

The European Research Council:

ERC StG & CoG Grants – Continuity in a changing Horizon



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Panel coordinator

Social Sciences and Humanities Unit

ERC Scientific Management Department

Info Day NCP Belgium, 16 May 2019

Outline



- **What is the ERC? What does the ERC offer for StG & CoG PIs and their teams?**
- **How is Belgium doing at the ERC?**
- **How are ERC research proposals evaluated?**
- **Some tips on preparing an ERC proposal**

ERC mission



European Research Council
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To encourage the highest quality research **in Europe** through competitive funding and to support **investigator-driven frontier research** across all fields, on the basis of **scientific excellence**

ERC Basics



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INDIVIDUAL RESEARCHERS FROM ALL OVER THE WORLD LONG TERM GRANTS

TO HIGH-RISK/HIGH-GAIN PIONEERING PROJECTS
IN ANY FIELD OF FRONTIER RESEARCH



Life Sciences



Physical Sciences and Engineering



Social Sciences and Humanities



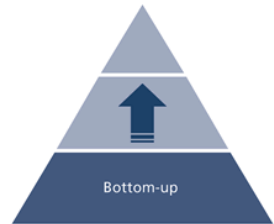
European
Commission

Horizon 2020
European Union funding
for Research & Innovation

What is the European Research Council?

The ERC supports excellence in frontier research through a bottom-up, individual-based, pan-European competition

Budget: € 13 billion (2014-2020) - 1.9 billion €/year
€ 7.5 billion (2007-2013) - 1.1 billion €/year



Legislation

- Scientific governance: independent Scientific Council with 22 members including the ERC President; full authority over funding strategy
- Support by the ERC Executive Agency (autonomous)
- Excellence as the only criterion

Strategy

- Support for the individual scientist – no networks!
- Global peer-review
- No predetermined subjects (bottom-up)
- Support of frontier research in all fields of science and humanities

Scientific Governance by the Scientific Council

ERC President



Jean-Pierre BOURGUIGNON

Vice-President



Martin STOKHOF

Vice-President



Dame Janet THORNTON

Vice-President



Fabio ZWIRNER



Manuel ARELLANO



Paola BOVOLENTA



Eveline CRONE



Ben L. FERINGA



Margaret BUCKINGHAM



Sir Christopher CLARK



Andrzej JAJSZCZYK



Tomas JUNGWIRTH



Michael KRAMER



Kurt MEHLHORN



Nektarios TAVERNARAKIS



Isabelle VERNOS



Barbara ROMANOWICZ



Giulio SUPERTI-FURGA



Lene VESTERGAARD HAU



Michel WIEVIORKA

The New ScC President from 1st January 2020 on **Prof. Mauro FERRARI**



Scientific Governance by the Scientific Council



ERC in the H2020 Structure



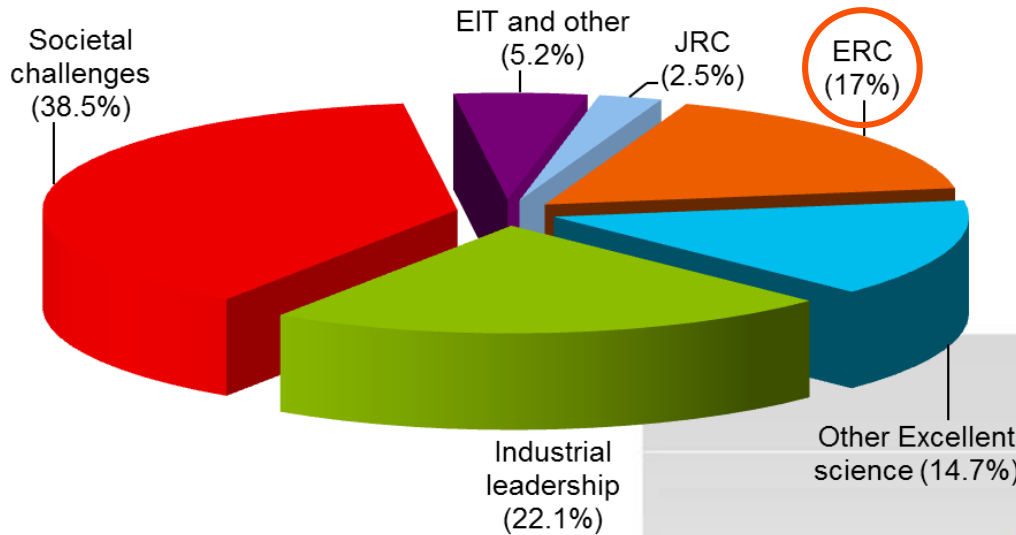
➤ The HORIZON 2020 main components:

- Excellent Science
 - ➔ *World class science is foundation of technologies, jobs, well-being*
 - ➔ *Europe needs to develop, attract, retain research talent*
 - ➔ *Researchers need access to the best infrastructures*
- Industrial leadership
- Societal challenges

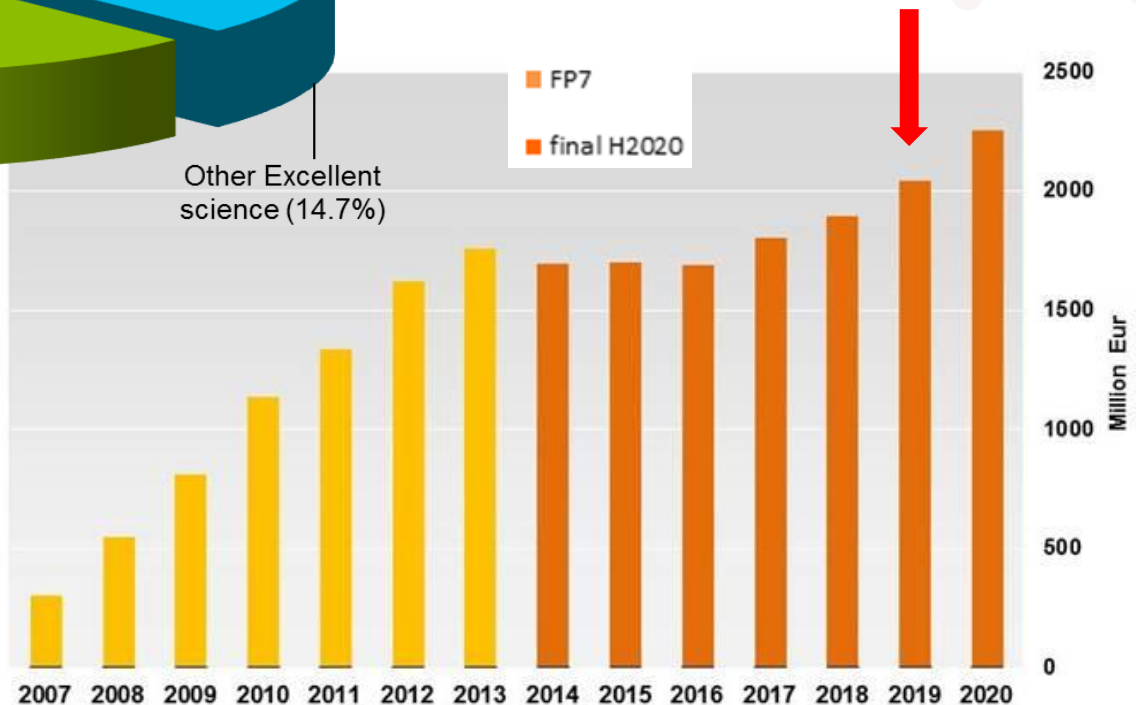
➤ Excellent Science:

- **European Research Council** (budget under H2020: € 13 billion)
- Future and Emerging Technologies
- Marie Skłodowska Curie Actions
- Research Infrastructures

ERC H2020 Budget



**ERC Budget
€ 13 billion**



For 2019, the budget is more than 2 billion euros, the highest ever since the beginning of the ERC.



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ERC Grant Schemes



Starting Grants

starters
(2-7 years after PhD)
up to € 1.5 Mio
for 5 years

Consolidator Grants

consolidators
(7-12 years after PhD)
up to € 2 Mio
for 5 years

Advanced Grants

track-record of
significant research
achievements in the
last 10 years
up to € 2.5 Mio
for 5 years

Proof-of-Concept

bridging gap between research - earliest
stage of marketable innovation
up to €150,000 for ERC grant holders

Synergy Grants (re-launched 2018)

2 – 4 Principal Investigators
up to € 10.0 Mio for 6 years



European
Commission

Horizon 2020
European Union funding
for Research & Innovation

What does ERC offer?

Creative freedom to individual grantee



ERC offers independence, recognition & visibility

- Work on any research topic: **bottom-up**
- Gain **financial autonomy** for 5 years
- Negotiate the **best work conditions** with the host institution
- Attract **top team members and collaborators** (EU and non-EU)
- **Portability of grants**
- **Attract additional funding and gain recognition:** ERC is a quality label



What does ERC offer?



BRILLIANT
RESEARCHER



INTERESTING
PROJECT



Who can apply?

- **Excellent Researchers**
- **Any nationality, any age** or any current place of work
- In conjunction with a Host Institution based in Europe
EU or associated countries
- If granted, you need to spend at least 50% of your working time in the EU or associated countries



Particular emphasis on.....

Frontier of science, scholarship and engineering, e.g.

- ✓ Multi- or interdisciplinary proposals which cross boundaries between different fields of research, **or**
- ✓ Pioneering proposals addressing new and emerging fields of research, **or**
- ✓ Proposals introducing unconventional, innovative approaches and scientific inventions.



2019 Panel Structure



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Each panel:
Panel Chair and 12-17 Panel Members

Life Sciences

- **LS1** Molecular Biology, Biochemistry, Structural Biology and Molecular Biophysics
- **LS2** Genetics, 'Omics', Bioinformatics and Systems Biology
- **LS3** Cellular and Developmental Biology
- **LS4** Physiology, Pathophysiology and Endocrinology
- **LS5** Neuroscience and Neural Disorders
- **LS6** Immunity and Infection
- **LS7** Applied Medical Technologies, Diagnostics, Therapies, and Public Health
- **LS8** Ecology, Evolution and Environmental Biology
- **LS9** Applied Life Sciences, Biotechnology and Molecular and Biosystems Engineering

Social Sciences and Humanities

- **SH1** Individuals, Markets and Organisations
- **SH2** Institutions, Values, Environment and Space
- **SH3** The Social World, Diversity, Population
- **SH4** The Human Mind and Its Complexity
- **SH5** Cultures and Cultural Production
- **SH6** The Study of the Human Past

Physical Sciences & Engineering

- **PE1** Mathematics
- **PE2** Fundamental Constituents of Matter
- **PE3** Condensed Matter Physics
- **PE4** Physical & Analytical Chemical Sciences
- **PE5** Synthetic Chemistry and Materials
- **PE6** Computer Science and Informatics
- **PE7** Systems and Communication Engineering
- **PE8** Products and Processes Engineering
- **PE9** Universe Sciences
- **PE10** Earth System Science

Contrary to what you may think.....

- ✓ ERC funds "frontier research", including applied research
- ✓ The budget is distributed among the scientific panels as a function of demand
- ✓ The panel descriptors do not represent ERC scientific priorities
- ✓ The success rate is virtually flat across the eligibility window (StG, CoG)
- ✓ The Host Institution is not an evaluation criterion

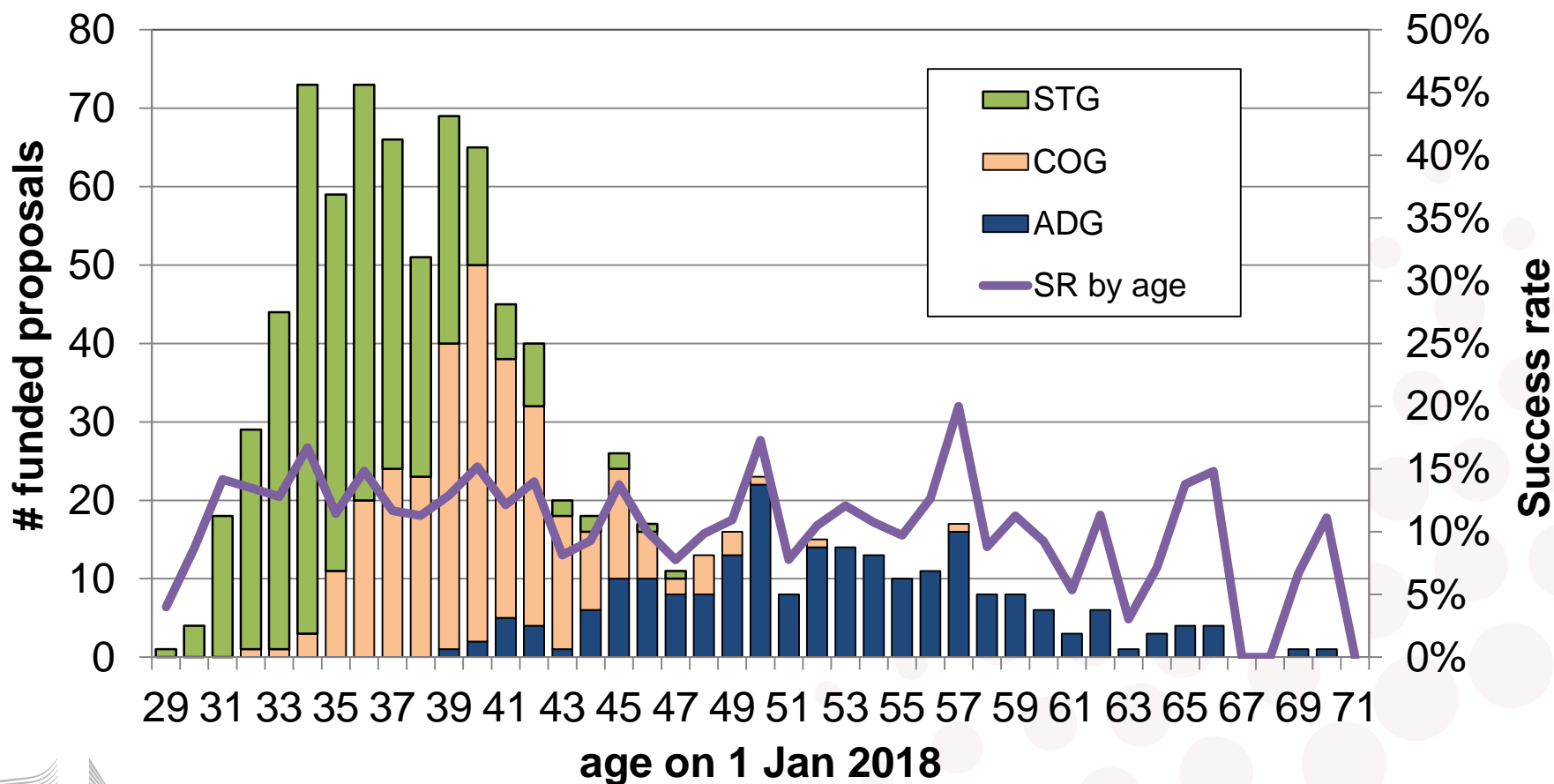


Shall I apply now or wait another year?

2018 StG/CoG/AdG Calls

Age of Grantees

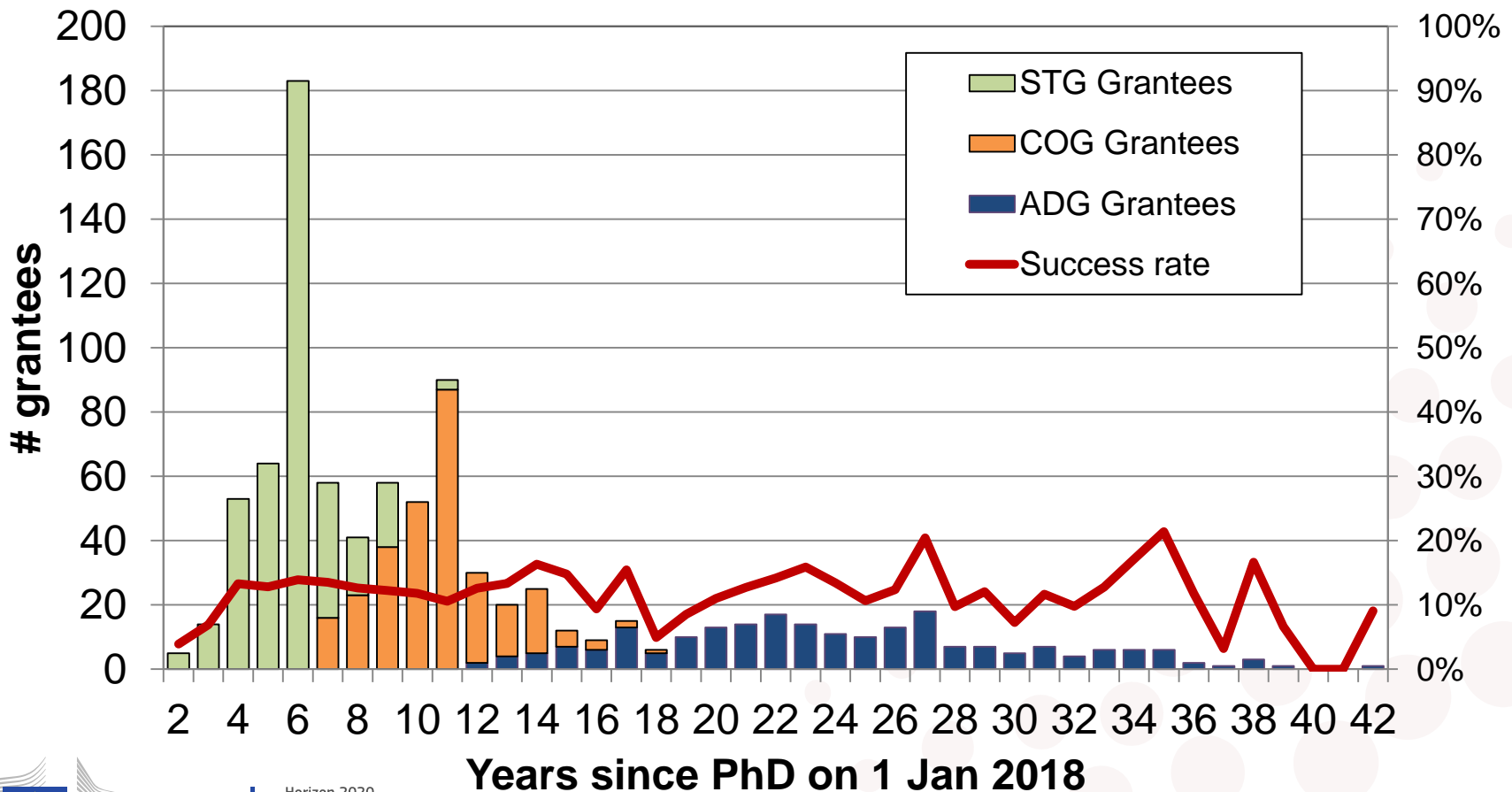
2018 Grantees by age and success rate



2018 StG/CoG/AdG Calls

"Academic age" of grantees

All calls 2018 Grantees by years since PhD



ERC Starting and Consolidator Grants

The applicant's profile



Condition StG: PhD **at least 2 and up to 7 years** before 1 Jan 2019
(2019 call, now closed)

Condition CoG: PhD **over 7 and up to 12 years** before 1 Jan 2019
(2019 call, now closed)

Extensions of the eligibility window for Starting and Consolidator Grant Calls for documented cases of:

- Maternity leave – 18 months per child (before or after PhD)
- Paternity leave – actual time taken off
- Military service
- Medical speciality training
- Serious illness or caring for seriously ill family members

No limit to the total extension

ELIGIBILITY



ERC Starting and Consolidator Grants

The applicant's profile



“Am I competitive enough?”

- Potential for research independence
- Evidence of scientific maturity
 - For example, at least one (StG) /several (CoG) important publication as main author or without participation of PhD supervisor
- **Promising track record of early achievements**
 - Significant publications
 - Invited presentations in conferences
 - Funding, patents, awards, prizes

All these need to be shown in your proposal that will include your CV and an early achievements track record.

Design of the Synergy call in a nutshell

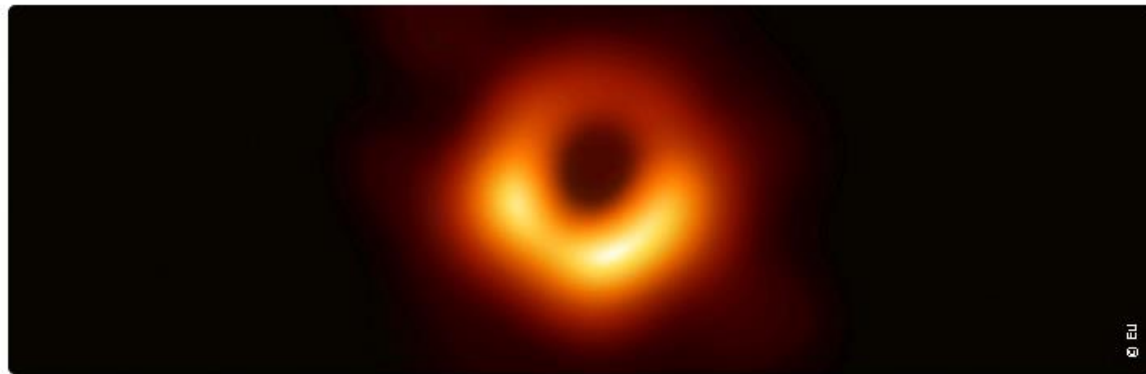


Deadline for SyG2019 proposal submission: 8 November 2018
SyG2020: submission opening planned for July 2019

EXAMPLE OF A GROUND-BREAKING SYNERGY PROJECT



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▶ The first ever image of a black hole, with EU support

Black hole breakthrough: a European success

by Helena Gonzalez-Sancho Bodero, ERCEA

11/04/2019 | 130 20

Since yesterday, it's been all over the media: the first ever image of a massive black hole. 'First-ever?' some may wonder. Yes, despite the abundance of artistic simulations and pictures from science fiction, the truth is that astrophysicists know little about these mysterious places in space. It has taken several years of research and an unprecedented international cooperation to obtain the long-awaited image. The support of the EU has been key in this fascinating quest.

You cannot see black holes. By nature, they are out of sight. Gravity pulls so much inside them that they swallow nearby planets and stars, even light. Since Einstein described these cosmic objects in his *Theory*

ERC Synergy Project: <https://blackholecam.org/>

ERC Proof-of-Concept (POC) Grants



- For Principal Investigators of existing grants
- Lump sum of EUR 150 000 for a period of 18 months
- **To maximise the value-creation** of the ERC-funded research

Provide funds to bring ERC-funded ideas to a *pre-demonstration* for:

- *Generation of return for innovators (economic, reputation, prestige, influence, ...)*
- *Generation of new value for users (socio-economic benefits)*

Outline



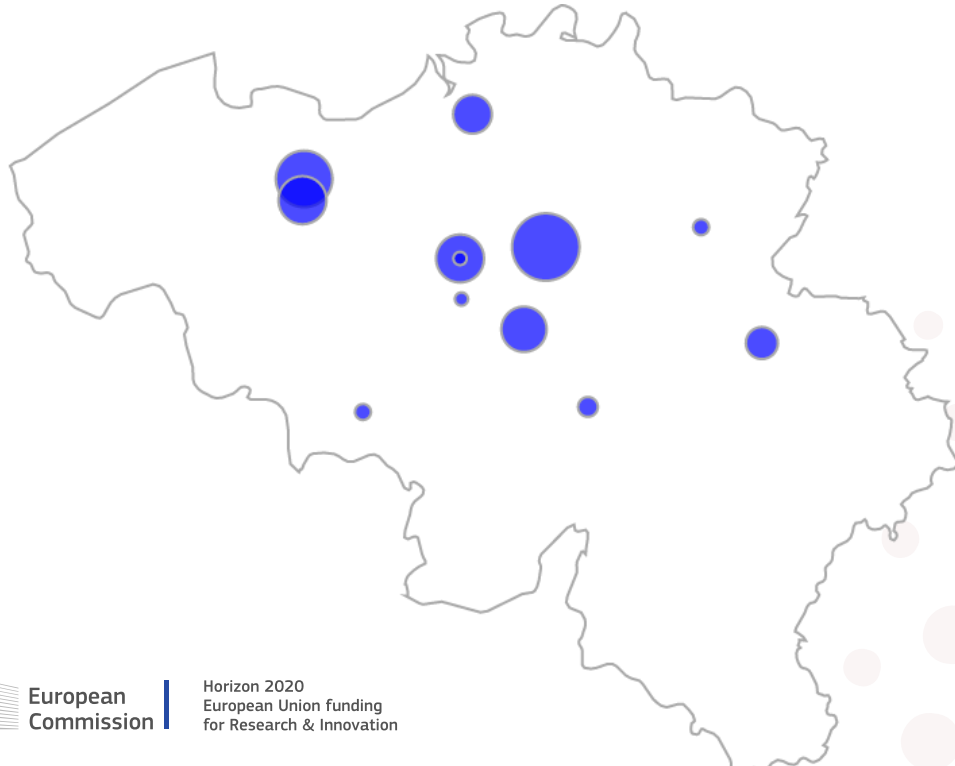
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ERC & BELGIUM – State of Play April 2019

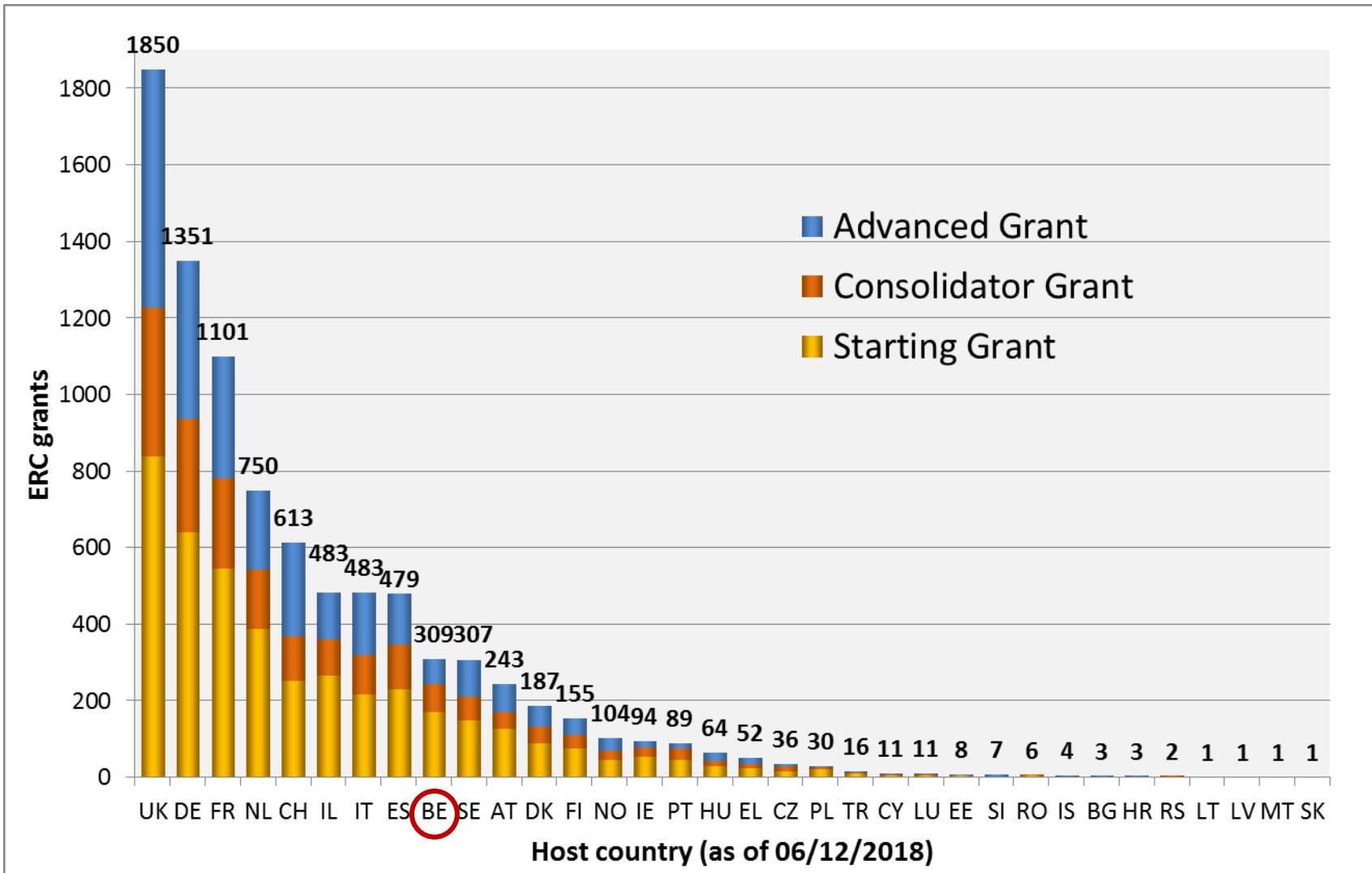


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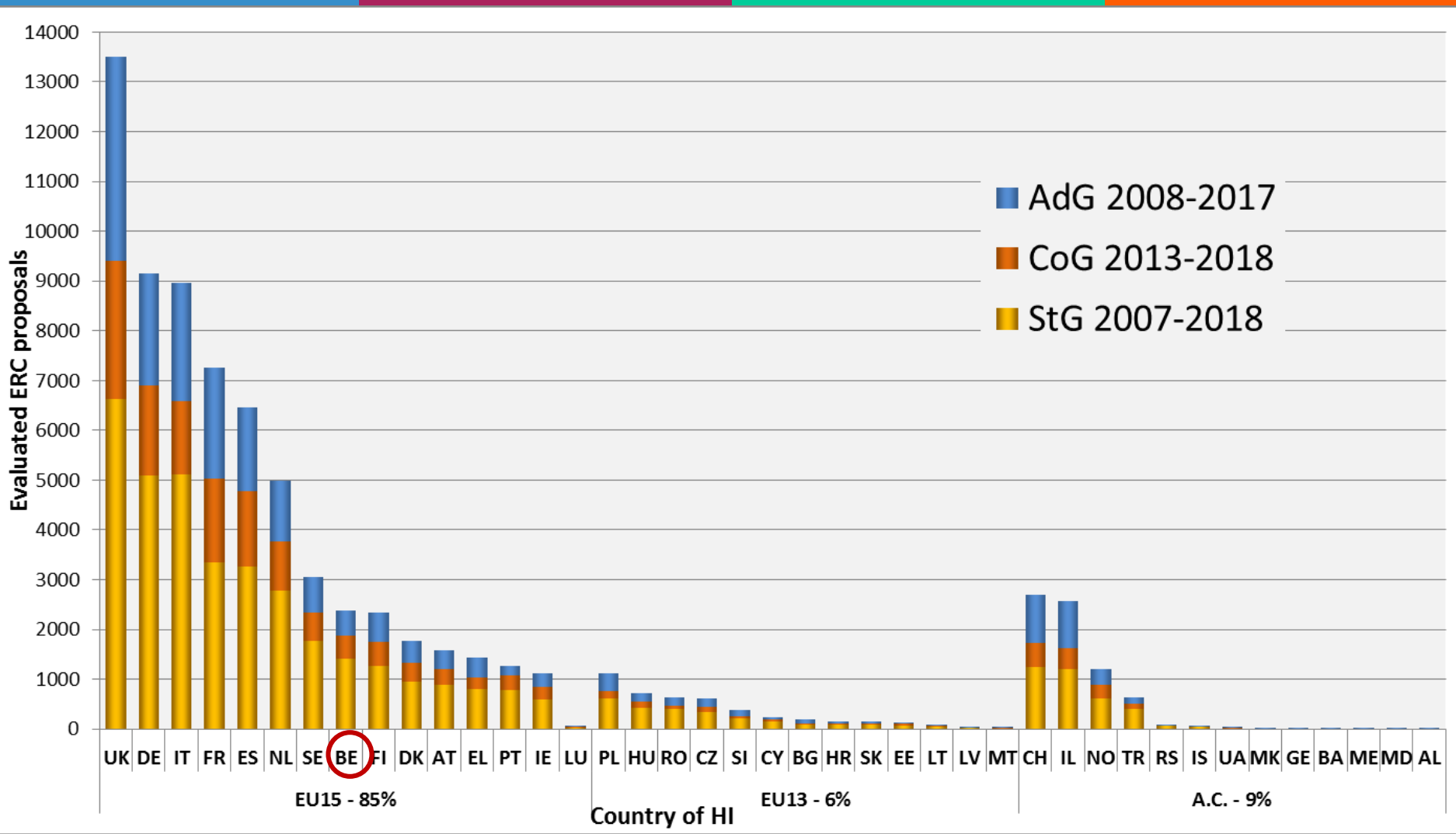
BELGIUM



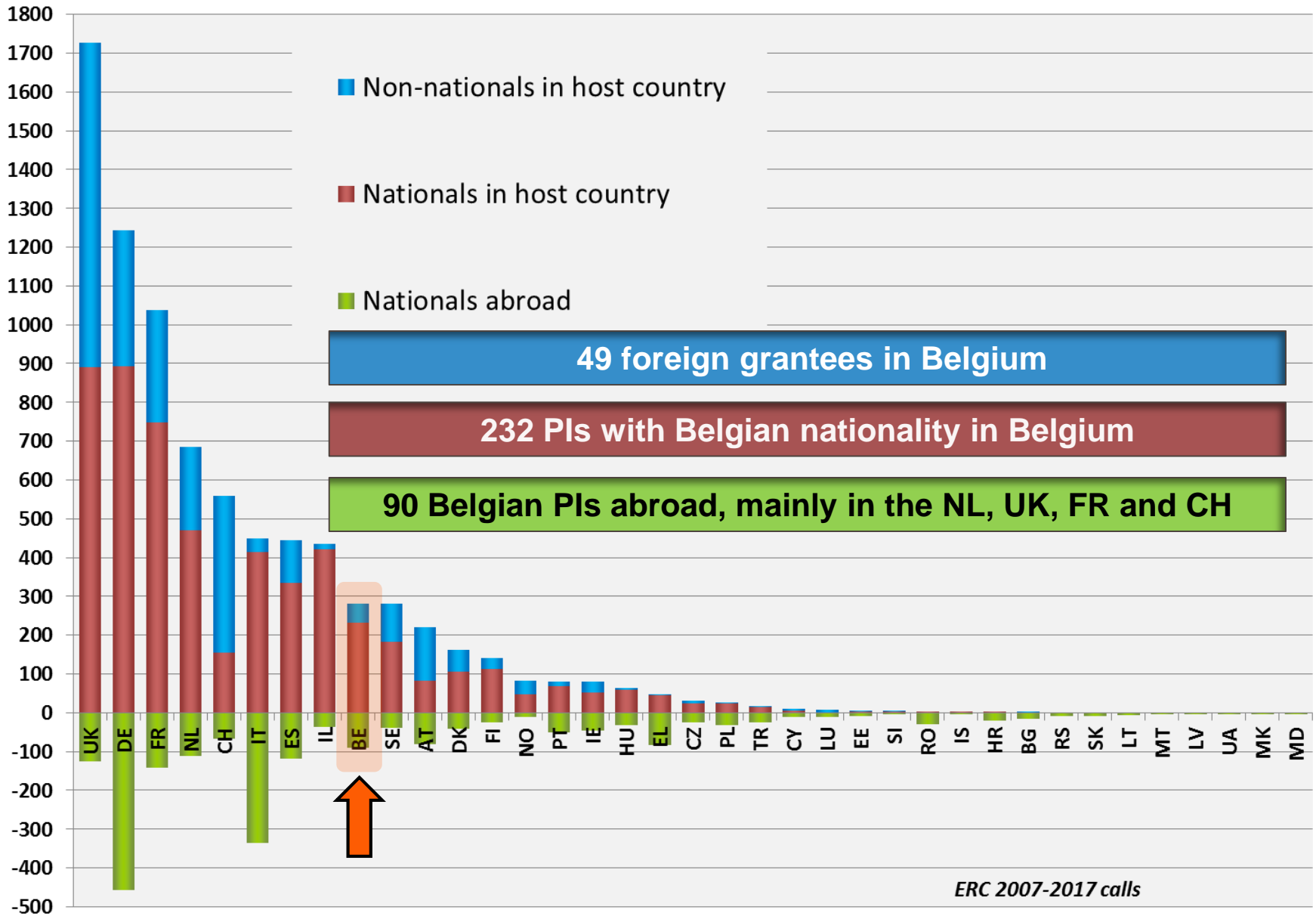
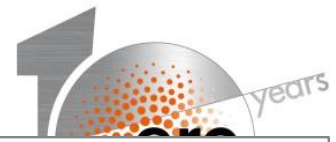
ERC Funded Projects by Country of HI



Evaluated ERC Proposals by HI Country



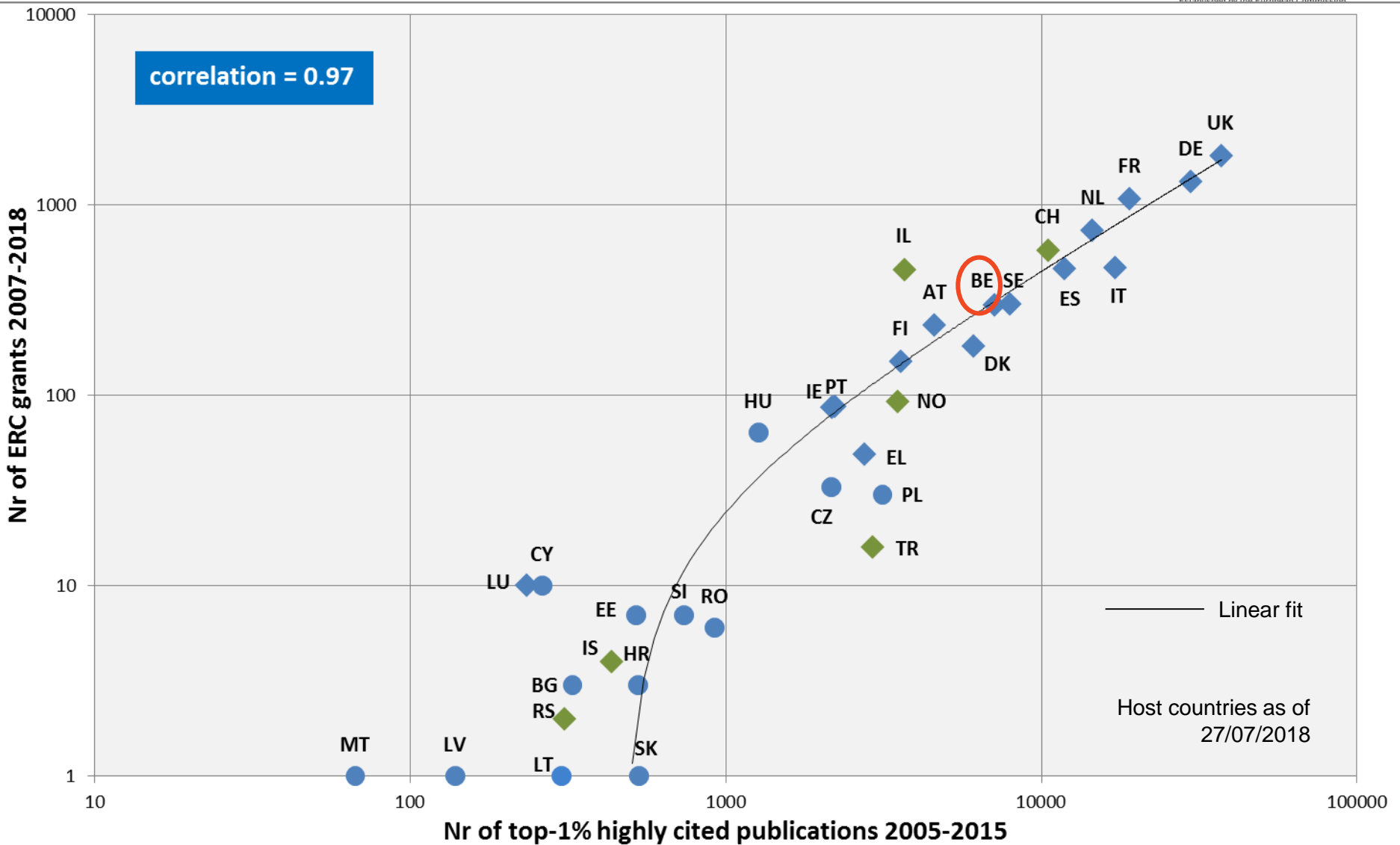
Grantees at Home and Abroad





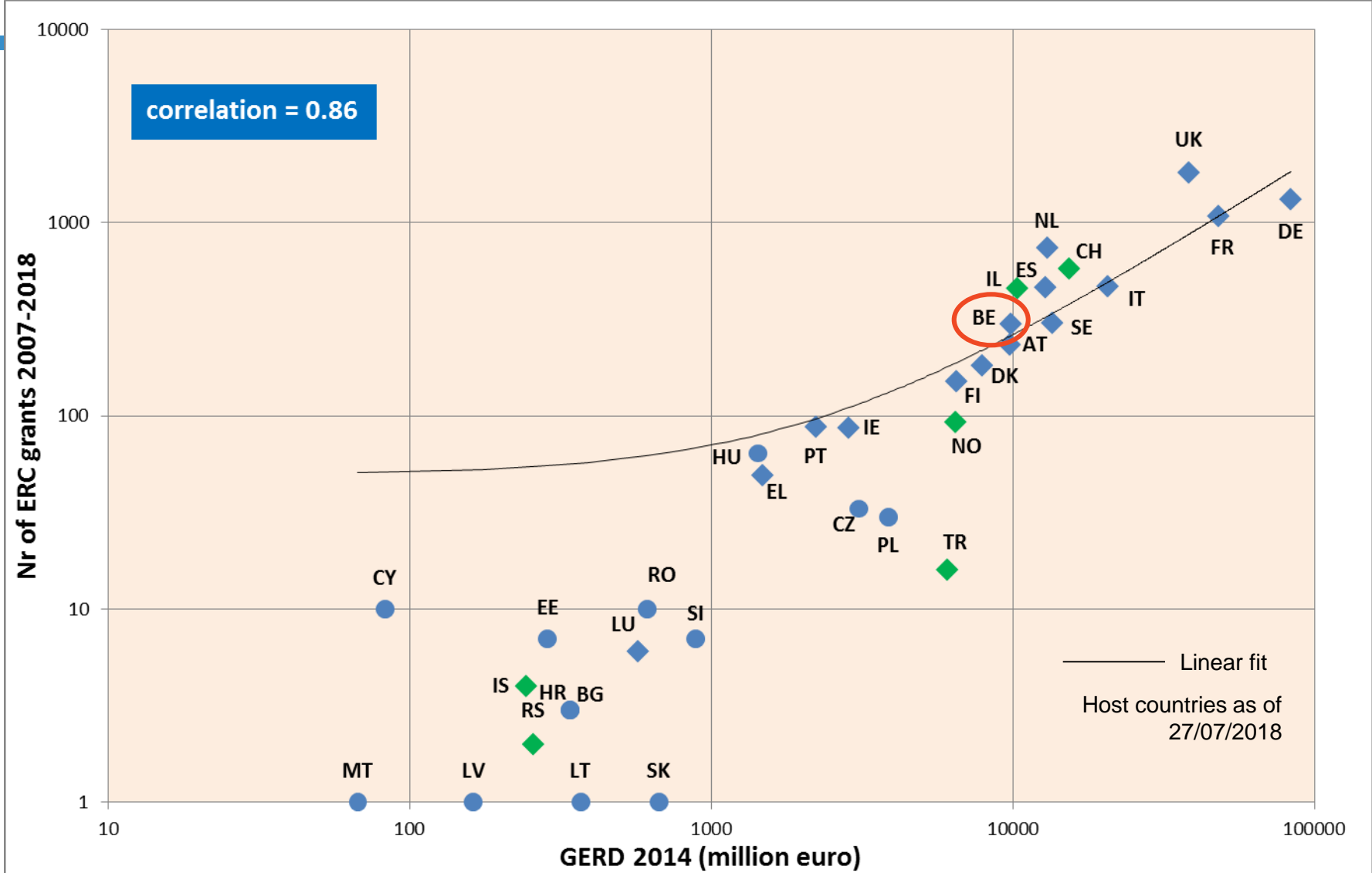
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ERC Grants versus Top Publications



ERC Grants versus GERD

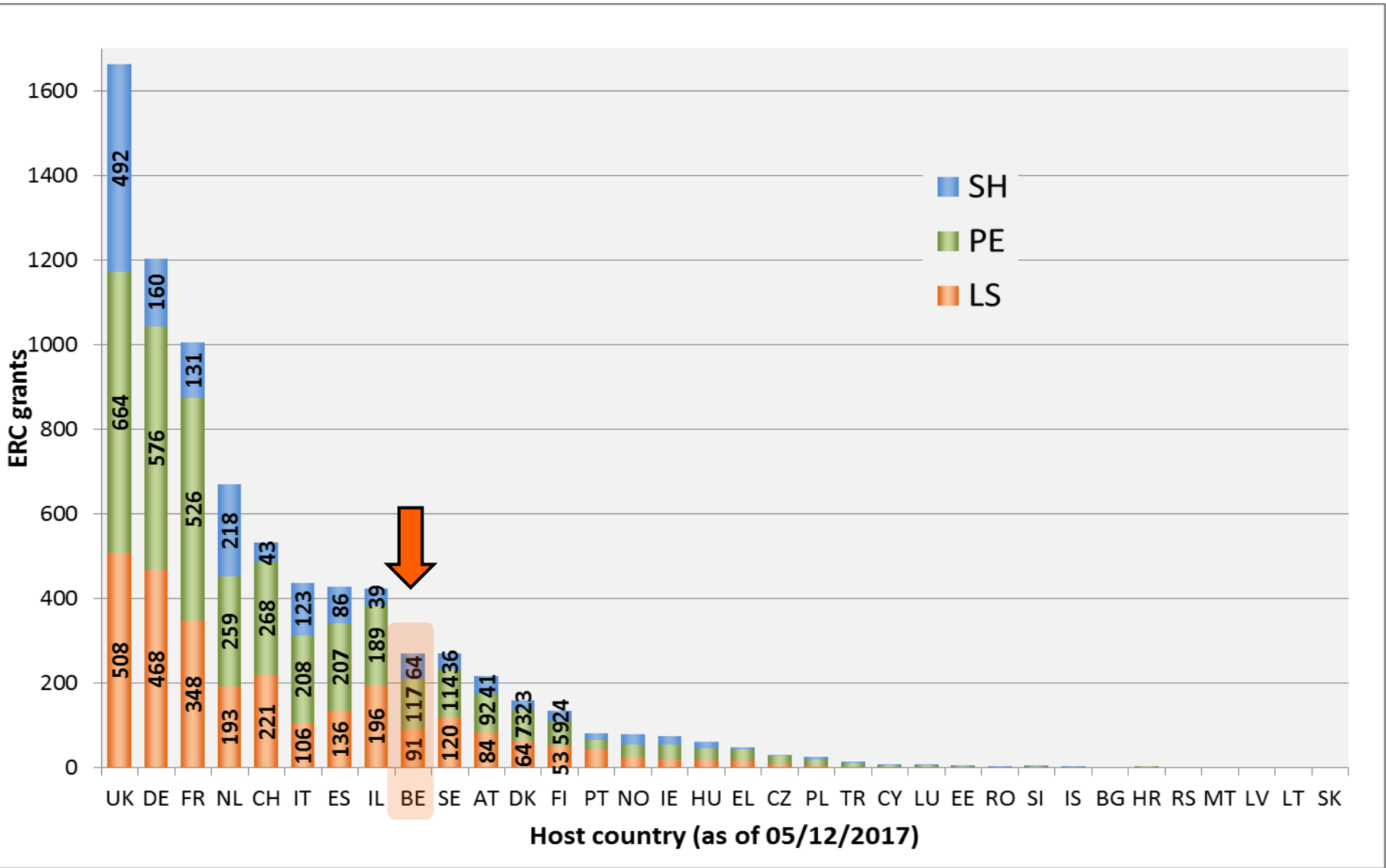
(Gross domestic expenditure on R&D)



ERC Funded Projects by Domain



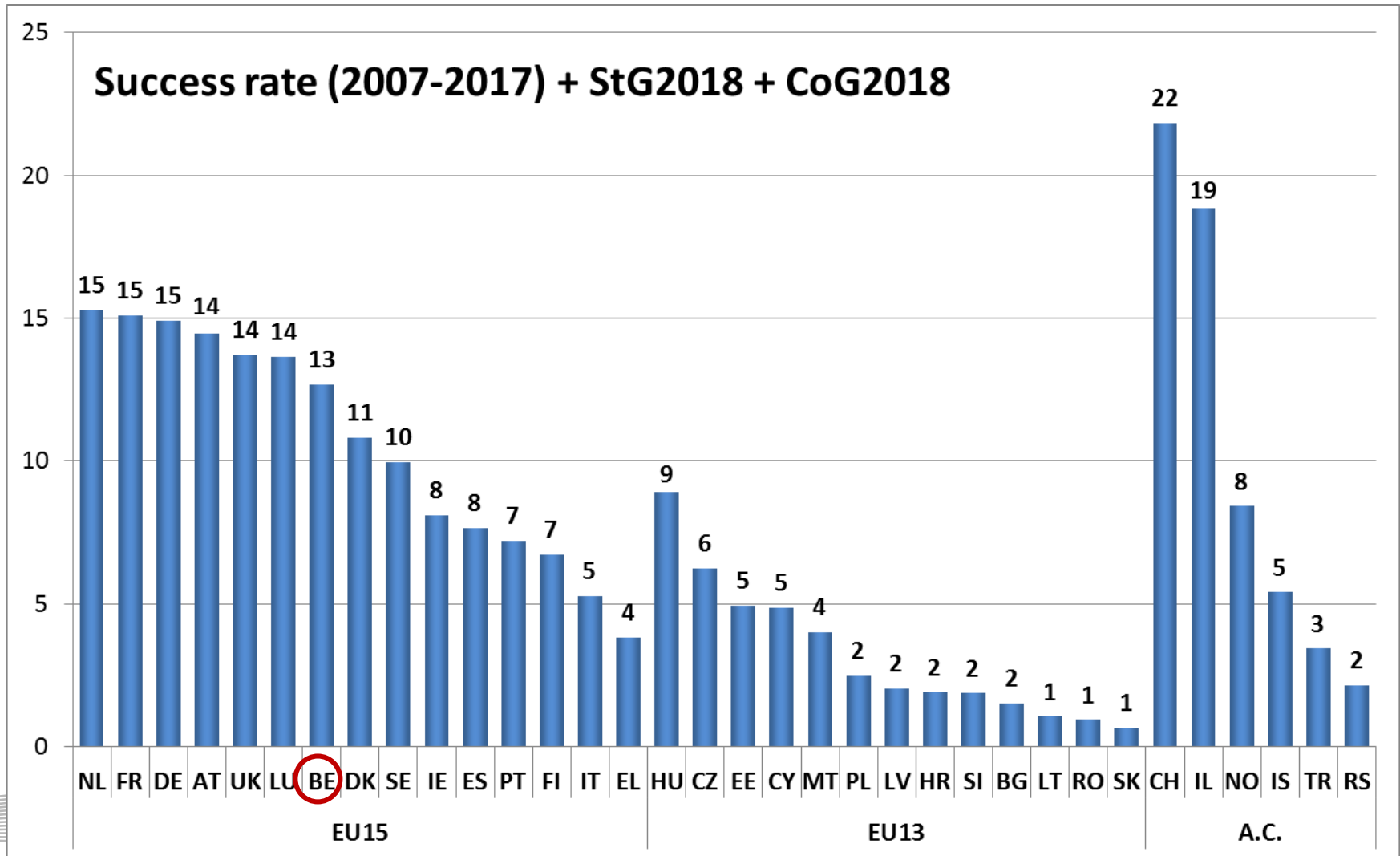
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Success Rate by Country of HI



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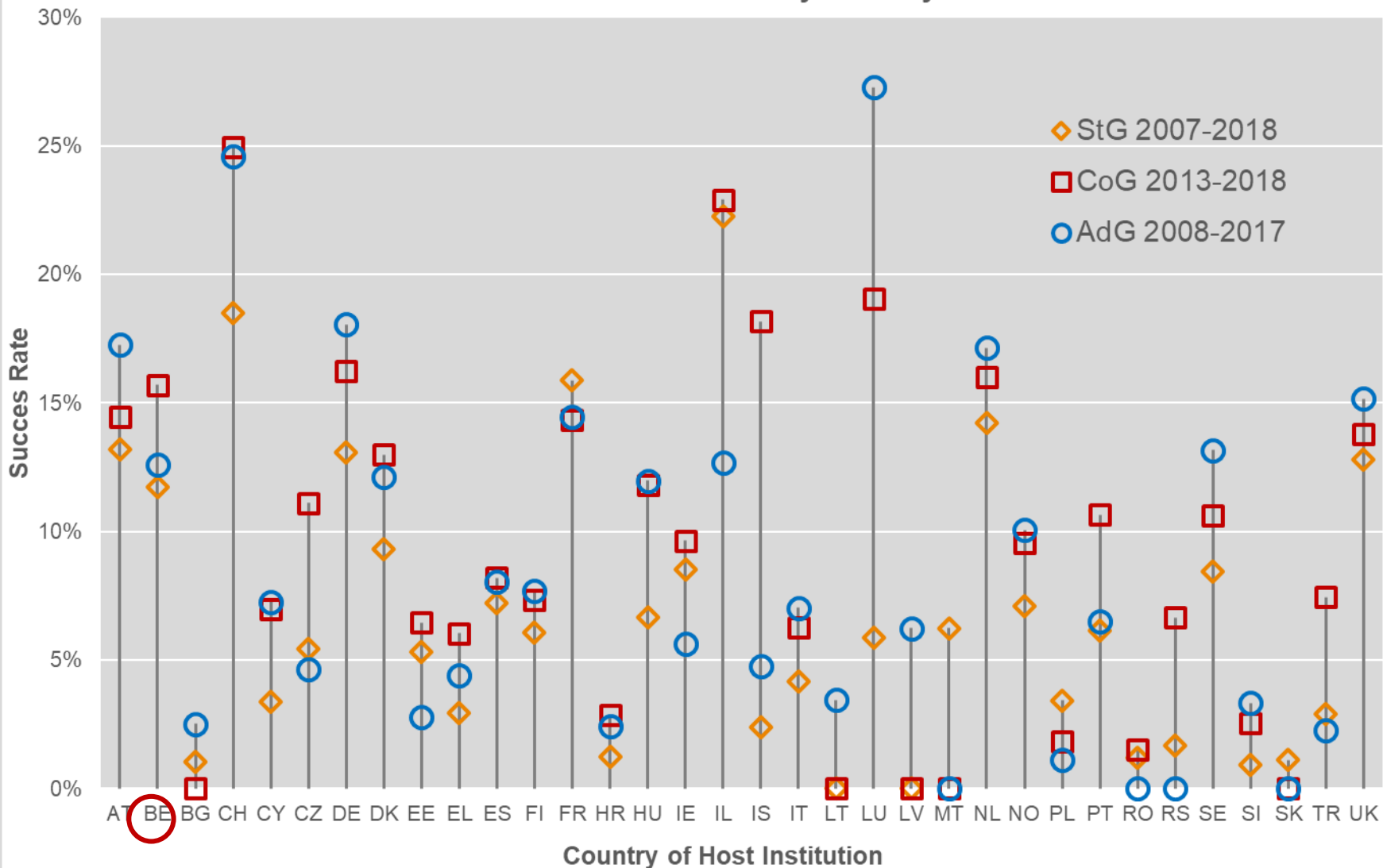


Success Rate by Country of HI and by Type of Grant



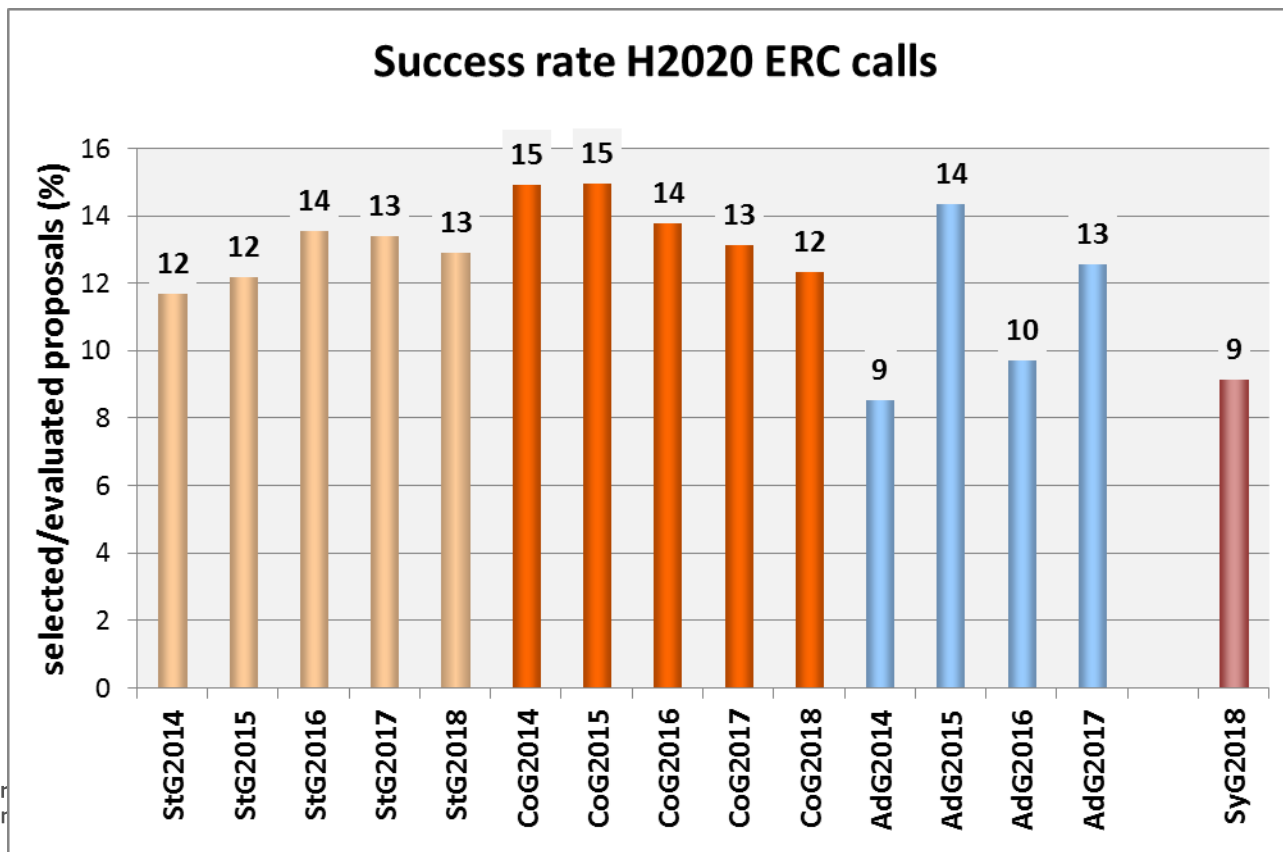
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Overall Success Rates by Country of HI



Overall Success Rates by Type of Grant

	StG2007-2018	CoG2013-2018	AdG2008-2017	Total
Funded Proposals	4257	1920	2678	8855
Evaluated Proposals	40960	15240	21091	77291
Success Rate	10%	13%	13%	11%



Country	Higher-Education Institution	No	StG	CoG	AdG	Total	LS	PE	SH
UK	University of Cambridge	1	103	48	82	233	82	111	40
UK	University of Oxford	2	85	52	94	231	65	96	70
UK	University College London	3	80	40	49	169	63	48	58
CH	Swiss Federal Institute of Technology Zurich (ETH Zurich)	4	54	22	75	151	39	105	7
IL	Weizmann Institute	5	67	41	42	150	87	61	2
CH	Swiss Federal Institute of Technology Lausanne (EPFL)	6	63	23	55	141	36	102	3
IL	Hebrew University of Jerusalem	7	65	21	40	126	53	51	22
UK	University of Edinburgh	8	45	17	41	103	35	41	27
UK	Imperial College	9	53	20	28	101	31	67	3
DE	University of Munich (LMU)	10	44	10	37	91	35	32	24
DK	University of Copenhagen	11	43	25	21	89	39	32	18
NL	University of Amsterdam	12	48	16	24	88	8	25	55
IL	Tel Aviv University	13	50	17	18	85	35	42	8
BE	University of Leuven	14	40	14	26	80	21	42	17
NL	Delft University of Technology	15	40	17	18	75	10	57	8
CH	University of Zurich	16	31	16	26	73	38	14	21
NL	Utrecht University	17	30	24	18	72	13	28	31
FI	University of Helsinki	18	34	15	22	71	39	17	15
NL	Radboud University Nijmegen	19	36	17	17	70	23	21	26
NL	Leiden University	20	35	14	19	68	1	25	42
UK	University of Bristol	21	26	9	32	67	13	40	14
IL	Technion - Israel Institute of Technology	22	39	11	14	64	20	43	1
DE	Technical University of Munich	23	27	17	17	61	14	46	1
UK	University of Manchester	24	21	14	24	59	10	40	9
Country	Research Organisation	No	StG	CoG	AdG	Total	LS	PE	SH
FR	National Centre for Scientific Research (CNRS)	1	235	124	108	467	129	280	58
DE	Max Planck Society	2	105	36	87	228	118	92	18
DE	Helmholtz Association of German Research Centres	3	69	35	31	135	81	53	1
FR	National Institute of Health and Medical Research (INSERM)	4	52	27	28	107	99	4	4
ES	Spanish National Research Council (CSIC)	5	33	20	18	71	20	43	8
FR	French Alternative Energies and Atomic Energy Commission	6	43	9	17	69	10	57	2

Top European Institutions Hosting ERC Grantees by Funding Schemes

ERC calls 2007-2017 +StG2018+CoG2018

Current signatories of the grant agreement

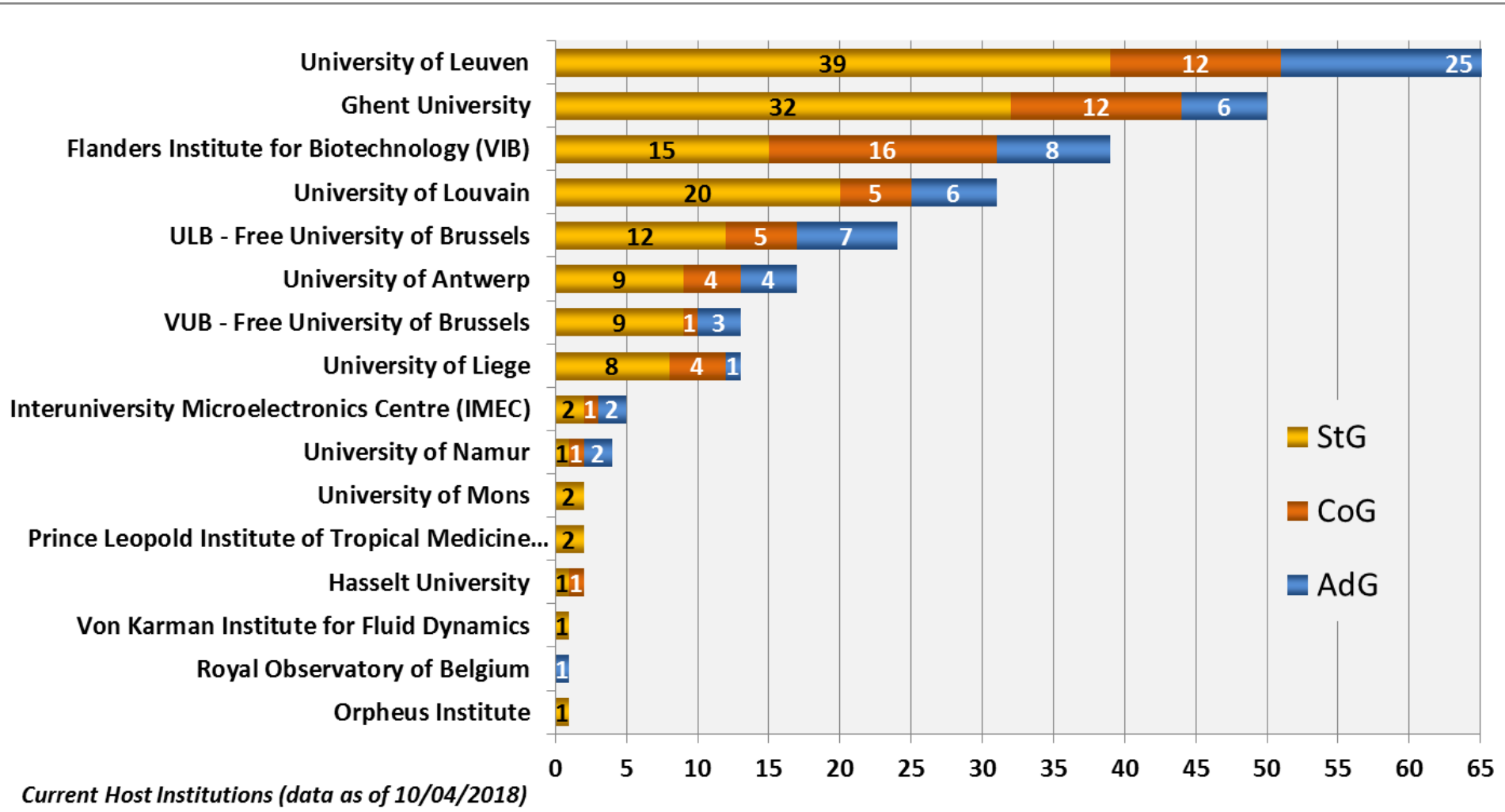
Data as of 06/12/2018

ERC Grants by Belgian institutions

(provisional data)



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ERC Grants by Belgian institutions in EU/AC



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ERC calls 2007-2017: 762 institutions

1	National Centre for Scientific Research (CNRS)	425
2	University of Cambridge	218
3	University of Oxford	214
4	Max Planck Society	210
5	University College London	157
6	Swiss Federal Institute of Technology Zurich (ETH Zurich)	136
7	Swiss Federal Institute of Technology Lausanne (EPFL)	134
8	Weizmann Institute	133
9	Hebrew University of Jerusalem	117
10	Nat. Institute of Health and Medical Research (INSERM)	101
11	Imperial College	97
12	University of Edinburgh	97
13	University of Amsterdam	83
14	University of Copenhagen	80
15	University of Munich (LMU)	80
16	University of Leuven	76
17	Tel Aviv University	75
18	Delft University of Technology	66
19	French Alternative Energies and Atomic Energy Comm.	66
20	Spanish National Research Council (CSIC)	66
34	Ghent University	50
45	Flanders Institute for Biotechnology (VIB)	39
62	University of Louvain la Neuve	31
79	ULB - Free University of Brussels	24

Outline

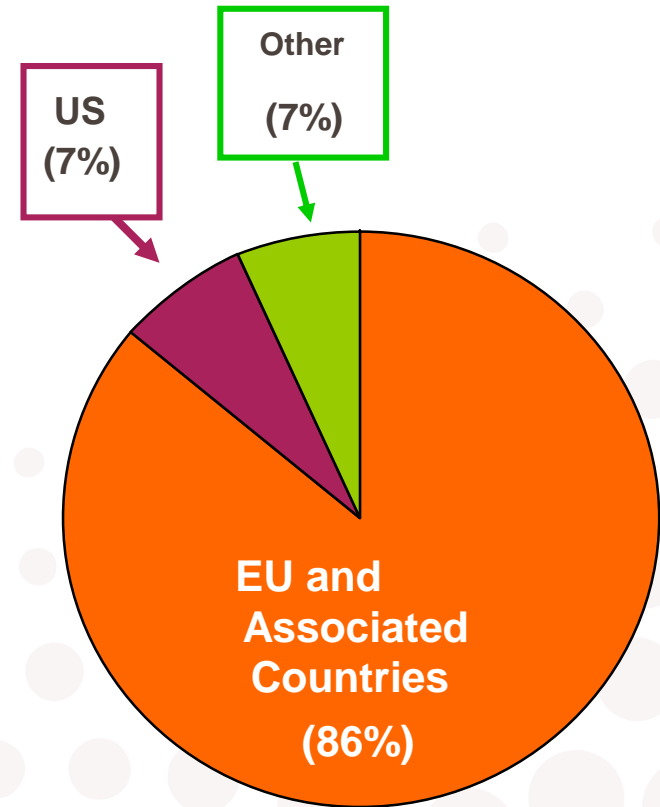


- What is the ERC? What does the ERC offer?
- How is Belgium doing at the ERC?
- **How are ERC research proposals evaluated?**
- Some tips on preparing an ERC proposal

Evaluation- StG/CoG/AdG

Peers

- **Panel members:** typically 425 / call (SyG:~90)
 - High-level scientists
 - Recruited by the ERC Scientific Council from all over the world: ~14% from outside Europe
 - About 14-17 members, including one chair person
- **Referees:** typically 2000 / call
 - Evaluate only a small number of proposals
 - Similar to normal practise in peer-reviewed journals

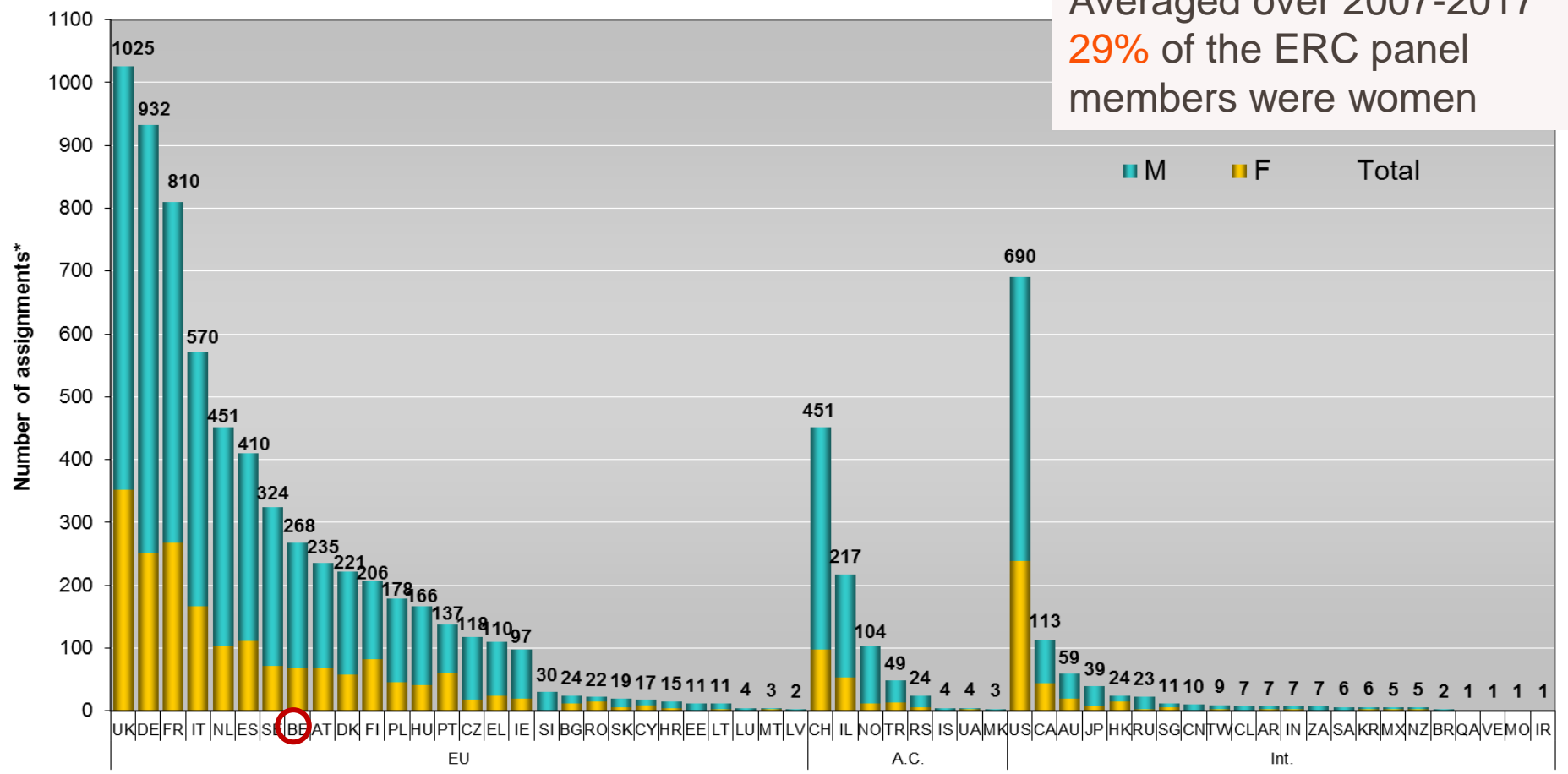


ERC Panel Members by Country of HI and Gender



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Averaged over 2007-2017
29% of the ERC panel members were women



Country of Panel Member's Host Institution

Based on the ERC StG, CoG and AdG calls 2007 - 2017



European Commission

European Union funding for Research & Innovation

StG/CoG/AdG: Submission to Panels

(SyG: all proposals are submitted to a single panel)



- Proposals are submitted to a *targeted Panel* (of PI's choice)
 - ➔ Can flag one “*Secondary Review Panel*”
- **Applicant chooses his/her panel**, and this panel is “responsible” for the evaluation of the proposal
- Proposals can be moved to other panels in exceptional cases, e.g. if clear mistake on part of applicant, or due to the necessary expertise being available in a different panel
- In case of cross-panel or cross-domain proposals, evaluation by members of other panels possible

Online Submission

Proposal structure

Administrative forms (Part A)

- 1 – General information
- 2 – Administrative data of participating organisations
- 3 – Budget
- 4 – Ethics
- 5 – Call specific questions

Administrative forms

Annexes

Commitment of the host institution, PhD certificates, certificates on extension of eligibility, ethics issues etc

Part B1 (submitted as pdf) ***Evaluated in Step 1 & Step 2***

Text box - Cross-domain nature explanation

- a – Extended synopsis 5 pages
- b – Curriculum vitae 2 pages
- Appendix – Funding ID
- c - Track-record 2 pages

Part B2 (submitted as pdf)

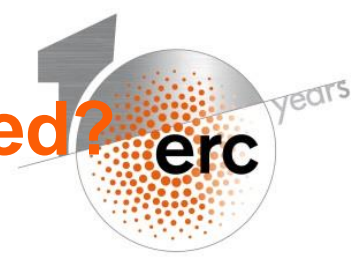
NOT evaluated in Step 1 (Step 2 only)

- Scientific proposal 15 pages
- a – State-of-the-art and objectives
- b – Methodology
- c – Resources

→ Read the Information for Applicants

How are ERC research proposals evaluated?

Excellence is the sole evaluation criterion



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Evaluation of *excellence* at two levels:

- **Excellence of the Research Project**

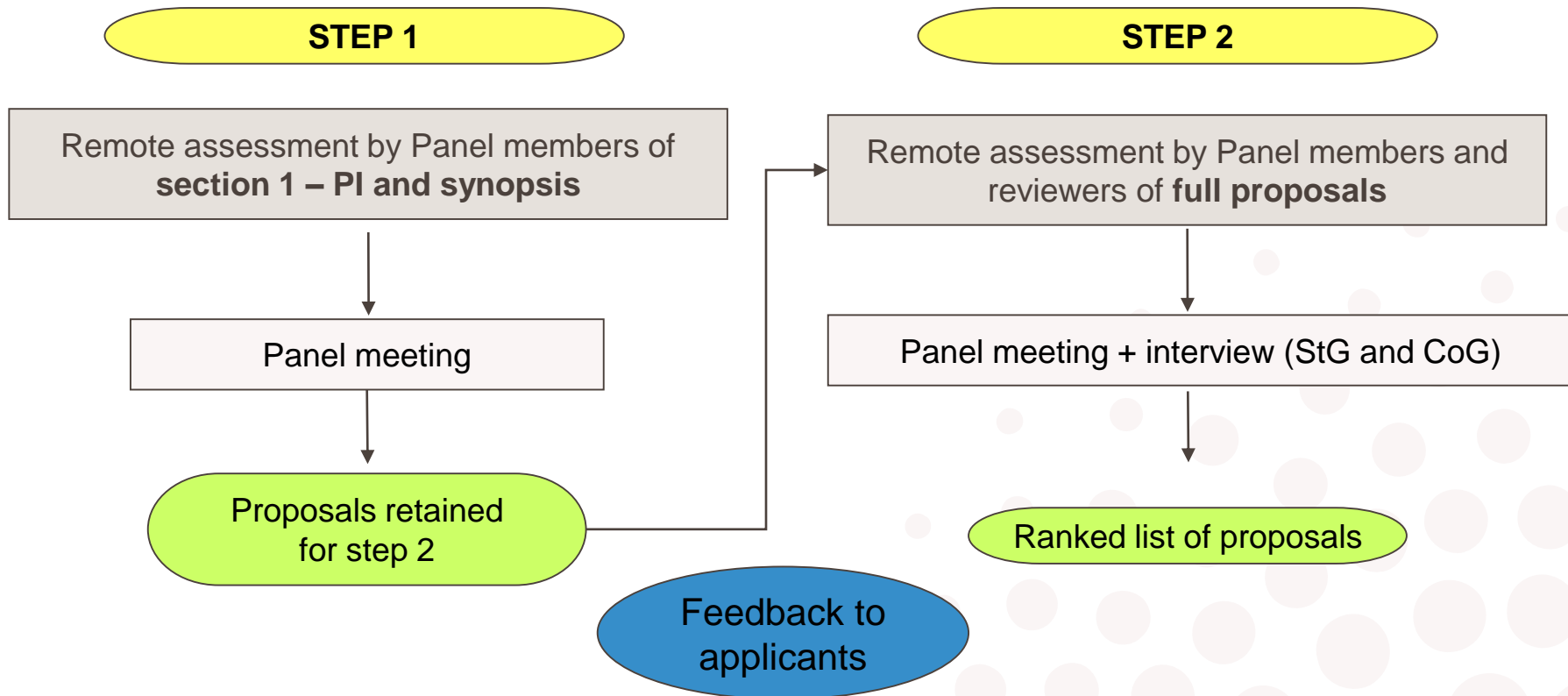
- ✓ **Ground breaking nature**
- ✓ **Potential impact**
- ✓ **Scientific Approach**

- **Excellence of the Principal Investigator**

- ✓ **Intellectual capacity**
- ✓ **Creativity**
- ✓ **Commitment**

Evaluation

Review procedure (StG, CoG and AdG)



- Right balance between generalist + specialized review
- Appropriate treatment of interdisciplinary proposals

How to prepare and submit a successful ERC research proposal?

- Have a **bright, original, exciting idea**
- Design a **research project** to implement the idea
- Get a letter of support from a **Host Institution** where the project is to be carried out (the HI must be located in the EU or any of the H2020 associated countries)
- Write your **research proposal**
- **Fully electronic/web based submission system**
- **Submit** your research proposal **before the deadline**

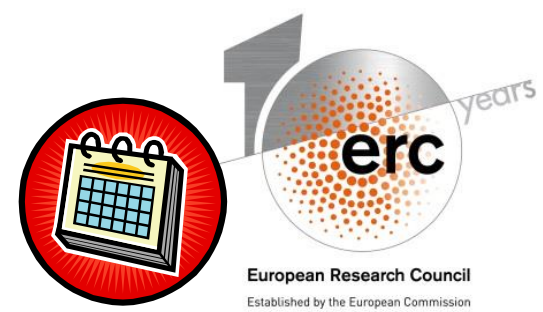


Outline



- What is the ERC? What does the ERC offer?
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Preparing your proposal (1)



- **Register early**, get familiar with the system and templates and start filling in the forms
- A submitted proposal can be **revised until the call deadline** by submitting a new version and overwriting the previous one
- Make sure you are eligible
- Follow the formatting rules and page limits.
- Download and proof-read the proposal before submitting.
- Make use of the **help tools and call documents** (Information for Applicants, Work Programme, Frequently asked questions)
- Talk to the National Contact Points and your Institution's grant office

Preparing your proposal (2): Host Institution



- You **can change** it during the project's life
- **Negotiate** with the HI (your position, equipment, administrative support, access to infrastructure, etc.)

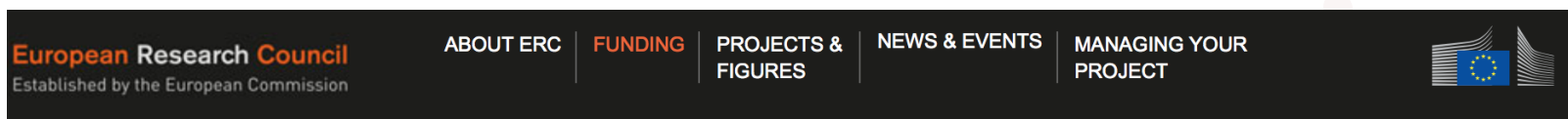
Rumour 1: *The quality/fame of the HI is increasing my chances/scores.*

✗ NOT true: the HI is not an evaluation criterion!

Preparing your proposal (3): Choosing the Panel

<https://erc.europa.eu/projects-and-results/erc-funded-projects>

- Check out projects funded under panel
- Check out past panel members



IMPORTANT: You are not allowed to contact panel members about the evaluation! Any such contact can lead to exclusion from the call.

CHOOSE YOUR PANEL

ERC peer review evaluation panels (2019 calls)

COMPOSITION OF EVALUATION PANELS

ERC Starting Grant 2019:
Panel Chairs
Panel Members

ERC Starting Grant 2018:

Preparing your proposal (4): Choosing descriptors

- Descriptors and free keywords may influence:
 - Evaluation Panel
 - **Panel members**
 - Whether a cross-panel evaluation is necessary

Rumour 2 : *The more cross-panel descriptors indicated, the higher the funding chances, since I emphasize like this the interdisciplinarity of my proposal.*

- ✗ **NOT true**: even though these are used to allocate proposals to Panel Members, once the proposals are allocated, Panel Members do not see the keywords and descriptors used.

Preparing your proposal (5): Part B1: the research project



- Is my project new, **innovative**, bringing new solutions/theories?
- Does it promise to go **substantially beyond the state of the art?** – no incremental research. **Think big!**
- Know your competitors – what is the **state of play** and why is your idea and scientific approach outstanding?
- Only the extended Synopsis is read at Step 1: **concise and clear presentation** is crucial (evaluators are not all experts in the field)
- How can I **prove/support** my case? Are my goals **realistic**? Explain your **scientific approach** in sufficient detail to convince the panel about the **feasibility** of your project
- What's the **risk**? Mitigating measures?
- Societal impact is **not** an evaluation criterion (which does not mean ERC-funded projects would not have such impact)

Preparing your proposal (6): Part B1: the principal investigator

- Why am I the **best/only person** to carry it out? Know your competitors
- Am I able to work **independently**, and to manage a 5-year project with a substantial budget?
- Am I **competitive**?
- Have I shown my **scientific leadership** in my CV?

Rumour 3: *One needs publications in Nature/Science/High Impact Factor journals to succeed.*

✗ NOT true

Preparing your proposal (7): Part B2



In Step 2, both part B.1 and part B.2 are read by Panel Members and specialists from around the world

- Do not repeat the synopsis, provide sufficient details on your methodology and work plan
- Make sure that the quantitative and qualitative differences to the state of the art are clear and referenced - show you did your homework.
- Provide alternative strategies to mitigate risks
- Explain **involvement of team members**
- Justify requested **resources** – **explain your budget properly**

Preparing your proposal (8): Proposal budget considerations



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- Budget analysis carried out in Step 2 evaluation (meeting)
- Panels have responsibility to ensure that resources requested are reasonable and well justified
- Budget cuts need to be justified on a proposal by proposal basis (no across-the-board cuts)
- Panels to recommend a final maximum budget based on the resources allocated/ removed
- Panels do not “micro-manage” project finances
- Awards made on a “take-it-or-leave-it” basis: no negotiations

Evaluation

Ranking and scoring in Step 1



- In Step 1 proposals are ranked by the panels on the basis of the individual reviews and the panels' overall appreciation of their strengths and weaknesses.
- Proposals will be retained for Step 2 based on the ranked list and the determined budgetary cut-off level.
- Applicants will be informed on the score attained by their proposal:
 - **A:** is of sufficient quality to pass to Step 2 of the evaluation,.
 - **B:** is of high quality but not sufficient to pass to Step 2 of the evaluation.
(if score = B at step 1: **Restriction of resubmission of 1 year**)
 - **C:** is not of sufficient quality to pass to Step 2 of the evaluation.
(if score = C at step 1: **Restriction of resubmission of 2 years**)
- In addition, applicants will be told the ranking range of their proposal out of the proposals evaluated by the panel.



Evaluation

Ranking and scoring in Step 2



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- In step 2 proposals are ranked by the panels on the basis of the individual reviews, the interview of the applicant (for StG, CoG and SyG) and an overall appreciation of their strengths and weaknesses.
- Proposals will be recommended for funding based on the ranked list and the funds available.
- Applicants will be informed on the score attained by their proposal:
 - **A:** fully meets the ERC's excellence criterion and is recommended for funding if sufficient funds are available.
 - **B:** meets some but not all elements of the ERC's excellence criterion and will not be funded. (if score = B - **NO** restriction on resubmission at Step 2)
- In addition, applicants will be told the ranking range of their proposal out of the proposals evaluated by the panel.

Typical reasons for not making it into Step 2



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- Incremental in nature
- Hypothesis and objectives not sufficiently clear
- No realisation of risks & challenges, contingency
- For interdisciplinary proposals: expertise missing in one area

It does take a considerable effort to compose a good application!

I have been invited for an interview

.. now what?



- 💡 Have **clear and representative slides** and focus on **SCIENCE!**
- 💡 **Anticipate questions.**
- 💡 Know the **details** of your proposal and methods, as well as your research area – who are your main competitors/collaborators?
- 💡 Your last slide is normally left on the screen during the questions/answers section of your interview

I have been invited for an interview .. now what?



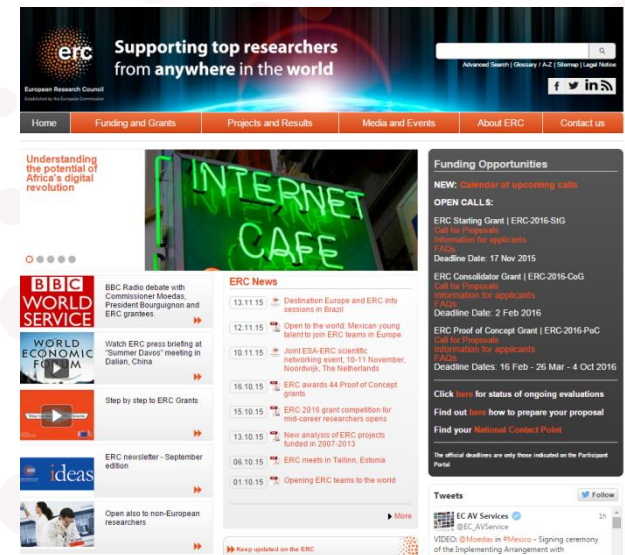
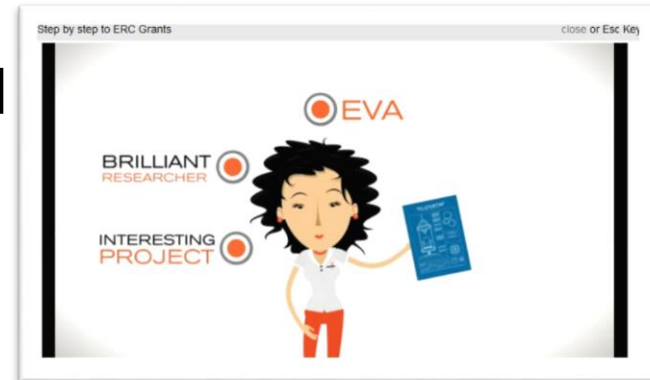
- 💡 Bring **additional slides** on new supporting data, if you have, and for possible explanations.
- 💡 **Don't over-explain your CV!**
- 💡 When the panel asks questions, keep your reply clear and concise. The more questions they ask the more details you can clarify.
- 💡 Keep the time.

PRACTISE, PRACTISE, PRACTISE, PRACTISE!!!!!!

Some useful tools and links



- Read **Information for Applicants and Work Programme**
- View the **step-by-step video** Introduction to application process, including tips & tricks for the interview
<https://vimeo.com/94179654>
- Consult **ERC website** for latest funding opportunities, view ERC funded projects



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More information on
erc.europa.eu

Read through the ERC
Work Programme 2019 !

National Contact Point in your country
erc.europa.eu/national-contact-points

Follow us on

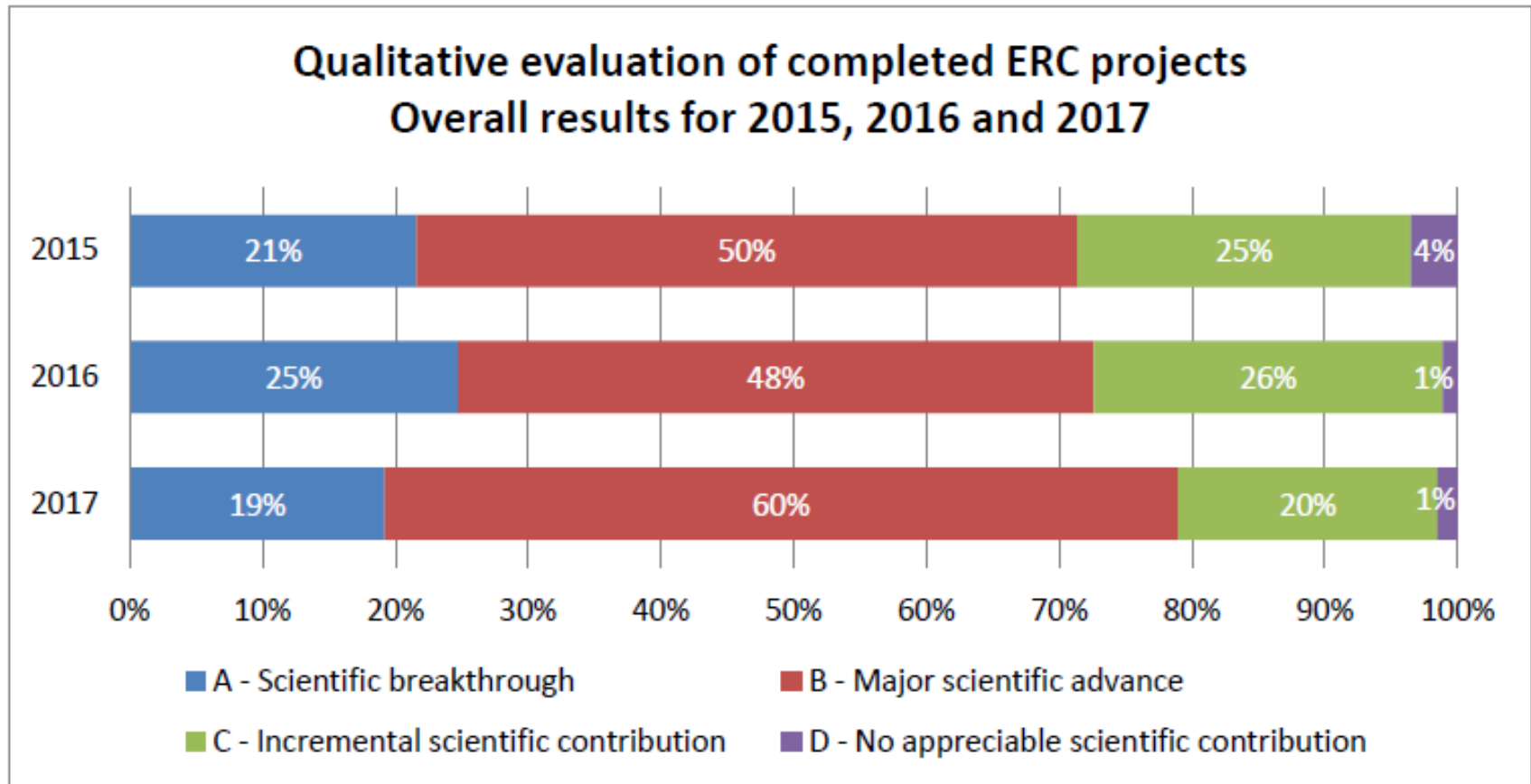


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ERC_Research

21% of the ERC-funded Projects Deliver Scientific Breakthroughs

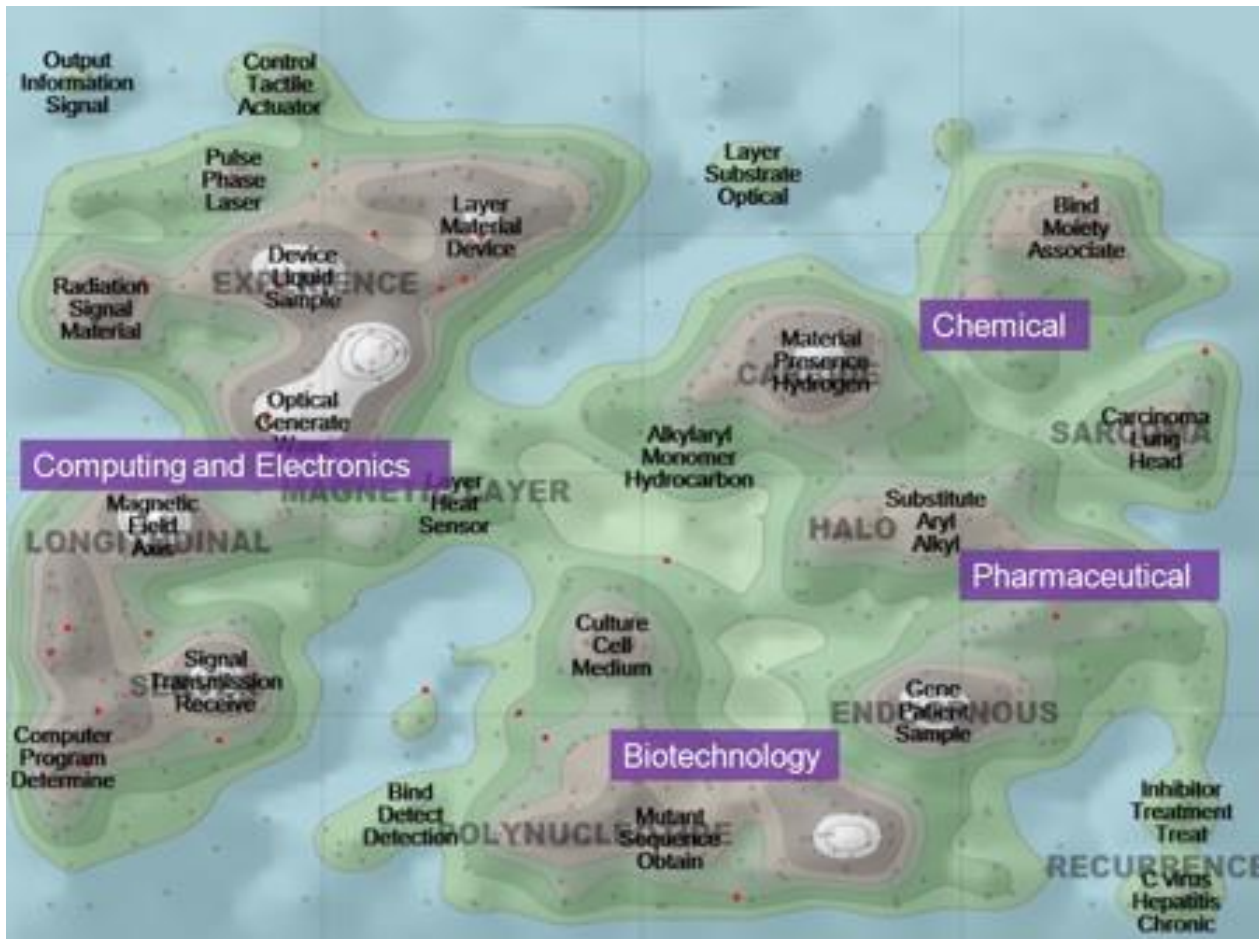


Frontier Research Leads to Innovation



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With 17% of the budget of the 7th Framework Programme (FP7), the ERC accounts for 29% of FP7-funded patent filings (>800)



Thematic
concept map of
ERC supported
inventions

Proposal submission

ERC Work Programme 2019 calendar



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ERC calls	Budget	Call Opening	Submission Deadline(s)
Starting Grants ERC-2019-StG	580 M€ (390 grants)	1 August 2018	17 October 2018
Synergy Grants ERC-2019-SyG	400 M€ (48 grants)	2 August 2018	8 November 2018
Consolidator Grants ERC-2019-CoG	602 M€ (314 grants)	24 October 2018	7 February 2019
Advanced Grants ERC-2019-AdG	391 M€ (166 grants)	21 May 2019	29 August 2019
Proof of Concept ERC-2019-PoC	25 M€ (167 grants)	6 October 2018	22 January 2019 25 April 2019 19 September 2019

Q: Can you show us an example of a successful proposal and say what factors made it stand out from the crowd?



We can't provide a 'representative' example.

Every panel decides whether and why a proposal is successful as compared to others.

The reasons for this can be very different from one panel to another.

Applicants should find their own way and rely on themselves to come up with a convincing proposal.

See on the ERC Website what projects have been funded in your field.

Questions

- Does a successful proposal require collaboration with international groups or should all expertise be available in house?
- Tips for writing a successful consolidator grant application without having obtained an ERC starting grant previously.
- What is the need for preliminary data in a proposal. Can we suggest broad ideas without pilot experiments?
- Compatibility of the ERC starting grant and any other 'young investigator' type grants (e.g. Sofja Kovalevskaja Award; START, FWF, Human frontiers)
- How to structure the budget: what % for travel, equipment, etc.

Questions

- Writing process: how did you build up your proposal? Right choice of panel? For ex. in which panel does Philosophy fit? SH3 The Social World, Diversity, Population or SH4 The Human Mind and its Complexity CV: how do you stand out?
- How important is it to have a team? (do I stand chances if I don't)
- Do I make any chance to get a grant if I never published in one of the high impact journals like Nature/Science?
- To which extent must the proposed research "deviate" from the former research of the PI? - How should one interpret "ground-breaking" research?

Questions



- How to structure the application in terms of 'work packages' for PhDs and Postdocs.
- Eligibility for foreign researchers, who built their careers outside of Europe but currently are postdoc in an European university.
- How precise/large should be the idea of research? I guess we should be precise in what we do but this is still a big project with several people working on it for 5 years.
- Is there an advice ratio between staff expenses and consumables/equipment expenses?
- How well seen would it be considered if my project would require the collaboration of other experts in the field? Shall I be totally independent on the realisation of the project?

Questions



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- What do they mean when they say that the impact and results are not so important in the proposal, that all that matters is the excellent idea? There needs to be SOME impact, so how to strike a good balance there.
- For the consolidator grants: - How is research excellence of the PI evaluated? - How important are publications as first author and last author, as compared to co-authorship?

Questions: CV



- Whether my CV is ready for starting/consolidator grant
- Are candidates with 2 years from the PhD evaluated at the same level of candidates with 5 years from the PhD?
- Is the CV evaluated in the context of the research field?

Questions: Multidisciplinary proposals



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- How to choose a panel for multidisciplinary research?
- How does the ERC treat multidisciplinary proposals that do not exactly fit in any of the panel descriptions?
- Is there any counterpart for the interdisciplinary panel at the FNRS/FWO?

Questions: Risk

- How to write well impact or risk when you are working on literature for example
- ERC grants are supposed to be highly innovative and 'risky' - how can this be understood in a policy science perspective?
- ERC grants have been awarded to people that will essentially pursue their line of research. Is the mantra "high risk high reward" really true (how innovative should we go)?

Questions: Eligibility



- Are there restrictions regarding the nationality of an applicant?
- Am I eligible for ERC starting grant while working as postdoc?
- Do the 7 years include career breaks due to unemployment after the PhD?
- What is the age-limit to apply for an advanced grant?



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After More than 10 Years, a Success Story



Over **8,800**
top researchers funded since
the ERC's creation in 2007



Over **100,000**
articles from ERC projects published
in prestigious scientific journals



Over **60,000**
researchers and other professionals
employed in ERC research teams



> 760 research institutions
hosting ERC grantees – universities,
public or private research centres in
the EU or associated countries



€ 13 billion
ERC budget for 2014-2020 under
Horizon 2020



77
nationalities of
grant holders

THANK YOU !



European
Commission

Horizon 2020
European Union funding
for Research & Innovation



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Additional back-up slides

The ERC international implementing agreements: Opportunities for researchers from outside Europe to collaborate with an ERC PI



Opportunities for:

- **Canada Research Chair holders or Banting PostDoc Fellows (Canada)**
- **NSF CAREER Awardees or NSF Postdoc Fellows (USA)**
- **MSIP Career Awardees or NRF Young Researchers (Korea)**
- **CONICET Investigator with a PICT or PIP grant (Argentina)**
- **JSPS Fellows (Japan)**. NEW: Similar agreement with JST
- **NSFC Grant holders (China)**
- **NRF Career Advancement or Postdoctoral Fellows (South Africa)**
- **CONACYT Research Fellows or Postdoc Fellows (Mexico)**
- **PostDoc grantees of FAPs, CAPES, CNPq (Brasil)**
- **Early-Career Researchers, National PostDoc Fellows or Doctoral Candidates funded by SERB (India)**

Nobel Prize to ERC grantees



The Nobel Prize in Chemistry 2016 was awarded jointly to Jean-Pierre Sauvage, Sir J. Fraser Stoddart and Bernard L. Feringa "for the design and synthesis of molecular machines".

ERC Grantee AdG 2008
ERC Grantee AdG 2015

Bernard Feringa
Nobel 2016

A portrait of Bernard Feringa, a man with glasses wearing a dark suit and light shirt. The portrait is enclosed in a light blue rounded rectangle. Two blue callout boxes with white text are positioned above the portrait, one pointing to the top left and one to the top right.

ERC Grantee AdG 2009

Jean Tirole
Nobel 2014

A portrait of Jean Tirole, a man with glasses wearing a dark suit and light shirt. The portrait is enclosed in a light blue rounded rectangle. A blue callout box with white text is positioned above the portrait, pointing to the top right.

The Nobel Prize in Economic Sciences 2014 was awarded to Jean Tirole "for his analysis of market power and regulation".

ERC Grantee AdG 2010
ERC Grantee AdG 2008
ERC Grantee AdG 2013

May-Britt Moser
Nobel 2014

Edvard Moser
Nobel 2014

Two portraits are shown side-by-side. The left portrait is of May-Britt Moser, a woman with long dark hair, wearing a black top. The right portrait is of Edvard Moser, a man with short brown hair, wearing a dark shirt. Both portraits are enclosed in light blue rounded rectangles. Three blue callout boxes with white text are positioned above the portraits, one pointing to the top left, one to the top right, and one to the bottom right.

ERC Grantee AdG 2009

Serge Haroche
Nobel 2012

A portrait of Serge Haroche, a man with glasses wearing a dark suit and light shirt. The portrait is enclosed in a light blue rounded rectangle. A blue callout box with white text is positioned above the portrait, pointing to the top right.

ERC Grantee StG 2007
ERC Grantee SyG 2012

Konstantin Novoselov
Nobel 2010

A portrait of Konstantin Novoselov, a man with short dark hair, wearing a dark suit and light shirt. The portrait is enclosed in a light blue rounded rectangle. Two orange callout boxes with white text are positioned above the portrait, one pointing to the top right and one to the bottom right.

The Nobel Prize in Physiology or Medicine 2014 was awarded to May-Britt Moser and Edvard Moser, together with John O'Keefe, "for their discoveries of cells that constitute a positioning system in the brain".

- 2 other ERC grantees received the Nobel prize in 2010 and 2012
- Other 7 ERC grantees were already Nobel laureates at the moment they received the ERC grant

40 Non-EU/AC Nationalities



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Over 8% of all ERC grants to principal investigators of non-EU/AC nationality

Non-EU/AC Principal Investigators	Starting and Consolidator grants	Advanced grants	Total grants
USA	181	107	288
Canada	70	13	83
Russia	43	9	52
India	49	3	52
Australia	41	7	48
China	37	0	37
Japan	25	7	32
New Zealand	13	6	19
Argentina	17	1	18
Other	79	8	87
Total	555	161	716

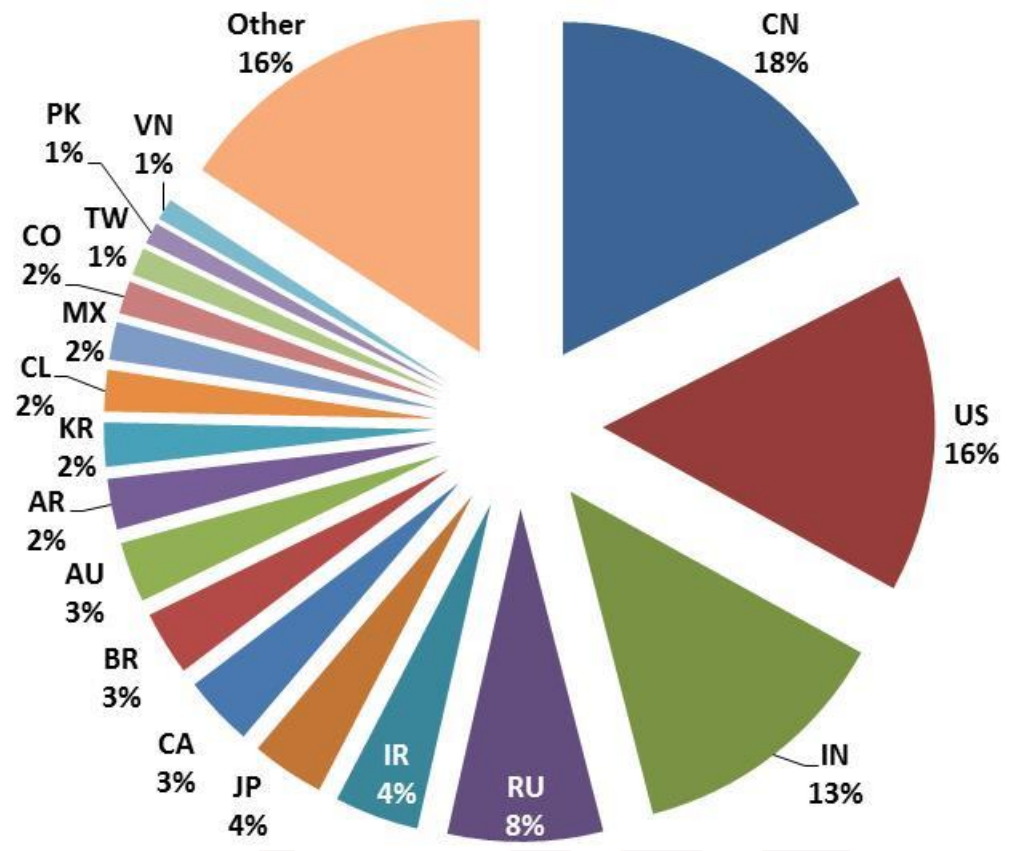
Attracting Researchers to Europe



Nationality of ERC project teams (PIs not included)
Analysis of 1,901 Starting and Advanced Grants

EU: 71%
Assoc. Countries: 10%
non-EU/AC: 17%
unknown: 2%

In all ERC grants
+ **10,000** non-ERA team members
most from
China, US, India, and Russia





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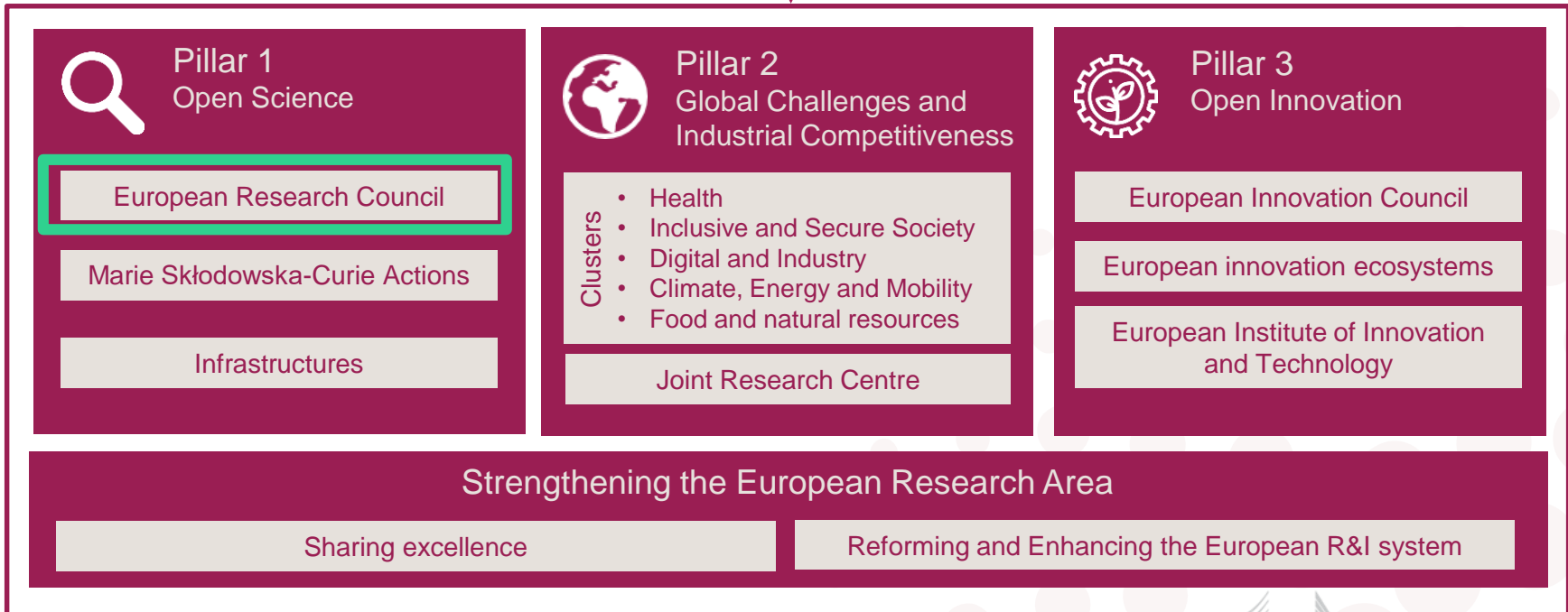
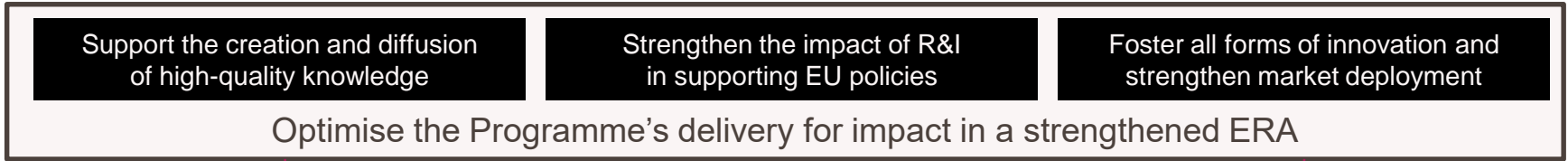
Outlook next Framework Programme

Horizon Europe: Evolution not Revolution



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Specific objectives of the Programme



What Next? update



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Ongoing

Parliament and Council negotiations on Union budget 2021-2027, including budget for Horizon Europe

12.12.
2018

Parliament agrees its position on Horizon Europe legislation

19.02.
2019

Council to agree its position on Horizon Europe legislation

April
2019

Parliament and Council start **trialogues** with a view to agreeing on Horizon Europe legislation

1 January
2021

Envisaged start of Horizon Europe



ERC is Putting Europe Back on the Map



The first reported ERC publications began to appear in 2007 and since then publications acknowledging ERC funding have gone from contributing less than 0.1% of EU top 1% publications in 2007 (2) to nearly 7% in 2014 (973).

In 2014, for the first time authors based in the EU appeared on more top 1% cited publications (14,172) than authors based in US (14,093) in absolute numbers.

Diagramme until 2014 (1% most cited Publications)

