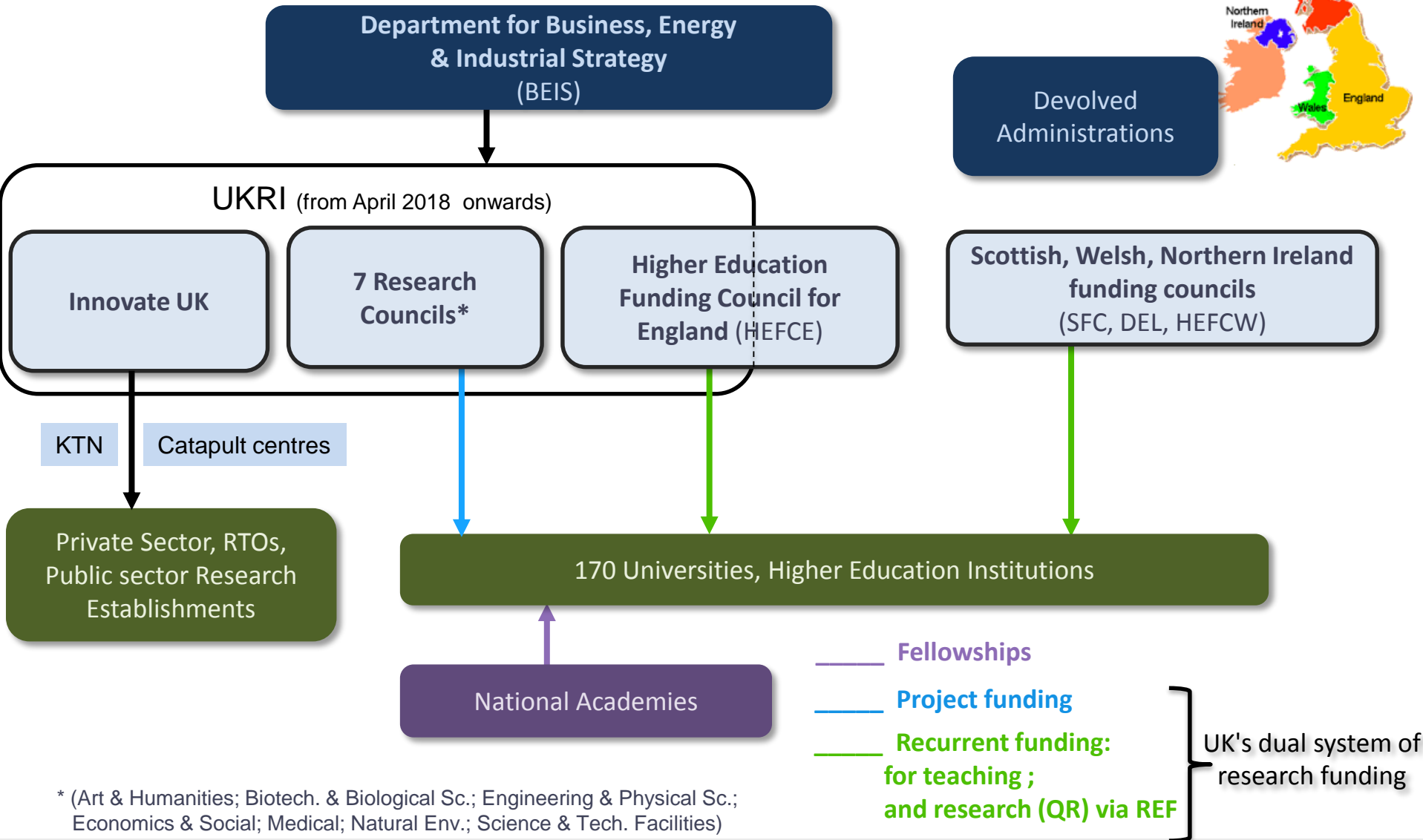
Excellence of UK higher education & research

The UK represents...





UK research funding system



* (Art & Humanities; Biotech. & Biological Sc.; Engineering & Physical Sc.; Economics & Social; Medical; Natural Env.; Science & Tech. Facilities)



PhD funding sources

- **Research Councils**

- Arts and Humanities Research Council (AHRC)
- Biotechnology and Biological Sciences Research Council (BBSRC)
- Economic and Social Research Council (ESRC)
- Engineering and Physical Sciences Research Council (EPSRC)
- Medical Research Council (MRC)
- Natural Environment Research Council (NERC)
- Science and Technology Facilities Council (STFC)

- **Academic institutions**

- Universities, colleges and research institutes

- **Commercial and charitable organisations**

- including the Wellcome Trust, Cancer Research UK, British Academy, Institution of Mechanical Engineers, Royal Geographical Society, Leverhulme Trust, etc.

- **Self-funding**

- Professional and Career development loans





Academic rank titles: a rough comparison

UK	US	France
Undergraduate	Undergraduate	Licence (1 ^{er} cycle)
Post-Graduate	Graduate	Master (2 ^{ème} cycle)
PhD student	PhD student	Doctorant (3 ^{ème} cycle)
Post-Doc	Post-Doc	Post-Doc
Lecturer	Assistant Professor	Maître de conférence (II)
Reader / Senior Lecturer	Associate Professor	Maître de conférence (I)
Professor	Full Professor	Professeur des universités (II & I)



Mobility programmes (1)



MFO Fellowship

Twelve one-month grants for PhD students from France wishing to carry out research at the Maison Française d'Oxford (MFO)

<https://uk.ambafrance.org/Appel-Bourses-Maison-Francaise-d-Oxford>



Churchill College Fellowship

Intended by senior researchers working in France and wishing to conduct research for 6 to 11 months at the Churchill College (University of Cambridge).

<https://uk.ambafrance.org/Offre-de-sejour-pour-chercheurs-confirmes-au-Churchill-College-Cambridge>

Come to France.

**MAKE OUR
PLANET
GREAT AGAIN**

Make Our Planet Great Again

The French government supports junior and senior researchers working in the areas of climate change, energy and Earth system science to develop their research project and partnership with France.

www.makeourplanetgreatagain.fr



Mobility programmes (2)



Entente Cordiale Scholarship

Financial Support for students (2nd or 3rd Cycle > bac+3) for one study-year in the UK or FR.

<https://uk.ambafrance.org/Entente-cordiale-scholarships>



Erasmus+



UK participation in Erasmus+ is uncertain after March 2019 (Brexit).

Partenariat
Hubert Curien
FR-UK



There is no PHC partnership between France and the UK.



Brexit: what impact on higher education, research and innovation?



Uncertainties:

- Immigration status (EU students and academics, etc.)
- UK participation in Erasmus+
- UK access to EU funding for R&I (H2020, etc.)
- Increase in tuition fees for EU students studying at UK universities
- Etc.

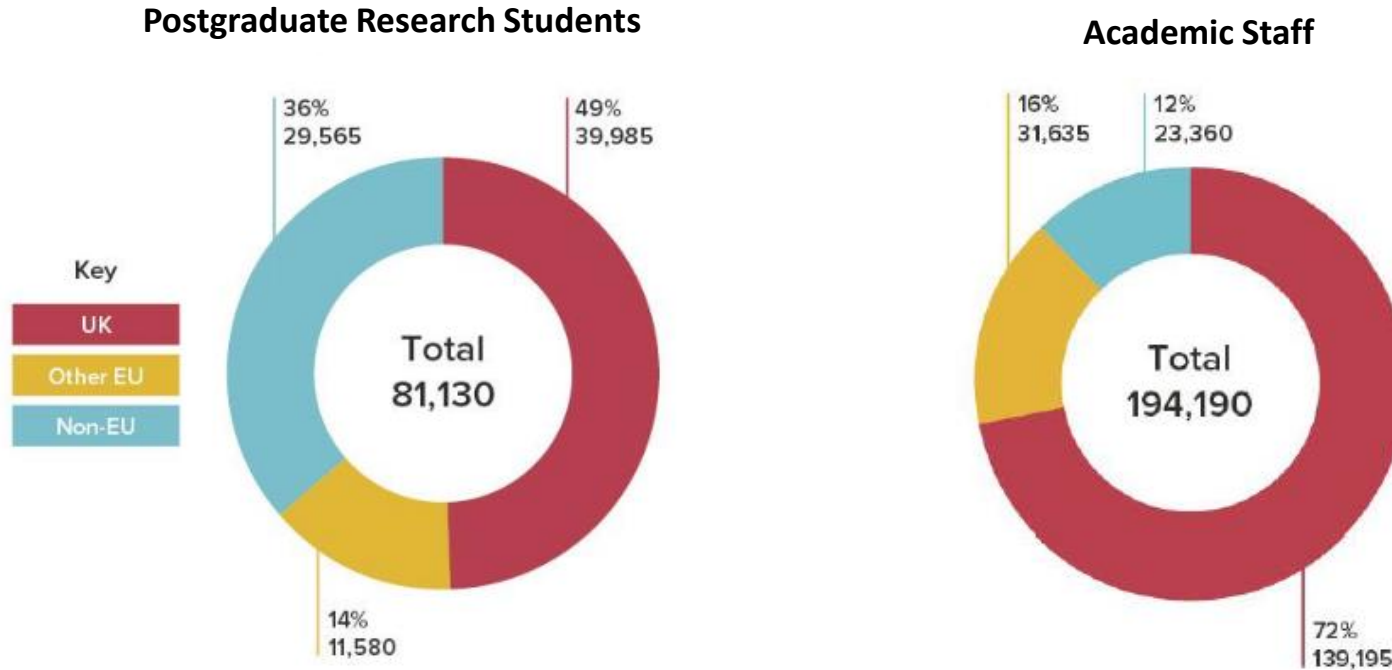
Source: Universities UK, *Brexit FAQs*, Dec. 2017



Foreign students and academics in UK universities

In the UK, foreigners account for:

- 50% of postgraduate research students (of whom 14% are EU27 nationals)
- 28% of academic staff (of whom 16% are EU27 nationals)

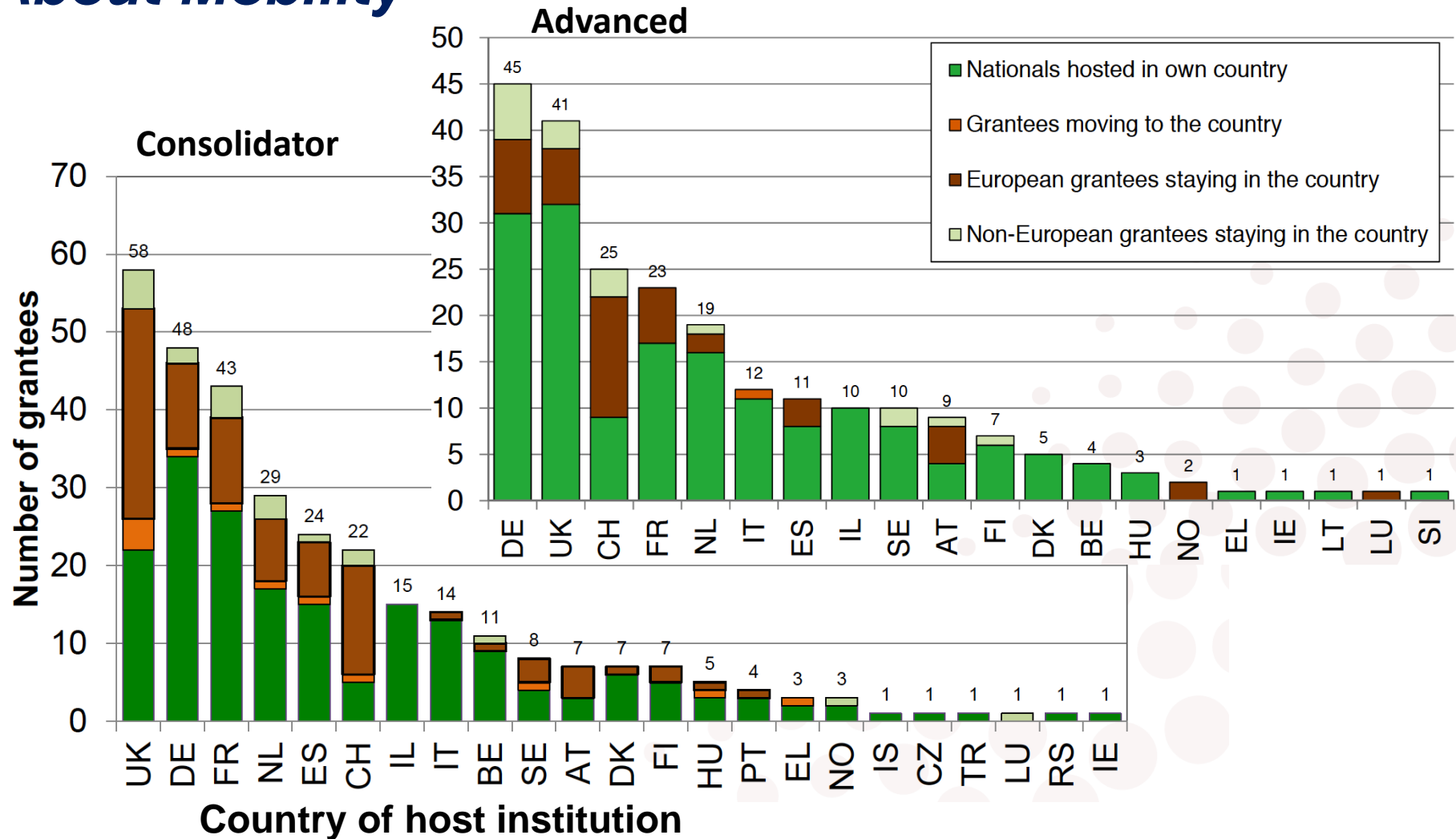


The UK is the 1st country of destination for EU27 students mobility

Source: Royal Society, 2017



ERC Grants 2016: Advanced (231)/Consolidator (314) *About Mobility*



Source : ERC Grants 2016 – Outcome: Indicative statistics



UK Government's Industrial Strategies

Examples of research areas defined as strategic:

- **Industrial Strategy 2013**

8 Great Technologies:

- big data and energy-efficient computing
- Satellites and commercial applications of space
- robotics and autonomous systems
- synthetic biology
- regenerative medicine
- agri-science
- advanced materials and nanotechnology
- energy and its storage

- **Industrial Strategy 2017**

4 Grand Challenges:

- artificial intelligence
- clean growth
- ageing society
- future of mobility





Missions and actions of the ESRI Department, French Embassy in the UK

Science and Technology Watch

News and Reports (FR) on Research and Innovation



Promote French Excellence in Science and Technology



Bilateral Research Workshops

- University College London
- Royal Society of Edinburgh

General Audience events : Science Museum, Royal Institution, Institut Français, Lycées français, etc.



**A Date With History:
Did You Say Europe?**
June 9, 2017 - York



Machine morality:
Robot ethics
in the 21st Century
June 22, 2017

Support to Bilateral Cooperation

Seed Meetings

<http://www.ambafrance-uk.org/Seed-meetings-in-London>



Bilateral Conferences

- Rassembler les acteurs publics et privés sur un sujet d'intérêt pour les deux pays
- Explorer les opportunités de collaboration



Long Term Partnership (Mult-year Funding)

- Bilateral Exchanges (Senior, Students)
- Cooperations in Strategic Domains (Climate, Nuclear, Space)



CHURCHILL COLLEGE
CAMBRIDGE



"Facilitator/Enabler" => Agreements

- CNES-UKSA (MicroCarb) – April 2017
- Paris Descartes-UCL (Faculties of Medicine) – May 2017



Contact

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