

Webinar on ERC Starting and Consolidator Grants 2021

6/10/2020

Webinar on ERC Starting and Consolidator Grants 2021

The organizers : the ERC National Contact Points (NCPs)

NCP FLANDERS

Flemish academia and research centers :

Margot Beereboom, NCP ERC

www.ncpflanders.be



Fédération Wallonie Bruxelles:

Natacha Wittorski, NCP ERC

www.ncp.fnrs.be

Belgian Science Policy Office



Federal institutions :

Bram Lefever, NCP ERC

<http://eurofed.belspo.be>

Webinar on ERC Starting and Consolidator Grants 2021

Programme of the webinar

- **Welcome and presentation of speakers**
- **ERC Starting and Consolidator Grants: I. SUBMISSION & II. EVALUATION**
Dr. Wieland Staessens, Scientific Officer unit B4, ERCEA
- **Testimony from an ERC panel member**
Prof. Pascale Vielle, former panel member, SH2, UCLouvain
- **Testimony from an ERC Consolidator grantee**
Prof. Koen Vandewal, ERC CoG 2019, PE 4 panel, UHasselt
- **Short break**
- **Testimonies from ERC Starting grantees**
 - *Prof. Nele Vandersickel, ERC StG 2020, LS7 panel, UGent*
 - *Prof. Paula Gobbi, ERC StG 2020, SH 1 panel, ULB*
- **ERC Starting and Consolidator Grants: III. OUTCOME**
Dr. Wieland Staessens, Scientific Officer unit B4, ERCEA

Webinar on ERC Starting and Consolidator Grants 2021

Technical introduction

- How to ask questions to the speakers ? Use the “Questions & Answers” function of Zoom. Please be clear and concise!
- You can upvote questions from other attendees
- For a technical question, send a chat message to the panelists
- Do not send content questions through the chat
- Yes the slides will be made available: on <https://www.horizon-europe-info-sessions.be/event/erc-starting-consolidator-calls-2021-webinar-format/>

ERC & Horizon Europe: prospects for 2021 calls

Dr. Wieland Staessens

ERC Executive Agency

Scientific Department

Physical Sciences & Engineering



**ERC Info Session
Belgium
06-10-2020**



What is the ERC?



European Research Council

Established by the European Commission

European Research Council (ERC):

EU funding agency supporting excellence in frontier research through a bottom-up, individual based, pan-European competition

- Support Individual Researchers through Grants
 - Gain **scientific recognition** (ERC as quality label of excellence)
 - Scientific & Financial **Autonomy**
 - **Bottom-up**: investigator-driven, no predetermined topics
 - **Ground-breaking, high risk/high gain** research in all fields of science
 - Under best working conditions (HI) & with best team
 - Portability: transfer to any place in EU

Scientific Council & Executive Agency



European Research Council
Established by the European Commission

Scientific Council

- 22 prominent scientists
- overall scientific strategy
- control operation quality



**Annual Work Programme
& Expert Selection**

ERC Executive Agency

- Former researchers (& administr.)
- Execute annual WP
- Support applicants, PIs, experts, ScC

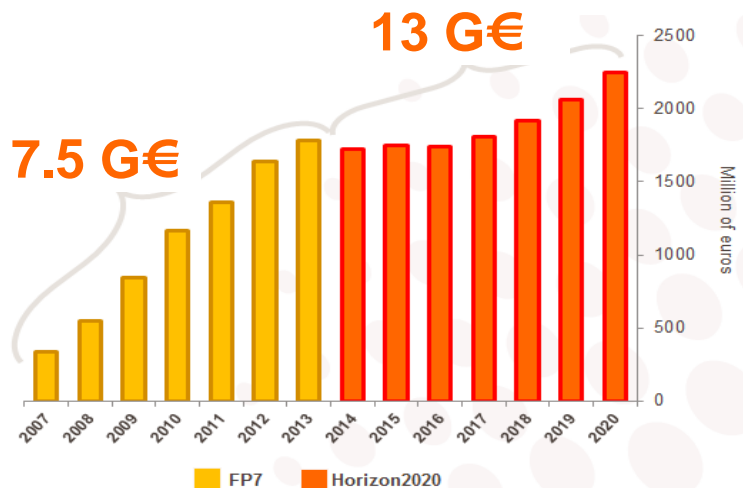


**Organise peer review evaluations
& Grant Management**

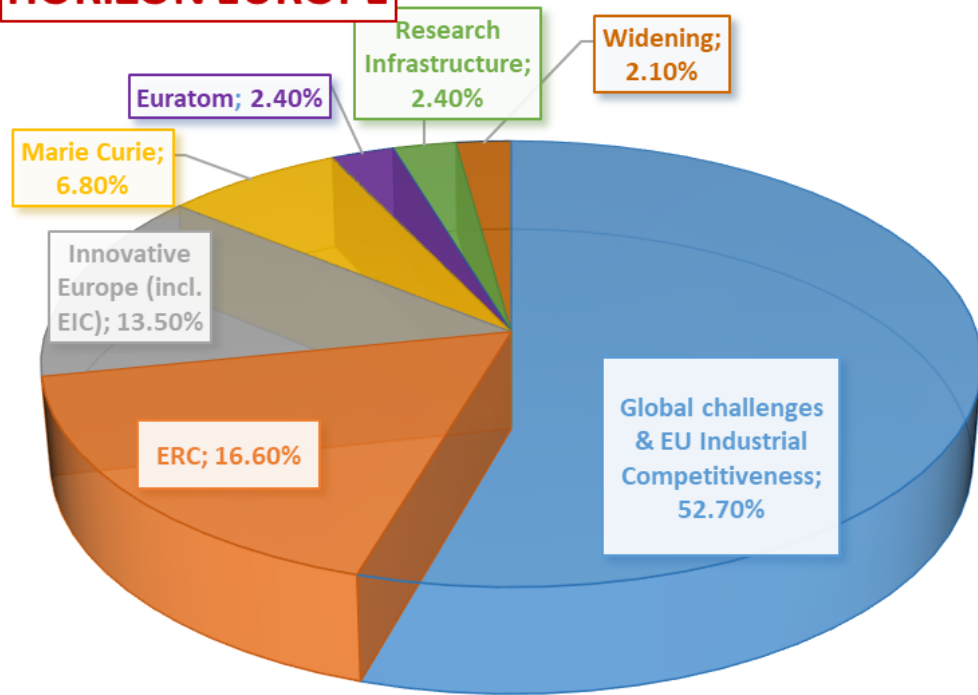
ERC part of Horizon Europe 2021 - 2027 (after FP7 & H2020)



ERC budget:



HORIZON EUROPE



Part I

SUBMISSION

ERC Grant Schemes in 2021



European Research Council
Established by the European Commission

Starting (StG)

- 2-7 years after PhD
- Up to 1.5 M€ (+1M€)
- Up to 5 years

Consolidator (CoG)

- 7-12 years after PhD
- Up to 2.0 M€ (+1M€)
- Up to 5 years

Advanced (AdG)

- 10-year significant achievements track-record
- Up to 2.5 M€ (+1M€)
- Up to 5 years

NO SYNERGY

Synergy (SyG)

Up to 10 M€ (+4M€) & 6 years

Proof-of-Concept (PoC)

Earliest stage of marketable innovation
€150,000 for ERC grant holders

Funding requested must be fully justified by estimation of real project cost

Project costs reimbursed at 100% funding rate (for actual incurred costs)
+ 25% indirect costs (flat-rate)

1 M€ extra grant can be requested

- a) Start-up costs for moving to EU/AC from abroad
- b) Purchase of large equipment
- c) Access to large facilities
- d) other major experimental and field work costs (no personnel cost)

ERC Proposal Structure

Only eligibility

Part A: Administrative Form

1. General Information
2. Participants & contacts
3. Budget (table + Resources)
4. Ethics
5. Call-specific questions
(+ excluded reviewers)

Annexes (as pdf)

HI support letter

**PhD record + supporting doc
(only for StG & CoG)**

Evaluation & eligibility

Part B1 (as pdf)

Extended synopsis (+cross-domain/panel explanation)	5 pages
Curriculum Vitae (& career gap) + Annex: Funding ID	2 pages
Early achievements track record	2 pages

Part B2 (as pdf)

Scientific Proposal	14 pages
• State-of-art & Objectives	
• Methodology	
Resources & Time Commitment	2 pages

Starting & Consolidator Grant Profiles

Starting Grant Profile

- Starting independent research
- 2-7 years after PhD (*)
- 50% time commitment
50% time in EU/AC
- Early achievements track record
 - ➔ Up to 5 publications
 - ➔ Research monographs
 - ➔ Patents
 - ➔ Invited presentations
 - ➔ Prizes, awards, etc

Call window: 12/01 – 09/03

Consolidator Grant Profile

- Consolidate independent research
- 7-12 years after PhD (*)
- 40% time commitment
50% time in EU/AC
- Early achievements track record
 - ➔ Up to 10 publications
 - ➔ Research monographs
 - ➔ Patents
 - ➔ Invited presentations
 - ➔ Prizes, awards, etc.

Call window: 21/01 – 20/04

Eligibility window & Resubmission



European Research Council
Established by the European Commission

- (*) Counting from 01-01-2021, but extendable beyond 7y (StG) -12y (CoG)
 - ➔ Maternity leave (18 months) / Paternity leave (documented time)
 - ➔ Long-term illness (documented time)
 - ➔ National service (documented time)
 - ➔ Clinical training (up to 4y)
- Resubmission restrictions may apply
- Similar restrictions may apply for future calls



C at Step 1 in 2019
B or C at Step 1 in 2020

From H2020 to Horizon Europe



European Research Council
Established by the European Commission

- Continuity and consolidation: “evolution not revolution”
- NEW: Interviews in AdG call
- NEW: 2 new Panels (PE11 & SH7) + changed Panel descriptors
 - ➔ Modernize: adapt to reflect scientific reality & evolution within research
 - ➔ Enlarge: include research fields more explicitly
 - ➔ Coherence: 27 panels to cover & fund “all fields of science” for all calls

Not a complete classification!!

No ERC priorities in funding!!

Inter-disciplinary proposals across panels are encouraged!!

ERC Panel Structure in Horizon Europe



Physical Sciences & Engineering

- PE1 Mathematics
- PE2 Fundamental Constituents of Matter
- PE3 Condensed Matter Physics
- PE4 Physical and Analytical Chemical Sciences
- PE5 Synthetic Chemistry and Materials
- PE6 Computer Science and Informatics
- PE7 Systems and Communication Engineering
- PE8 Products and Process Engineering
- PE9 Universe Sciences
- PE10 Earth System Science
- **PE11 Materials Engineering**

Life Sciences

- LS1 Molecules of Life: Biological Mechanisms, Structures and Functions
- LS2 Integrative Biology: From Genes and Genomes to Systems
- LS3 Cellular, Developmental and Regenerative Biology
- LS4 Physiology in Health, Disease and Ageing
- LS5 Neuroscience and Disorders of the Nervous System
- LS6 Immunity, Infection and Immunotherapy
- LS7 Prevention, Diagnosis and Treatment of Human Diseases
- LS8 Environmental Biology, Ecology and Evolution
- LS9 Biotechnology and Biosystems Engineering

Social Sciences and Humanities

- SH1 Individuals, Markets and Organisations
- SH2 Institutions, Governance and Legal Systems
- SH3 The Social World and Its Diversity
- SH4 The Human Mind and Its Complexity
- SH5 Cultures and Cultural Production
- SH6 The Study of the Human Past
- **SH7 Human Mobility, Environment, and Space**

Each panel comes
with descriptors

Submitting an ERC proposal



Excellent Idea

StG or CoG?

Cross-panel/domain?

Descriptors?

Domain & Panel?

Write part B1 & B2

Get acquainted with system

Prepare Annexes

Submit on time

Part II

EVALUATION

Evaluation process (2 Steps)

(StG, CoG, AdG)



European Research Council
Established by the European Commission

STEP 1

Remote assessment by **Panel members**
and **Cross Panel Reviewers** of **Part B1**

Panel meeting

Proposals retained
for step 2

Feedback to
applicants

A
B
C

STEP 2

Remote assessment by **Panel members**
and **Remote Reviewers** (*specialists*) of
full proposal (**Part B1+B2**)

Panel meeting
(with interview)

Ranked list of
proposals

A
B

ERC Evaluation Criteria

Excellence is sole criterion



European Research Council
Established by the European Commission

1. Research Project

- Ground-breaking nature & potential impact

Important challenges

Ambitious & Beyond SoA

High risk/High gain

- Scientific Approach

Feasibility

Methodology & Working arrangements

Time scales, Resources & PI commitment

Only Step 2

2. Principal Investigator

Ability for ground-breaking research

Creative independent thinking

Scientific expertise & capacity

Panel Discussion with previous Panel Member & Grantees

Part B1: Find the right balance

- ✓ Innovative? Beyond state-of-art?
High risk/High gain? Realistic/feasible?
- ✓ Outline state of play (incl. competition)
- ✓ Be **concise** & **clear**
(also for generalists)
- ✓ Think about **risk mitigation**

Part B2: Fill in the details

- ✓ No verbatim repetition of synopsis
- ✓ Detailed state-of-art
- ✓ Extensive **methodology** and **work plan**
- ✓ Provide **risk mitigation strategies**
- ✓ Explain involvement of **team**
- ✓ Justify requested **resources**

Some Hints & Tips



European Research Council

Established by the European Commission

Interviews at Step 2

→ typically 5-10 min. presentation + 20-25 min. Q&A

- ✓ Practice in advance and thoroughly (Mock interview)
- ✓ Get Panel interested in YOUR ideas & proposal
- ✓ Present & defend YOUR ideas
- ✓ Being nervous is perfectly normal

Avoiding misconceptions



European Research Council

Established by the European Commission

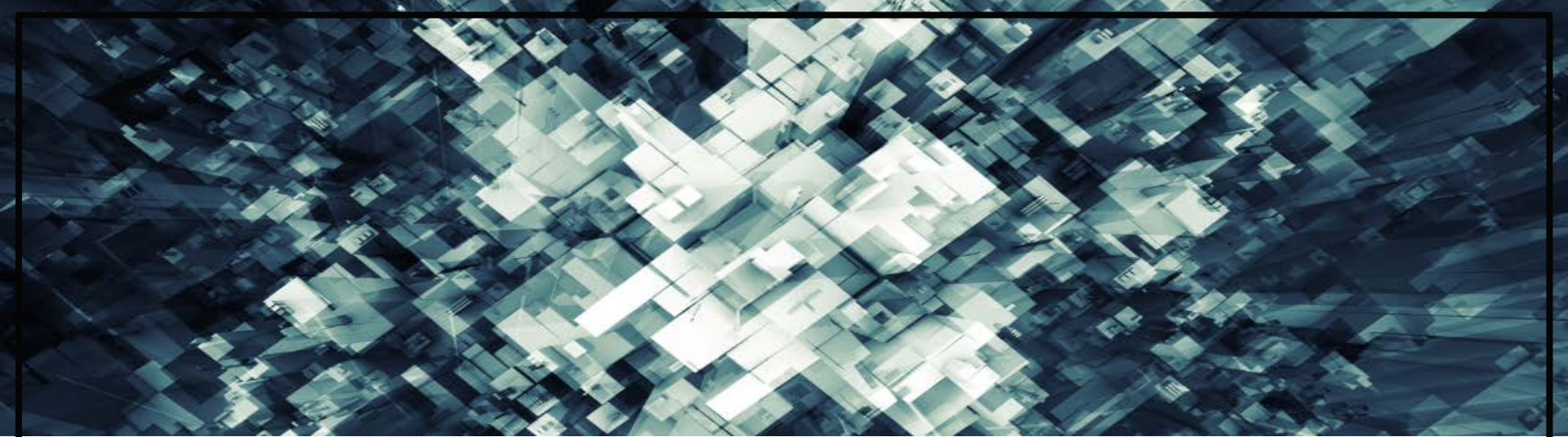
- ERC funds frontier research, also in applied sciences
- Publication record (i.e. h-index) is not an evaluation criterion
- Host Institution is not a evaluation criterion
- Budget distribution over the panels based on demand (bottom-up)
- Projects shorter than 5 years also welcome (with pro ratio adapted budget)
- Each applicant is treated equally (irrespective of age, gender, previous ERC grant, previous submission, etc)

Some Hints & Tips



European Research Council
Established by the European Commission

Panel Discussion with previous Panel Member & Grantees



Testimony from ERC Consolidator grantee

Koen Vandewal

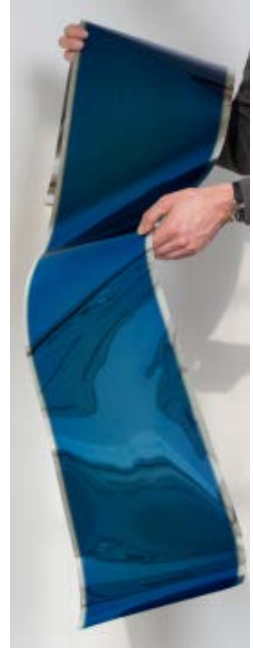
Prof. Hasselt University

Organic Opto-Electronic devices group



About me

- PhD at Hasselt University
in Physics – Materials science – new materials for PV
- 2010 - Postdocs at Linköping University (SE) and
Stanford University (US) (never on personal grant)
- 2014 – Prof. at TU Dresden (DE)
first time involved in national and H2020 projects
- 2018 – Prof. at Hasselt University (BE)



About me and ERC

- 2016: applied StG, panel condensed matter physics (1.5 MEUR)
- 2017: applied CoG, panel condensed matter physics (2 MEUR)
- 2018: applied CoG, panel Physical and Analytical Chemical Sciences (2.4 MEUR)
- 2019: applied CoG, panel Physical and Analytical Chemical Sciences (2.4 MEUR)

- CV gets you through first round, content of proposal determines if you get through second round and funded.
- I changed panel because I found more familiar names in the physical chemistry panels of the previous years.
- General impression upon receiving the reviewer comments: overall comments external reviewers were good, often hard to find substantial criticism.
- At interview, 2-3 panel members ask questions raised by external reviewers. The other panel members sit in silence.
- Upon resubmission and rewriting, I tried to mitigate criticism, but also tried to include the positive criticism or positive comments on feasibility and risks.

Tips & answers to written questions

- Topic should be new, but not too far from expertise.



Other applications of organic materials



- Ideally: New and exciting (risky) proposal, but applicant is the only one capable or best suited to execute it.
 - Too high risk = no previous expertise or publications on topic
 - Too low risk = all your previous publications are on the topic
- I included preliminary (unpublished) data.
- Structure proposal:
 - B1: innovation and impact, CV and achievements track record most important sections)
 - B2: state-of-the-art, methodology (preliminary work, only scientific WPs), resources (budget)
- Most challenging part of interview: keeping nerves under control, little space to move in small room, blank stares from panel during 10 min presentation, unexpected general questions, over before you realize it.

Short break
See you back in 10 minutes!

ERC starting grant

casestudy

Nele Vandersickel

My long-term vision

- Integrate clinical and fundamental research
- Create novel diagnostic tools based on fundamental knowledge
- Form bridge between researchers with complementary expertise

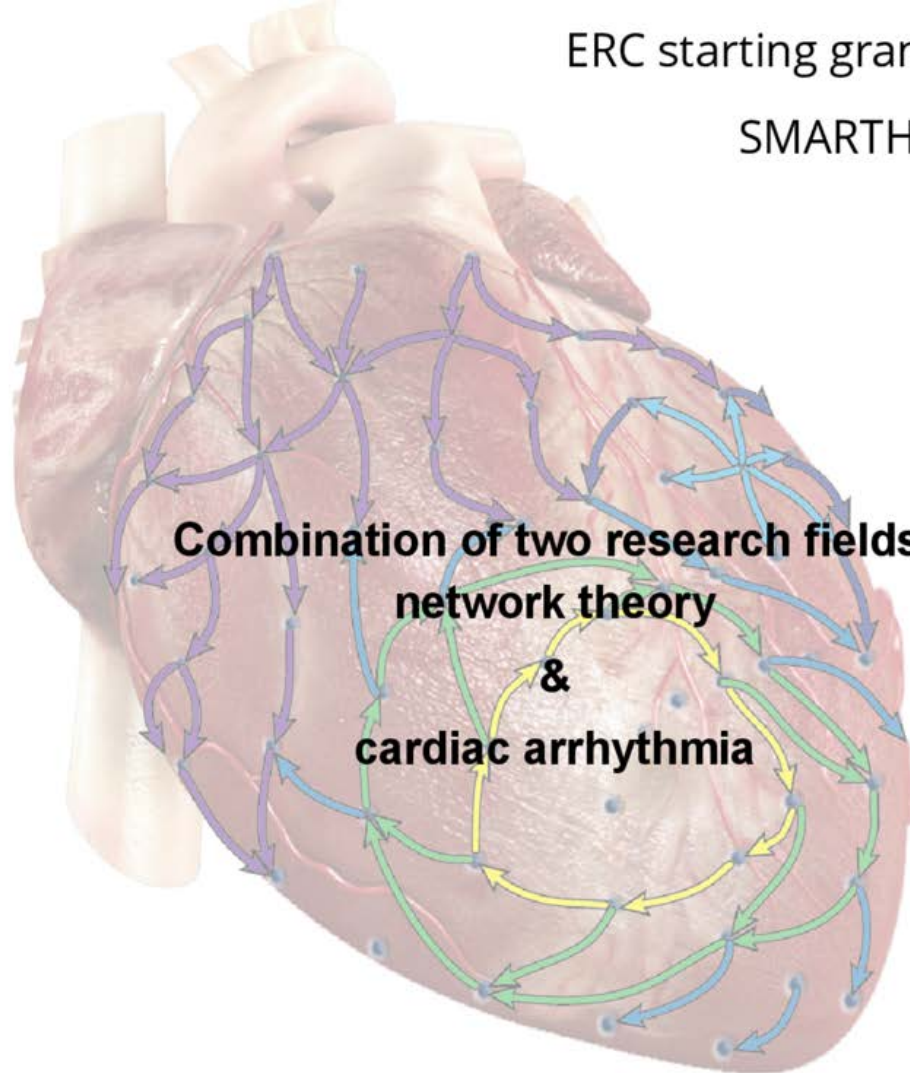


I want to link basic research with clinical research to actually improve the health of patients.

Experience in all three areas!

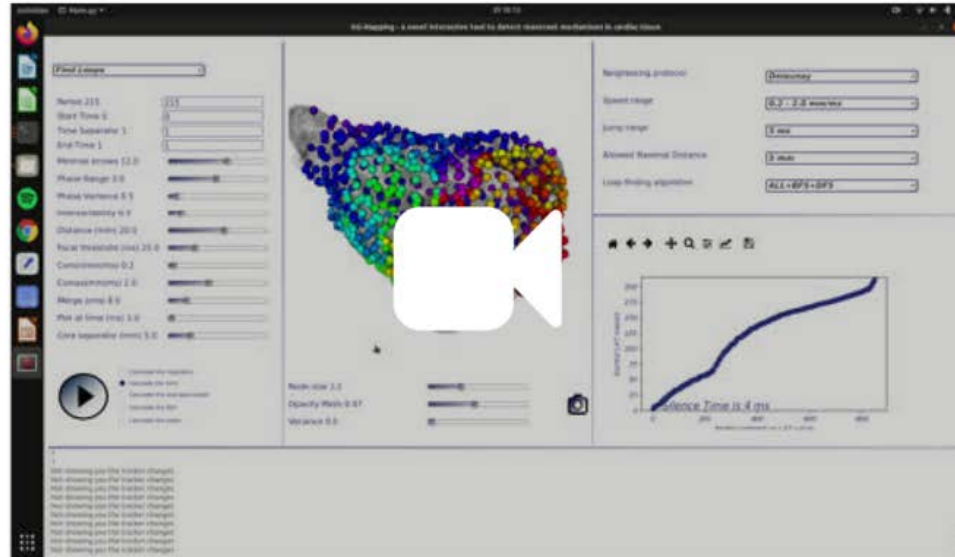
ERC starting grant: 2020

SMARTHEART



**Combination of two research fields:
network theory
&
cardiac arrhythmia**

Created a new diagnostic tool to determine **automatically** the source and location of cardiac arrhythmia based on network theory



Research proposal:

- Past the state of art: bring something new
- Yet already demonstrate the proof of principle:
however not too much \leftrightarrow incremental research
- Think about interdisciplinary projects (usually people really like that). Make sure you have expertise for both fields
- Speak to your audience: E.g. clinical audience? make proposal clinical and not too complicated specifically in B1
- Make proposal one unity
- Read the evaluation criteria!
- High/Risk high gain
- Important subject
- Name many plans B in case plan A does not work

Own excellence

- I switched research field: was able to be successful in both of them
- Write small biography to demonstrate what you did so far (e.g. I have a very strange CV)
- Show scientific independence: publish as last author!
- Demonstrated the ability to conduct ground-breaking research
- Required scientific expertise and capacity to successfully execute the project

General comments

- Start in time: it took me 7 month to write 1st proposal
- 1 month to redo proposal
- Reuse your proposal in case you do not obtain ERC for other applications (e.g. B1 fits in research proposal to become professor)
- I used my proposal to write many papers already.

IDED – Inheritance, Demographics, and Economic Development

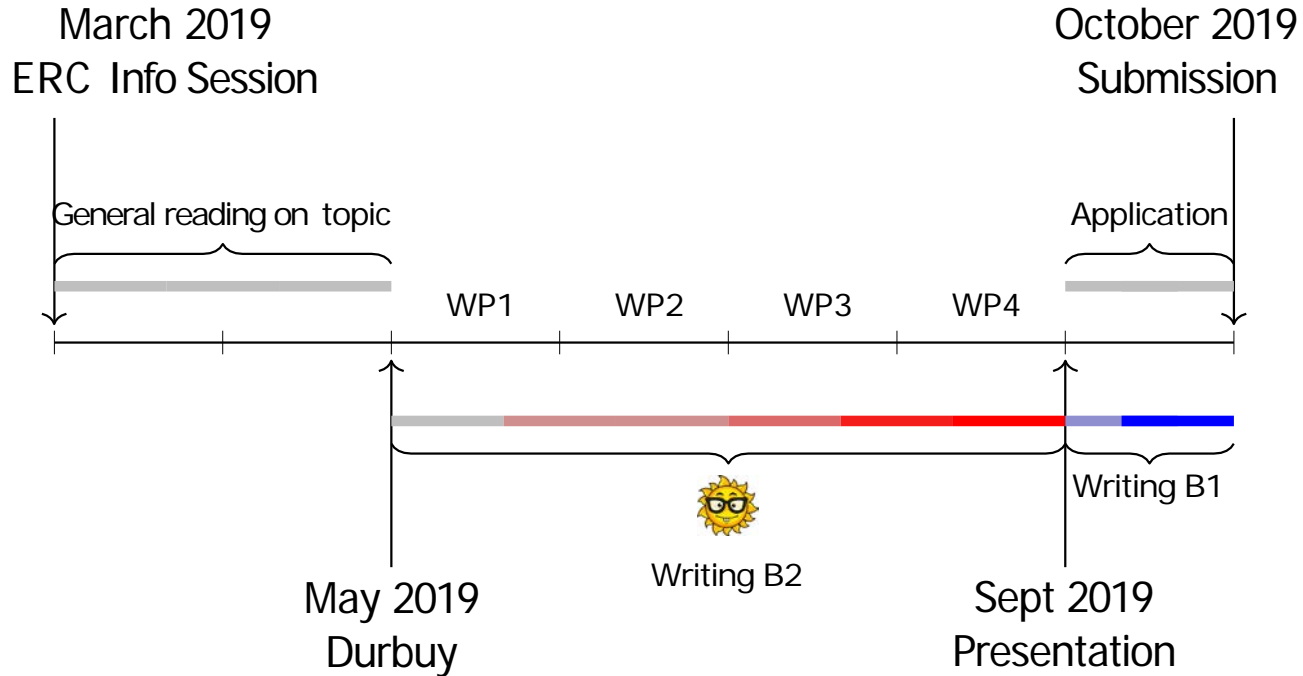
Paula E. Gobbi

Université libre de Bruxelles (ECARES) and CEPR

Who am I?

- Born in Buenos Aires (1985), Italian, and Belgian.
- PhD in economics from UCLouvain in 2013 with a visit at Northwestern University.
- 3 years postdoc at UCLouvain (FNRS), 1 year postdoc at the Paris School of Economics (ERC funded)
- Assistant Professor at ECARES, Université libre de Bruxelles since September 2017
- Mother of Elena (4yrs), Nicolas (2yrs), and Clara (4months).

Application experience



Tips

1. Start from a (big) gap in the literature.
2. Have your project read:
 - B2: ask to possible co-authors and experts
 - B1: ask to seniors
3. Talk about your project and present it internally some time before submitting.
4. Enjoy doing it. Take 3-4 months focused only on it.

Filling a gap

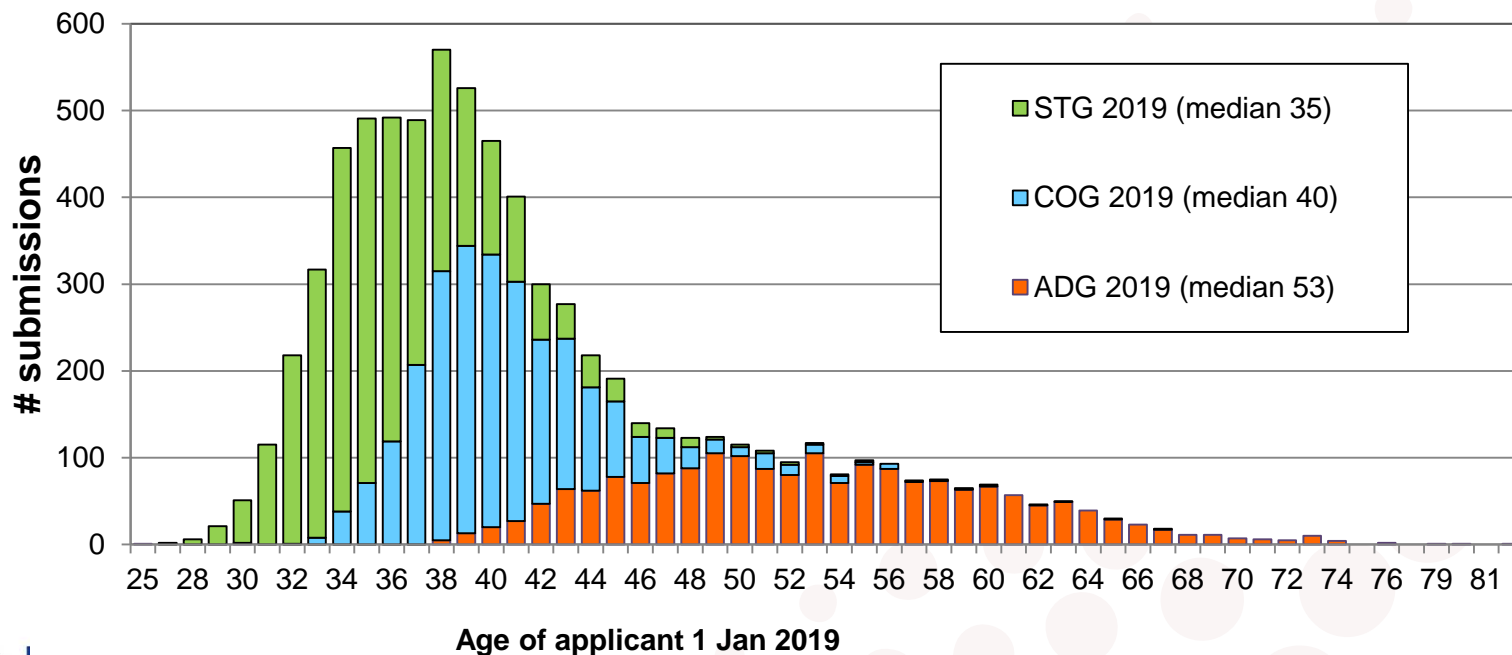
- ▶ Economists study *inheritances* and *demographics* in isolation.
 - ▶ ≠ other social scientists.
 - ▶ Examples:
 - ▶ partible inheritance ↔ nuclear families
 - ▶ impartible inheritance ↔ stem-family types
- ▶ General objective of the project:
 - Understand how the interconnections between inheritance schemes and demographics affect economic development.

Part III

OUTCOME

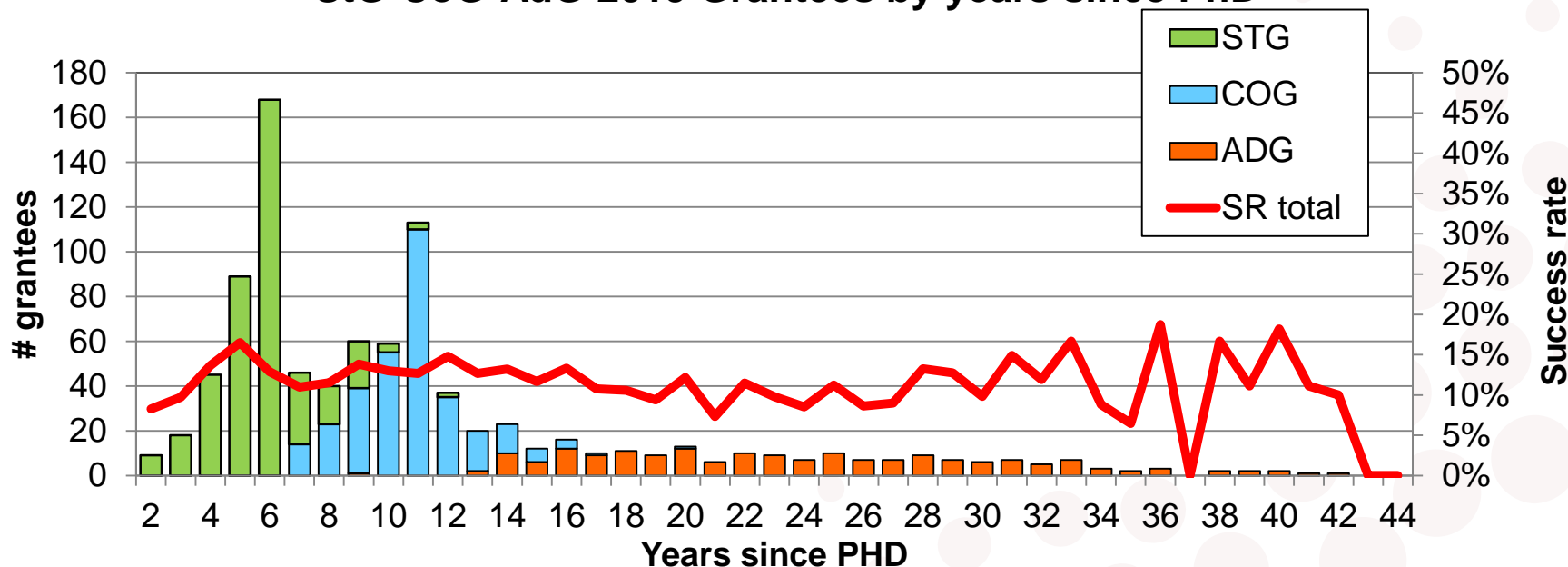
Applicants by age

StG-CoG-AdG 2019 Age of applicants



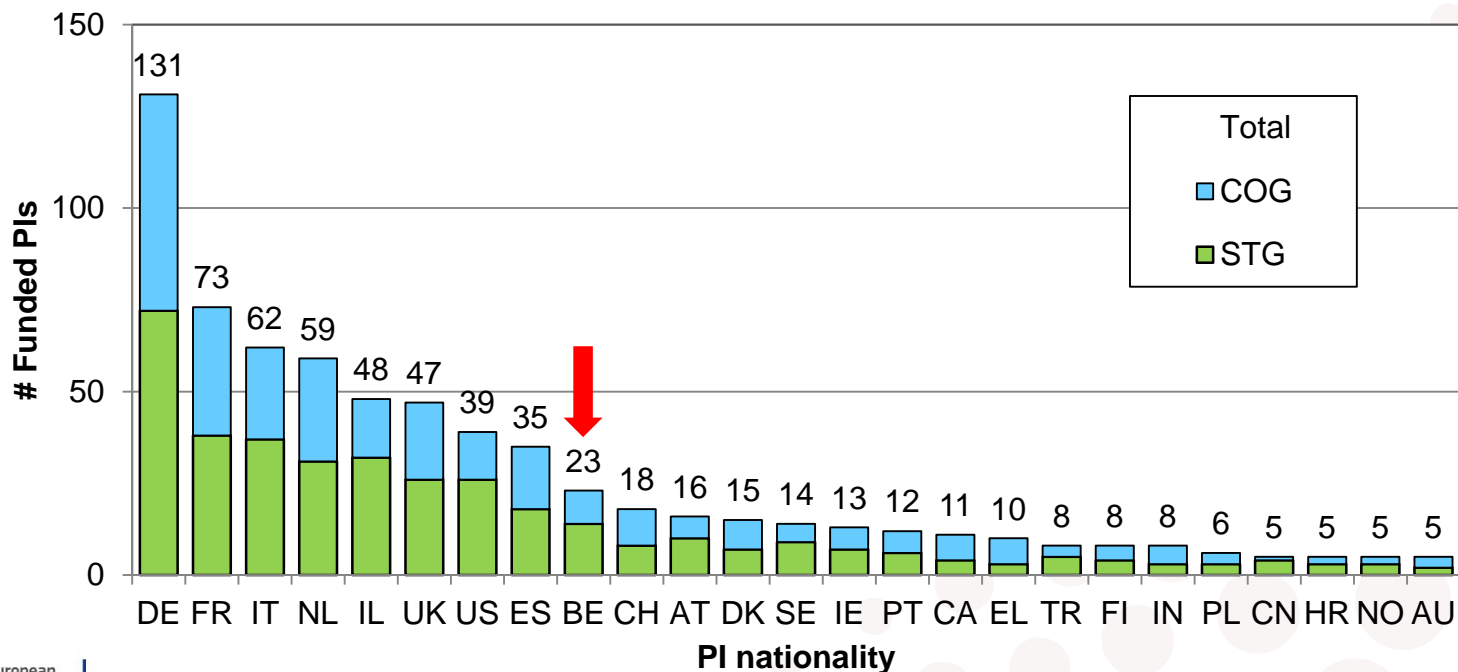
Success rate by (academic) age

StG-CoG-AdG 2019 Grantees by years since PhD



Success rate by PI nationality

StG-CoG 2019 Funded PIs by nationality

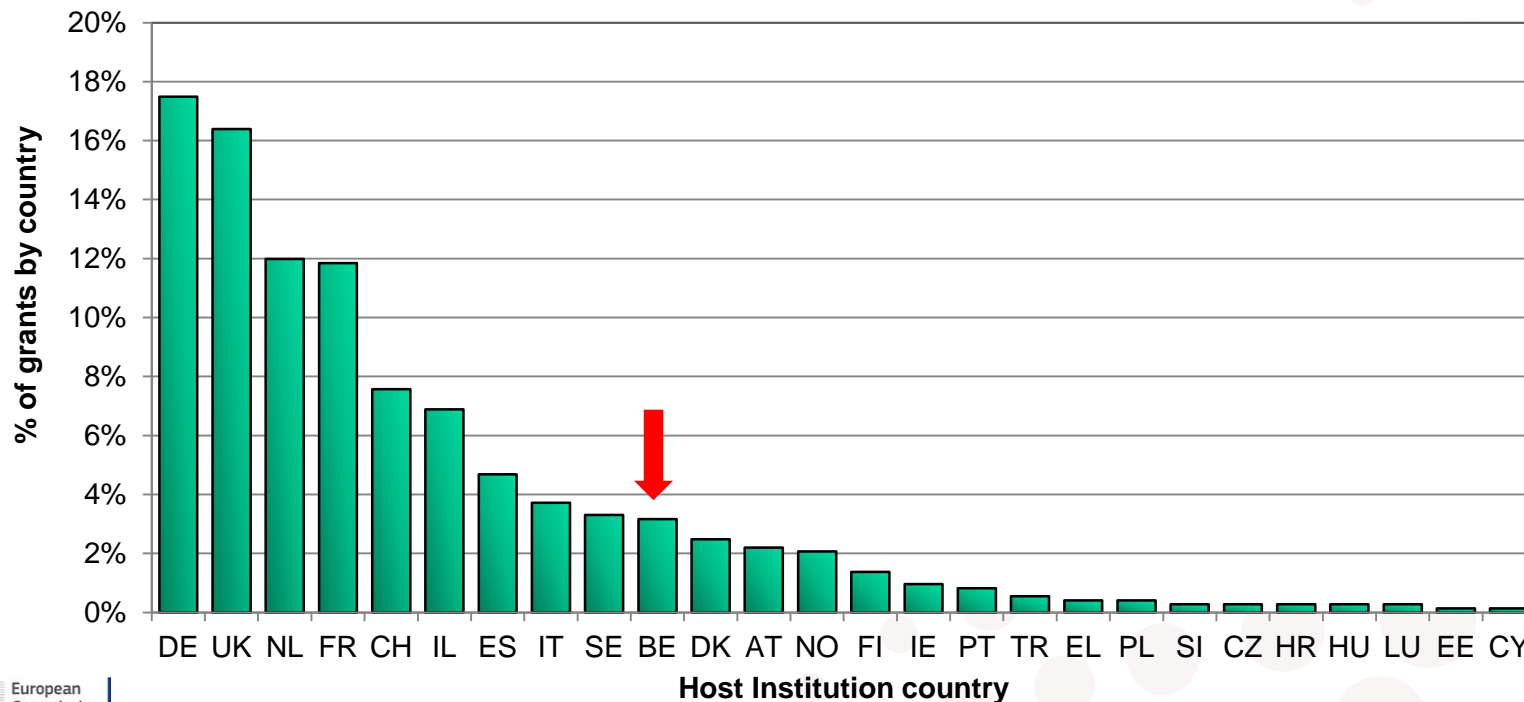


Success rate by HI country



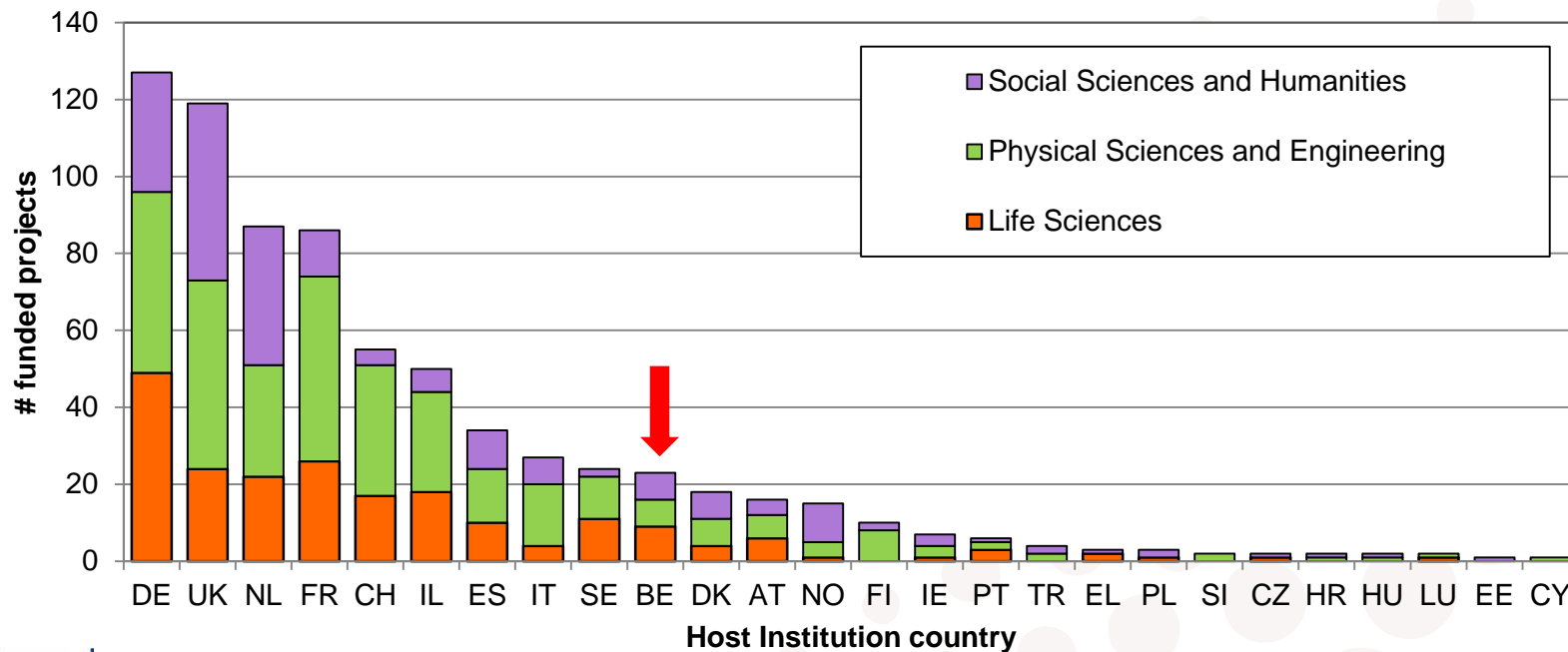
European Research Council
Established by the European Commission

StG-CoG 2019 % of grants by country



Success rate by HI country & by Domain

StG-CoG 2019 Funded projects by domain

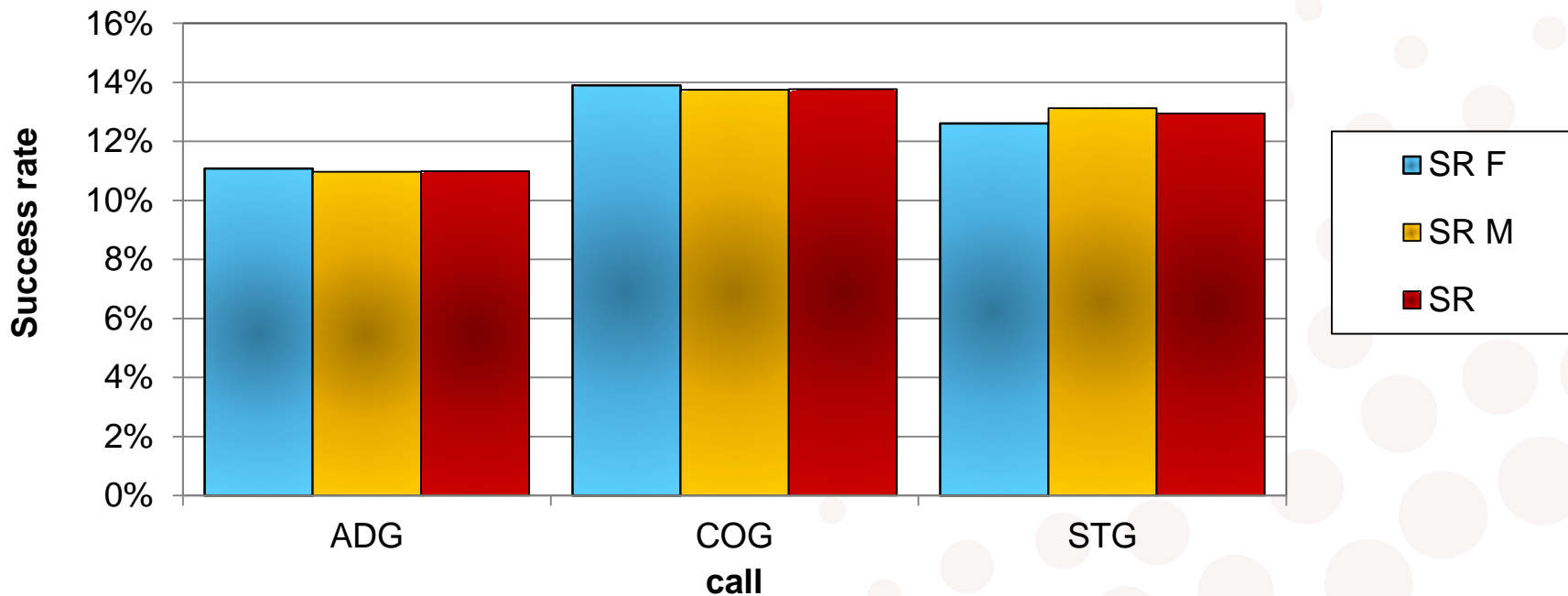


Gender balance & Success rate



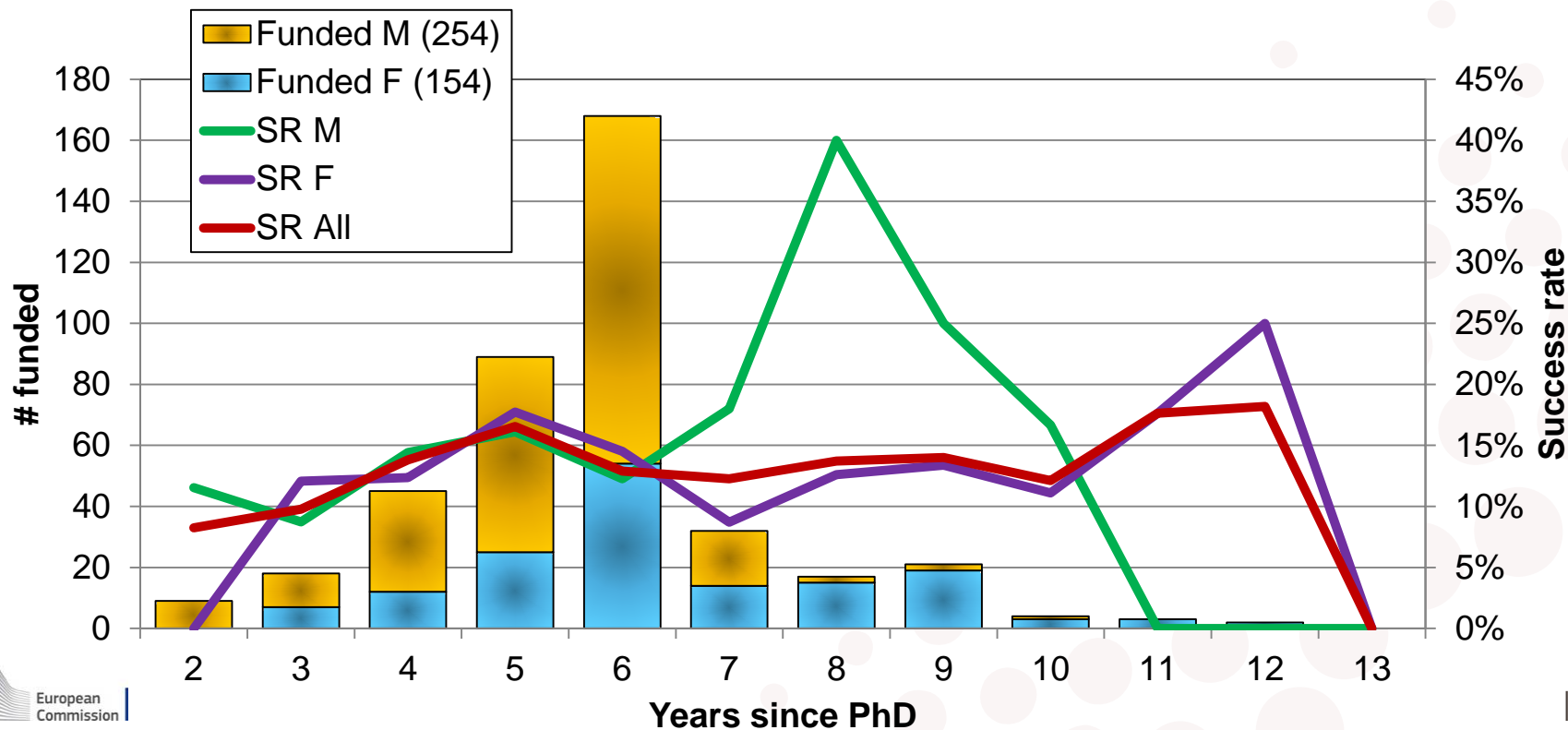
European Research Council
Established by the European Commission

H2020 ERC 2014-2019 Success rate by gender

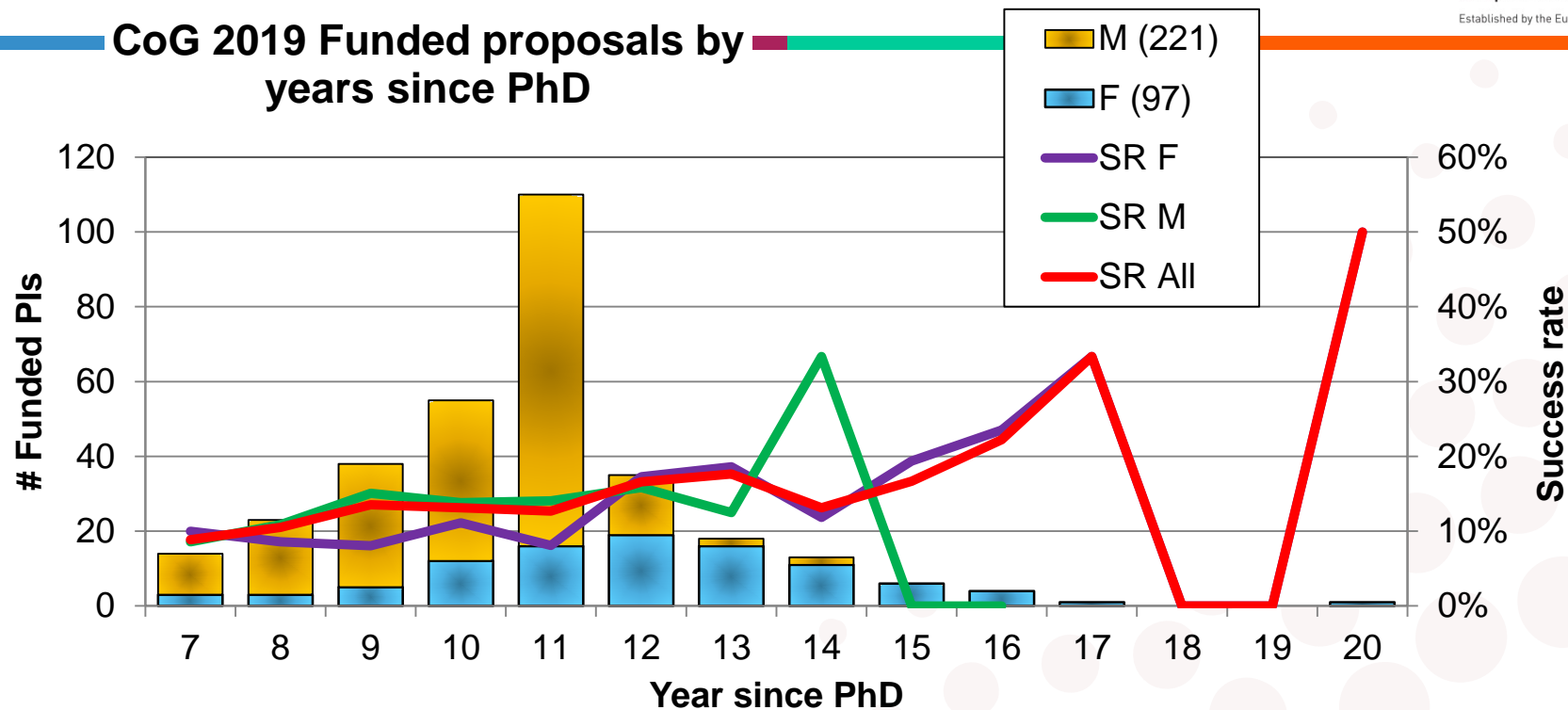


StG 2019: Success Rate & Gender balance

StG 2019 funded proposals & success rate by years since PhD



CoG 2019: Success Rate & Gender balance



Some other data



European Research Council
Established by the European Commission

Scientific Council: 60% of annual calls budget to StG & CoG

Average success rate in 2019 for StG & CoG: 13%

15%-20% of applications requests extra funding in LS & PE, 3% for SH

Re-submissions have 1.5 times more success than new applications

Thank you & Good Luck !

Thank you for your participation!

Please give us your feedback through the evaluation form

Good luck with your application

*Bram Lefever, NCP ERC, BELSPO (EUROFED)
Margot Beereboom, NCP ERC, NCP Flanders
Natacha Wittorski, NCP ERC, NCP-FNRS*

Support services for applicants

Contact your ELO : Flemish academia and research centers

KU LEUVEN

Iesel Van der Plancken

Research Coordination Office KU Leuven

tel +32-16-320-446, EU-info@kuleuven.be



Lieve Huys, Nathalie Vandepitte, Pieter-Jan Hutsebaut

EU team Ghent University

tel +32-9-264-3029, eu-team@ugent.be



Kristof Geeraerts, Liesbet Cockx, Bruno Hoste, Frederik Verleysen,
Grants Office University of Antwerp

tel +32-3-265-3193, research@uantwerpen.be



Stien Mommaerts, Cristina Macovei, ELO, R&D VUB

tel +32-2-629-2213/2154, elo@vub.be



Jeroen Gillabel, Research Coordination Office UHasselt

tel +32-11-268-042, EUresearch@uhasselt.be

Support services for applicants

Contact your ELO : Flemish academia and research centers



Jan Meneve, Research Office
tel +32-14-335-669, EU-liaison@vito.be /
jan.meneve@vito.be



Anne Van den Bosch, Director Public R&D Policies & Programs
tel +32-16-281-682, Anne.VandenBosch@imec.be



Lieve Ongena, Sr Science Policy and International Grants
office manager, Elien Vandermarliere, International Grants
Officer
tel +32-9-244-6611, grantsoffice@vib.be



Saskia Decuypere, Ann Verlinden, Research Office
tel +32-3-247-6686, research@itg.be



Ger van den Kerkhof, ELO
tel +32 497 438 247 / + 3211 790 560
ger.vandenkerkhof@flandersmake.be

Support services for applicants

Contact persons in FWB universities



Eléonore Couder, ADRE/RINT

tel +32 10 4 74992, eleonore.couder@uclouvain.be



Ophélie Ladrière, ARD

tel +32 4 366 5637, oladriere@uliege.be



Emily Mainetti, Rachel Leproult

Département Recherche, Cellule Europe

tel +32 2 650 6718/3162/4288, ulb-europe@ulb.ac.be



Christelle Saout, ADRE

tel +32 81 72 5047, christelle.saout@unamur.ac.be



Barbara Marchi, AVRE

tel +32 65 37 4776, barbara.marchi@umons.ac.be



Nathalie Schellens, SAR

tel + 32 2 211 79 99, nathalie.schellens@usaintlouis.be

Support services for applicants

National Contact Points (NCPs)

NCP FLANDERS

Flemish academia and research centers :

Margot Beereboom, NCP ERC

tel +32-2-550-1576, ncp_fwo@fwo.be

Website : [www.fwo.be/NationalContactPoint.aspx /](http://www.fwo.be/NationalContactPoint.aspx/)
www.ncpflanders.be



Wallonia Brussels Federation:

Natacha Wittorski, NCP ERC

tel +32-2-504-9309, natacha.wittorski@frs-fnrs.be

Website : www.ncp.fnrs.be

Belgian Science Policy Office



Federal institutions :

Bram Lefever, NCP ERC

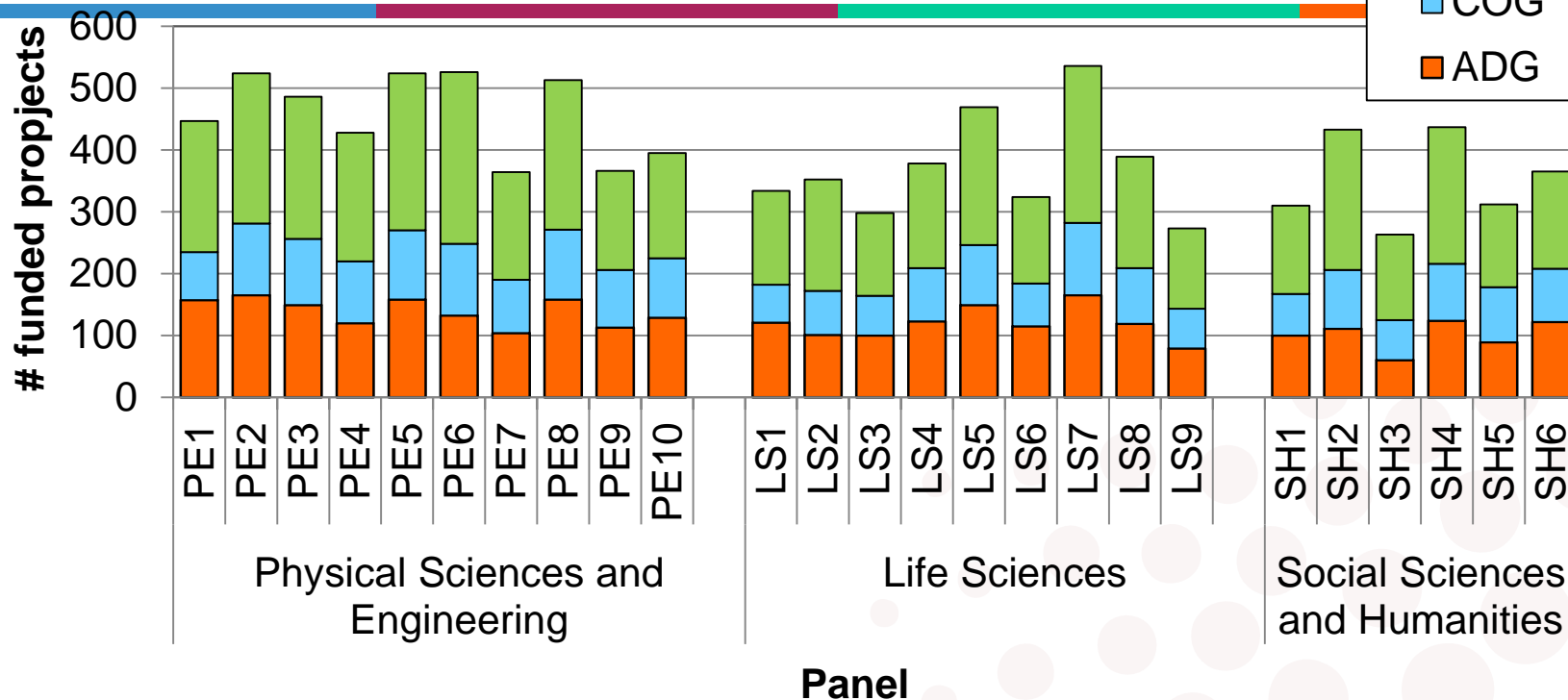
tel +32-2-238-3752, Bram.Lefever@belspo.be

Website : <http://eurofed.belspo.be>

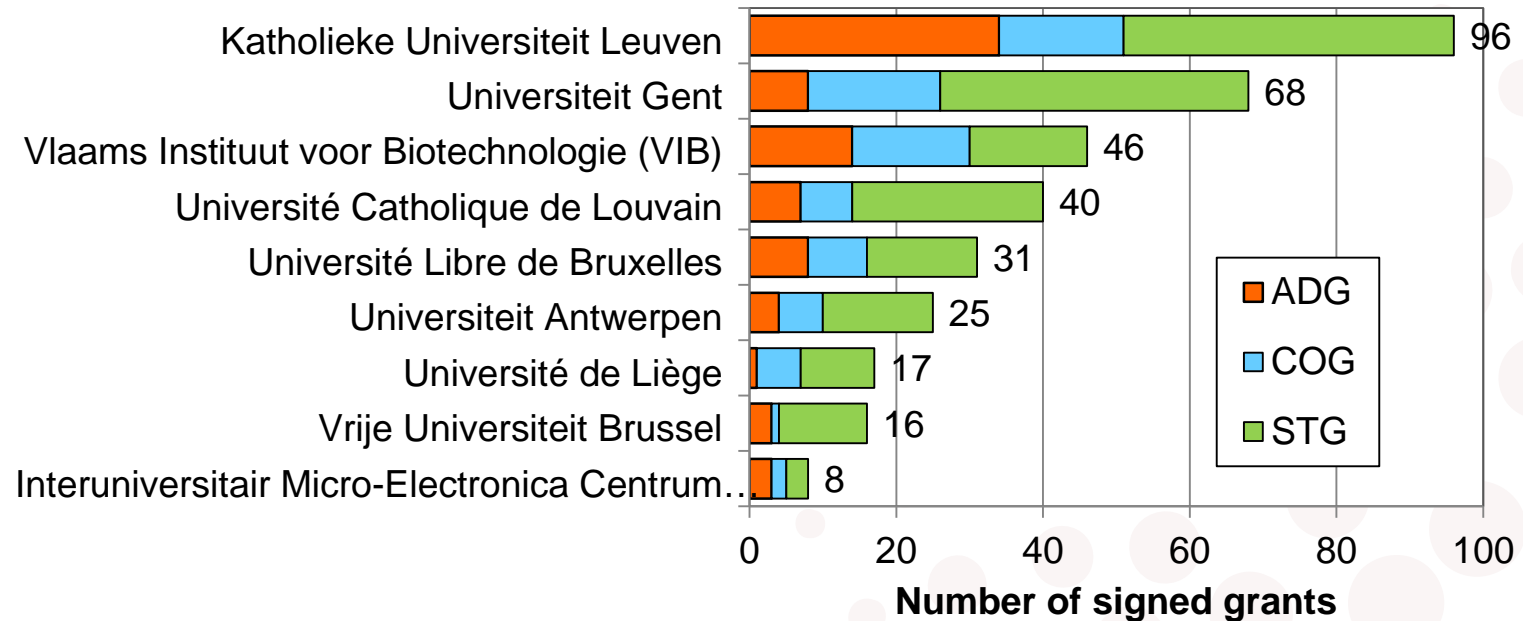
Back-up slides

Signed Project Distribution per panel

ERC 2007-2020 Signed projects by panel



ERC StG-CoG-AdG Signed grants 2007-2020



Overview Data for the 2019 calls



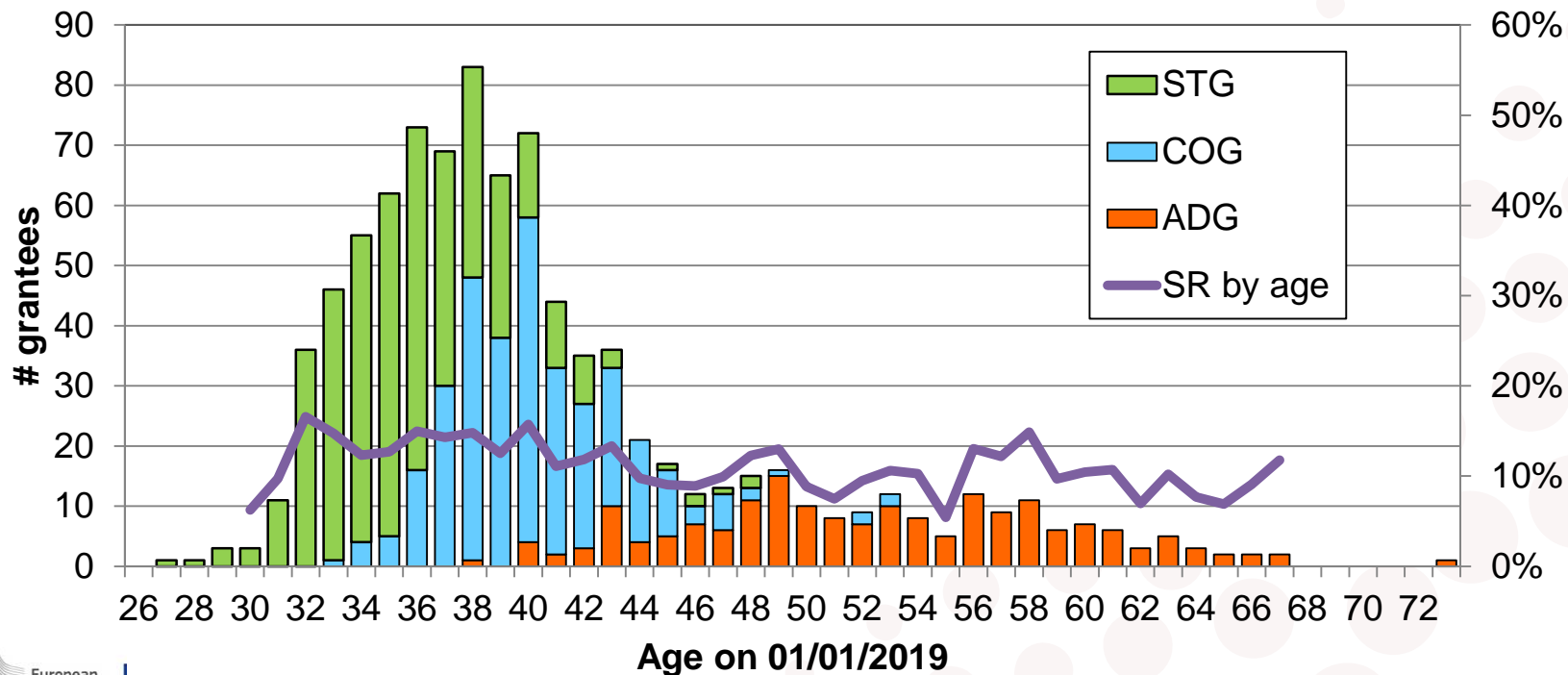
European Research Council
financed by the European Commission

2019	StG	CoG	AdG	SyG	Total
# Evaluated	3060	2425	1836	285	7606
Change from 2018	-2%	+2%	-9%	-1%	-2%
# Grants	408	318	185	38	949
Success rate	13%	13%	10%	13%	12%
Amount awarded EU (M€)	620	636	451	374	2081
Female participation	38%	32%	19%	23%	30%
Avg. size grants (M€)	1.52	2.00	2.43	9.8	
% of total spending	30%	30%	22%	18%	
Median age Grantee	35	40	52	51	

60%

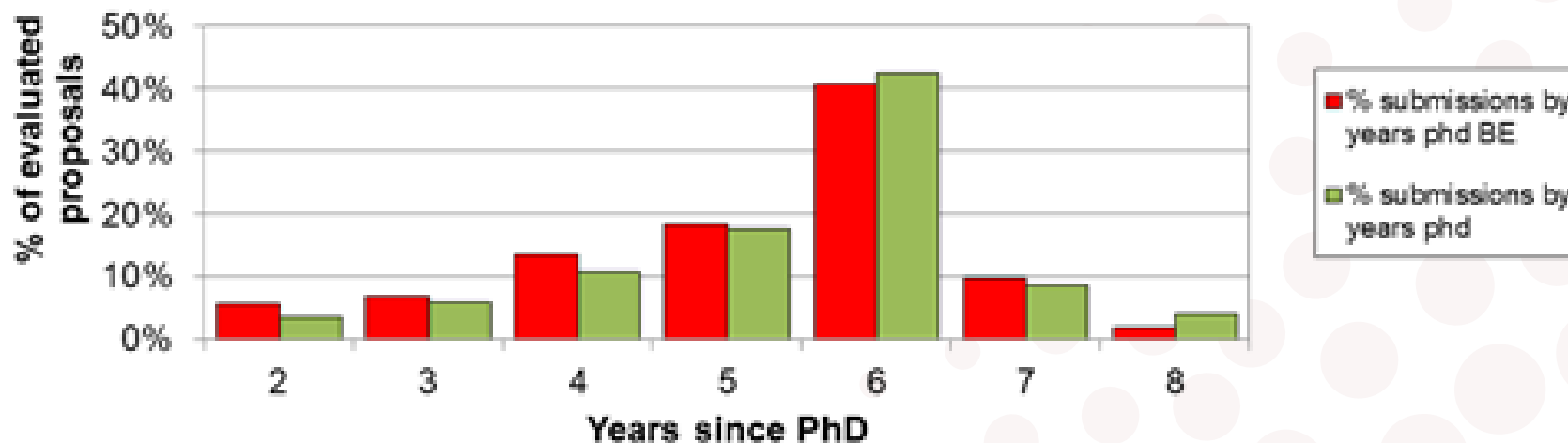
Success rate by age

StG-CoG-AdG 2019 Grantees by age with success rate



Evaluation rate as function of PhD years

STG 2019 Evaluated proposals by years since PhD



Eligible HI countries under H2020

EU Member States

AT Austria
BE Belgium
BG Bulgaria
CY Cyprus
CZ Czech Republic
DE Germany
DK Denmark
EE Estonia
EL Greece
ES Spain
FI Finland
FR France
HR Croatia
HU Hungary
IE Ireland
IT Italy
LT Lithuania
LU Luxembourg
LV Latvia
MT Malta
NL Netherlands
PL Poland
PT Portugal
RO Romania
SE Sweden
SI Slovenia
SK Slovakia

UK United Kingdom

H2020 Associated Countries

AL Albania
AM Armenia
BA Bosnia and Herzegovina
CH Switzerland
IL Israel
IS Iceland
FO Faroe Islands
GE Georgia
MD Moldova
ME Montenegro
MK FYR of Macedonia
NO Norway
RS Serbia
TN Tunisia
TR Turkey
UA Ukraine

UK?

Other Countries

CN China
RU Russia
US United States

UK?