

El proceso de evaluación

Jornada informativa – ERC Advanced Grant.

Madrid, 24 de mayo de 2024



GOBIERNO
DE ESPAÑA

MINISTERIO
DE CIENCIA, INNOVACIÓN
Y UNIVERSIDADES



oficina
europea

Excellence is the sole criterion on the basis of which ERC frontier research grants are awarded



- The ground-breaking nature, ambition, and feasibility of the **research project**.
- The intellectual capacity, creativity, and commitment of the **Principal Investigator(s)**, with a focus on the extent to which the Principal Investigator(s) has the required scientific expertise and capacity to successfully execute the project.

Research Project - Ground-breaking nature, ambition and feasibility

Ground-breaking nature and potential impact of the research project

- To what extent does the proposed research address **important challenges**?
- To what extent are the **objectives ambitious and beyond the state of the art**?

Scientific Approach

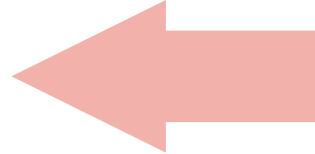
- To what extent is the outlined scientific approach **feasible** bearing in mind the ground-breaking nature and ambition of the proposed research (*based on the Extended Synopsis*)?
- To what extent are the proposed **research methodology and working arrangements** appropriate to achieve the goals of the project (*based on the research proposal*)?
- To what extent are the proposed **timescales, resources and PI commitment** adequate and properly justified (*based on the research proposal*)?

Principal Investigator - Intellectual capacity and creativity

- has the PI demonstrated the **ability to conduct ground-breaking research**?
- does the PI provide evidence of **creative and original thinking**?
- does the PI have the required **scientific expertise and capacity to successfully execute** the project?

A competitive Advanced Grant Principal Investigator is expected to be...

An active and established research leader with a track record of significant research achievements



Principal Investigators:

- list of achievements reflecting their track record.
- A short narrative describing scientific importance and the role played by the PI.

The peer review panels:

- unconventional research career paths
- particularly noteworthy contributions
- possible career breaks
- major life events

Proposal Structure

The ERC full proposal = part B1 + part B2 + Part A*

Part B1 - pdf

Cover Page and summary (1p)

Extended Synopsis (5p)

Curriculum vitae +
Track-record (4p)

*Evaluated in Step
1*

Part B2 - pdf

(14p)

SoA & objectives

Methodology

*NOT evaluated in Step
1 (only in Step 2)*

Part A – online forms

A1 General Information

A2 Participants

A3 Budget: table + description (10.000c)

A4 Ethics and security

A5 Other questions

% Time commitment

Excluded Reviewers (up to 3)

Annexes

HI support letter

PhD certificate

Ethics and security issues

Template Eligibility Extension

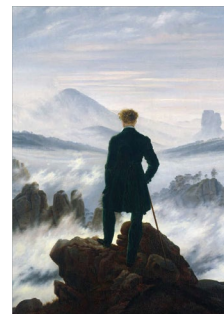
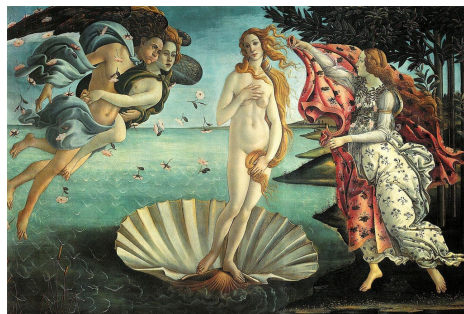
Equipment Table

- **One deadline**
- **2 steps evaluation process**

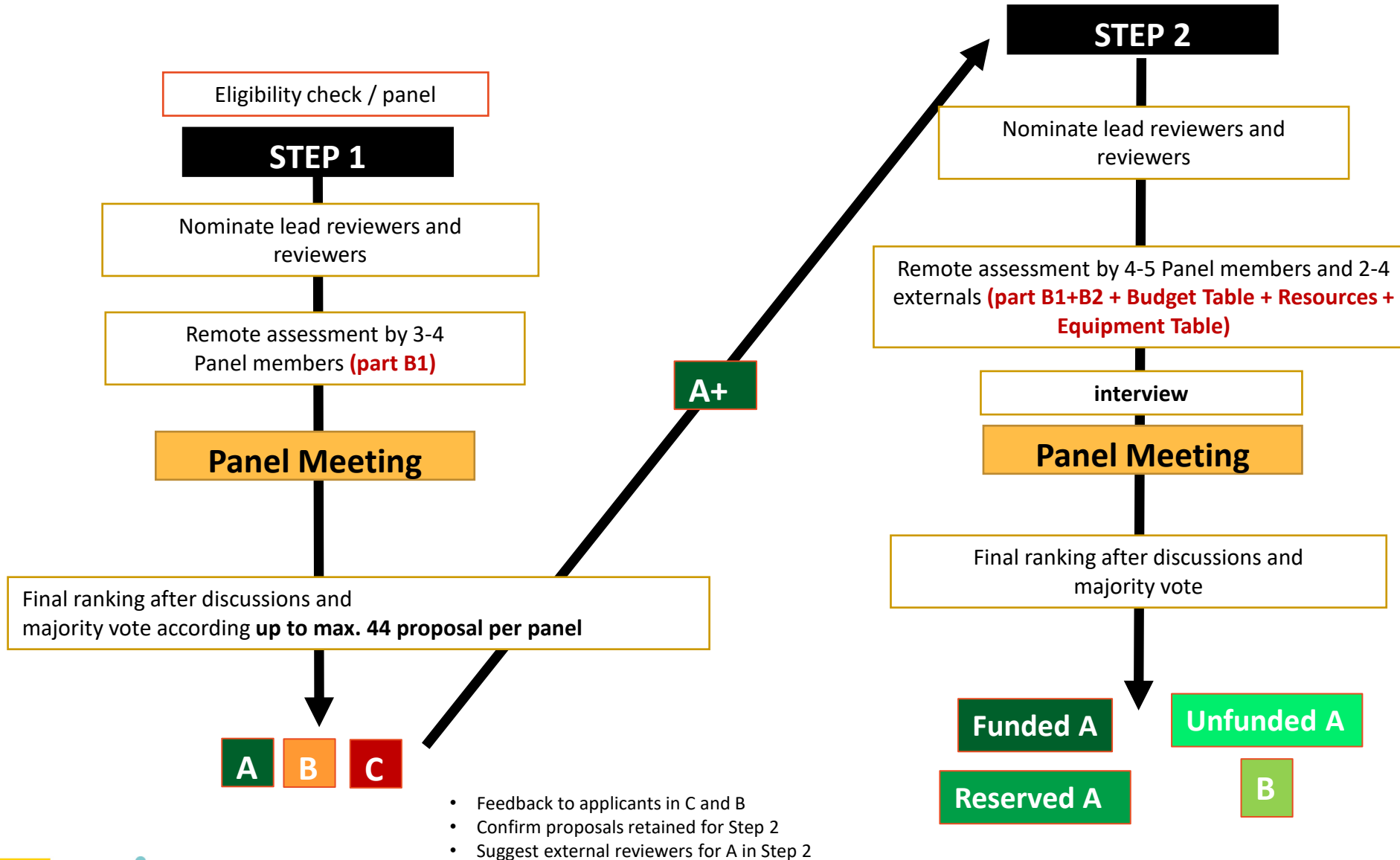
The ERC proposal



- ✓ Important challenges
- ✓ Ambitious objectives, beyond SoA (novel concept and approach or development between or across disciplines)
- ✓ Feasibility of outlined scientific approach
- ✓ Appropriate methodology and working arrangements to achieve the goals
- ✓ Timescales, resources and PI commitment



ERC 2024 Evaluation process - Individual Grants



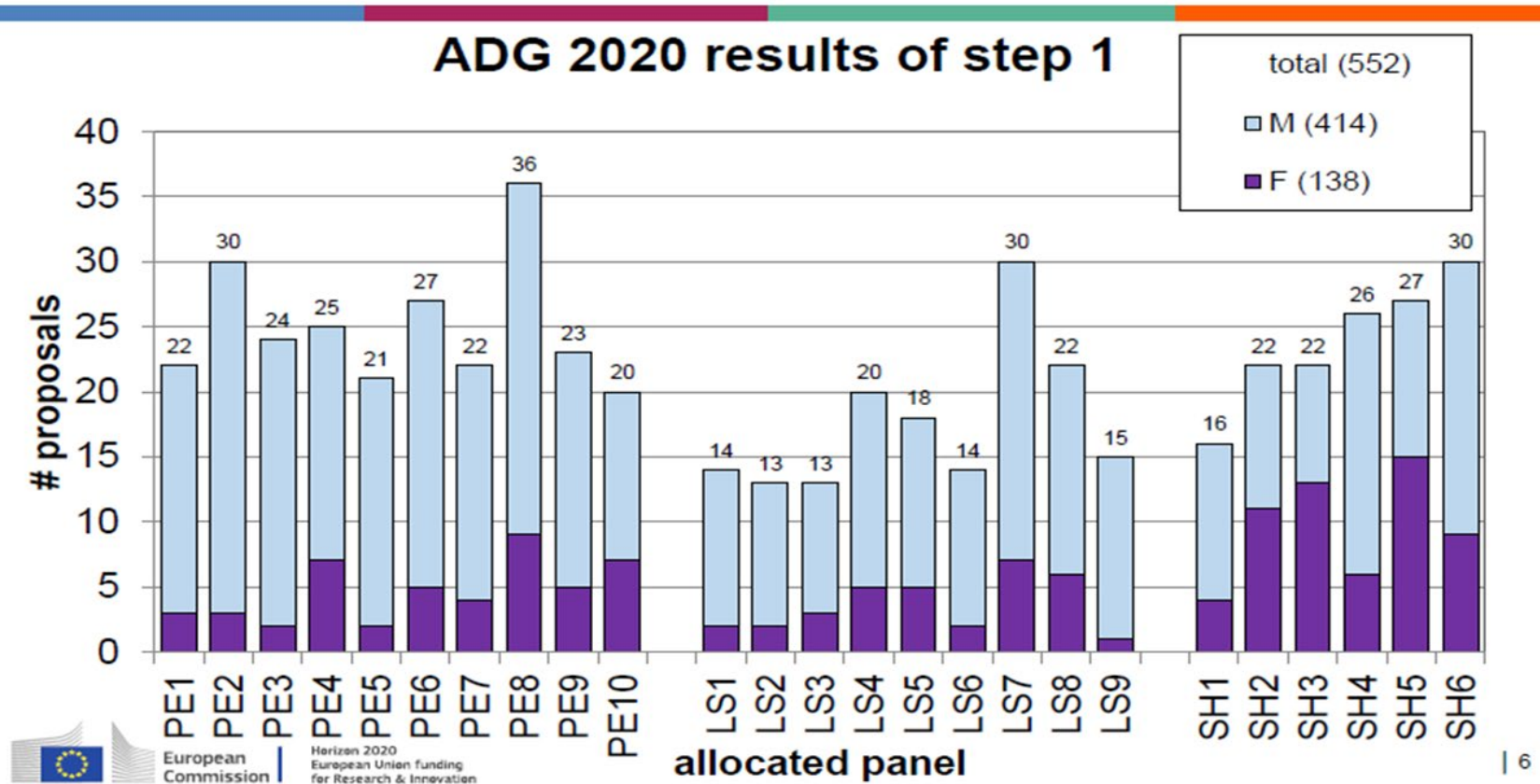
Ethics assessment

¿Cómo afectará la limitación de las 44 propuestas?

ADG 2020 Results of Step 1 By panel and gender



European Research Council
Established by the European Commission



Evaluation panels

The peer review is carried out by 28 evaluation panels (ERC panels), covering all fields of science, engineering and scholarship

**Physical Sciences
and Engineering (PE)**

11 paneles

Life Sciences (LS)

9 paneles

**Social Sciences and
Humanities (SH)**

8 paneles

When you submit, you need to indicate:

Primary ERC Review Panel : which will in principle evaluate the proposal

Secondary ERC Review Panel: *if applicable*

Please select, if applicable, the ERC keyword(s) that best characterise the subject of your proposal in order of priority.

ERC Keyword 1: As first keyword, choose one which is linked to the Primary Review Panel.

ERC Keyword 2-4: *if applicable, from any panel*

Free keywords: FREE text, they guide (but do not determine) the allocation of proposals to reviewers

Evaluation: Panel Structure

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 Processes Engineering
- PE9 Universe Sciences
- PE10 Earth System Science
- PE11 Materials Engineering

PE7 Systems and Communication Engineering

Electrical, electronic, communication, optical and systems engineering

PE7_1 Control engineering

PE7_2 Electrical engineering: power components and/or systems

PE7_3 Simulation engineering and modelling

PE7_4 (Micro- and nano-) systems engineering

PE7_5 (Micro- and nano-) electronic, optoelectronic and photonic components

PE7_6 Communication systems, wireless technology, high-frequency technology

PE7_7 Signal processing

PE7_8 Networks, e.g. communication networks and nodes, Internet of Things, sensor networks, networks of robots

PE7_9 Man-machine interfaces

PE7_10 Robotics

PE7_11 Components and systems for applications (in e.g. medicine, biology, environment)

PE7_12 Electrical energy production, distribution, applications

Evaluation: Panel Structure

Life Sciences

- LS1 Molecules of Life: Biological Mechanisms, Structures and Functions
- LS2 Integrative Biology: From Genes and Genomes to Systems
- LS3 Cell Biology, Development, Stem Cells and Regeneration
- 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

LS6 Immunity, Infection and Immunotherapy

The immune system, related disorders and their mechanisms, biology of infectious agents and infection, biological basis of prevention and treatment of infectious diseases, innovative immunological tools and approaches, including therapies

LS6_1 Innate immunity

LS6_2 Adaptive immunity

LS6_3 Regulation of the immune response

LS6_4 Immune-related diseases

LS6_5 Biology of pathogens (e.g. bacteria, viruses, parasites, fungi)

LS6_6 Infectious diseases

LS6_7 Mechanisms of infection

LS6_8 Biological basis of prevention and treatment of infection

LS6_9 Antimicrobials, antimicrobial resistance

LS6_10 Vaccine development

LS6_11 Innovative immunological tools and approaches, including therapies

Evaluation: Panel Structure

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
- SH8 Studies of Cultures and Arts

SH8 Studies of Cultures and Arts

Social anthropology, studies of cultures, studies of arts

SH8_1 Kinship; diversity and identities, gender, interethnic relations

SH8_2 Religious studies, ritual; symbolic representation

SH8_3 Cultural studies and theory, cultural identities and memories, cultural heritage

SH8_4 Museums, exhibitions, conservation and restoration

SH8_5 History of art and of architecture

SH8_6 Architecture, design, craft, creative industries

SH8_7 Music and musicology; history of music

SH8_8 Visual and performing arts, screen, arts-based research

SH8_9 Digital approaches to anthropology, cultural studies and art

Panel Members

Each of the 28 panels is composed by 12-18 panel members.

More than 450 panel members per call and year!

The panel chair is known during the evaluation however the composition is made public once the results are published.

The full list of **panel members** and **remote referees** will be published once the call is resolved.

A panel may not include an expert in your discipline , they are semi-generalists , **but!** ERC can establish collaborations between panels...

The members of ERC panels alternate to allow panel members to apply to the ERC calls in alternate years.

ERC-2024-Consolidator Grant. Panel Chairs Life Science

- **LS1** Prof. Bert Poolman
- **LS2** Prof. Magnus Nordborg
- **LS3** Prof. Florian Greten
- **LS4** Prof. James Woodgett
- **LS5** Prof. Michael Brecht
- **LS6** Prof. Jacques Neefjes
- **LS7** Prof. Marianne Van der Sande
- **LS8** Prof. Arjen Biere
- **LS9** Prof. Anne Meyer

Panel Members

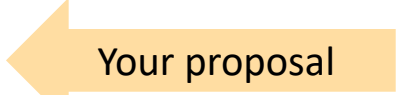
LS7 Prevention, Diagnosis and Treatment of Human Diseases

- LS7_1 Medical imaging for prevention, diagnosis and monitoring of diseases
- LS7_2 Medical technologies and tools (including genetic tools and biomarkers) for prevention, diagnosis, monitoring and treatment of diseases
- LS7_3 Nanomedicine
- LS7_4 Regenerative medicine
- LS7_5 Applied gene, cell and immune therapies
- LS7_6 Other medical therapeutic interventions, including transplantation
- LS7_7 Pharmacology and toxicology
- LS7_8 Effectiveness of interventions, including resistance to therapies
- LS7_9 Public health and epidemiology
- LS7_10 Preventative and prognostic medicine
- LS7_11 Environmental health, occupational medicine
- LS7_12 Health care, including care for the ageing population
- LS7_13 Palliative medicine
- LS7_14 Digital medicine, e-medicine, medical applications of artificial intelligence
- LS7_15 Medical ethics

Panel members in the ERC Starting Grant 2023 peer review, appointed by the ERC Scientific Council.

- Liesbet Geris (Panel Chair)
 - Janne Backman
 - Ari Barzilai
 - Maria Blanco-Prieto
 - Maria Blettner
 - Teun Bousema
 - Micha Drukker
 - Alejandro Frangi
 - Alessia Gimelli
 - Václav Hořejší
 - Jorgen Kjems
 - Ian Law
 - Evi Lianidou
 - Craig Morgan
 - Annette Paschen
 - Mickael Tanter
 - Martine Vrijheid
 - Serena Zacchigna

LS7 Prevention, Diagnosis and Treatment of Human Diseases

- LS7_1 Medical imaging for prevention, diagnosis and monitoring of diseases
- LS7_2 Medical technologies and tools (including genetic tools and biomarkers) for prevention, diagnosis, monitoring and treatment of diseases
- **LS7_3 Nanomedicine**  Your proposal
- LS7_4 Regenerative medicine
- LS7_5 Applied gene, cell and immune therapies
- LS7_6 Other medical therapeutic interventions, including transplantation
- LS7_7 Pharmacology and toxicology
- LS7_8 Effectiveness of interventions, including resistance to therapies
- LS7_9 Public health and epidemiology
- LS7_10 Preventative and prognostic medicine
- LS7_11 Environmental health, occupational medicine
- LS7_12 Health care, including care for the ageing population
- LS7_13 Palliative medicine
- LS7_14 Digital medicine, e-medicine, medical applications of artificial intelligence
- LS7_15 Medical ethics

Liesbet Geris (Panel Chair)

Janne Backman

Ari Barzilai

Maria Blanco-Prieto

Lead reviewer

Maria Blettner

Teun Bousema

Micha Drukker

Reviewer

Alejandro Frangi

Alessia Gimelli

Václav Hořejší

Jorgen Kjems

Reviewer

Ian Law

Evi Lianidou

Craig Morgan

Annette Paschen

Reviewer

Mickael Tanter

Martine Vrijheid

Serena Zacchigna

External experts

The ERC independent external experts deliver individual reviews in a remote evaluation phase at Step 2, which constitute the starting point for the panels' discussion.

The ERC panels assess and score the proposals based on these individual reviews and on the panels' overall appreciation of the strengths and weaknesses of each proposal.

The ERC proposal



Extended Synopsis
Curriculum vitae + Track-record

Intrigue (part B1)



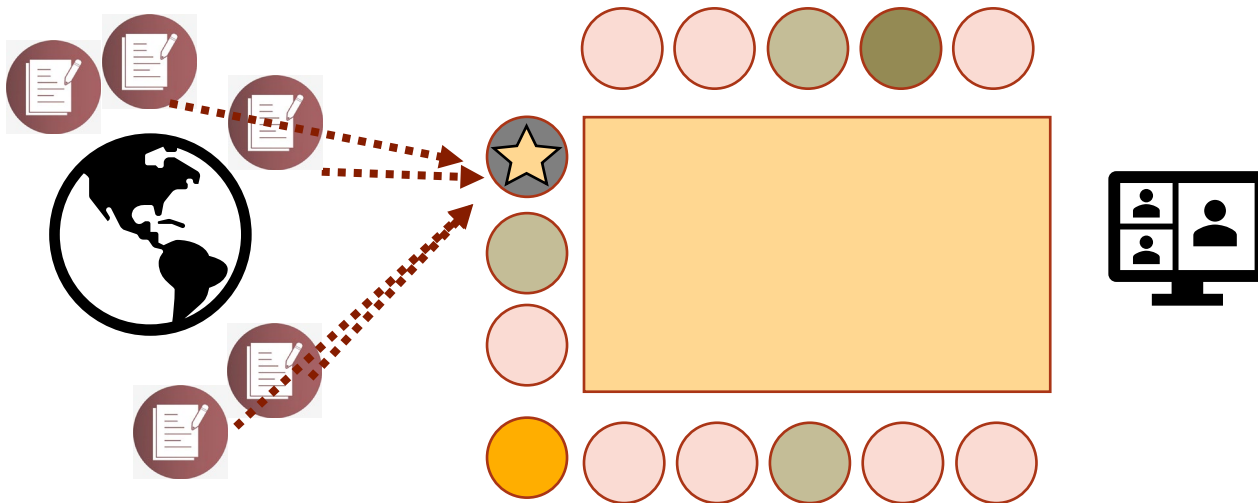
SoA & objectives
Methodology

Convince (part B2)

Inspire (Parts B1+B2+ interview)

Interview

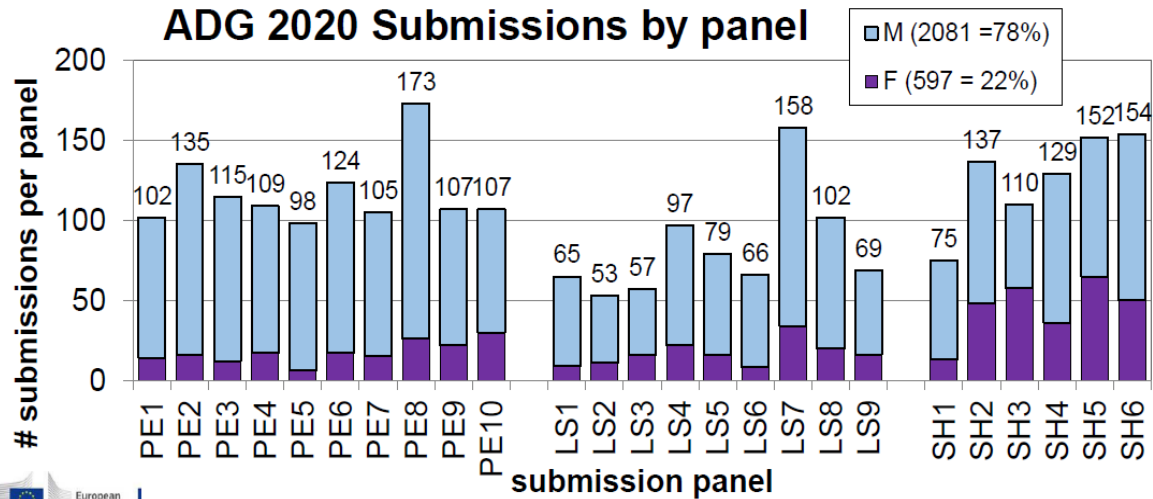
- The **first part** of the interview will consist of a presentation of the research project by the Principal Investigator.
- The **remaining time** will be devoted to a questions and answers session. **The PI may expect questions also related to the budget table, resources section and equipment table, including cost estimates,** which are part of the application.
- The evaluation panels will review the requested lump sum contribution on the basis of the budget of those proposals recommended for funding and, **if necessary, recommend adjustments.**



Good practice

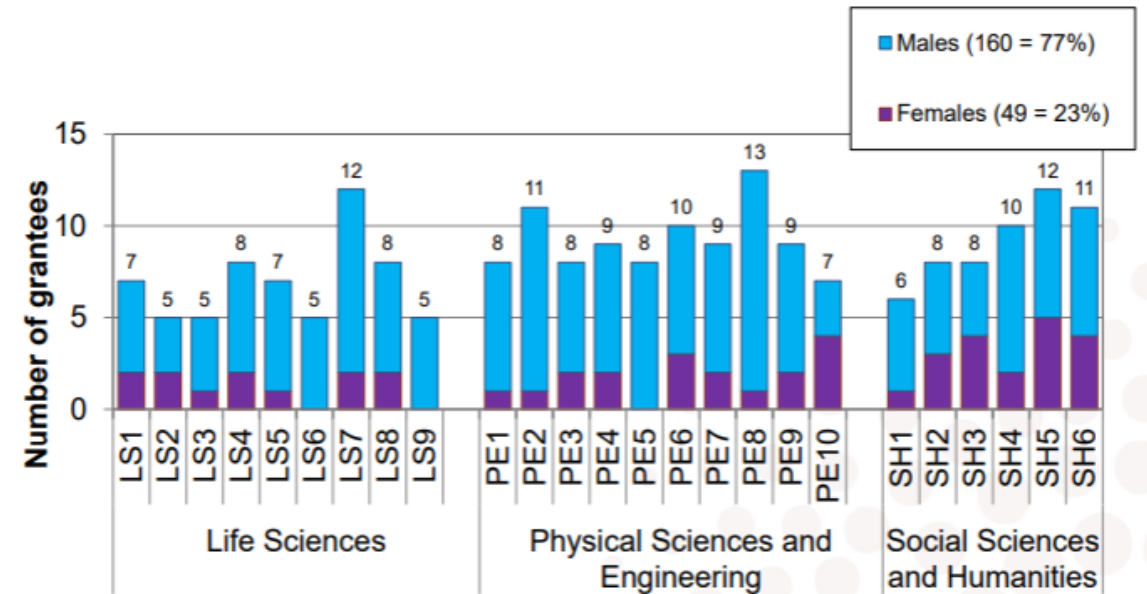
- Knowing the **potential panelists** (or similar profiles) is a good strategy for success.
- Think about who might read the proposal.
- Make them **understand the impact** on the scientific field.
- Tell them a story that will appeal to them (B1) and to convinces them (B2)

¿Cómo no elegir el un panel de evaluación?



An indicative budget is allocated to each panel in proportion to the budgetary demand of its assigned proposals. **This important principle ensures comparable success rates between the individual panels regardless of how many proposals each panel evaluates**

ERC Advanced 2020
Grantees by Panel and Gender
Total 209 grants



Useful links

- Database of all **funded projects** by year and threshold/call (and much more)



- <https://erc.europa.eu/projects-statistics>

- [Panel Members | ERC - European Union](https://erc.europa.eu/apply-grant/panel-members?IPGWtPdOmn=&page=85)



<https://erc.europa.eu/apply-grant/panel-members?IPGWtPdOmn=&page=85>

Gracias por su atención



GOBIERNO
DE ESPAÑA

MINISTERIO
DE CIENCIA, INNOVACIÓN
Y UNIVERSIDADES



oficina
europea