Session 3 — Polishing your idea to fit ERC and panel choice

How to know you have _THE IDEA_?

- Something you have wanted to do for a long time but lacked resources
- Something that when you have presented the idea to your peers it has raised interest

Pitfalls to avoid - Part 1 - Protocol

Applying from yourself

Write to the reviewers, not to yourself / your team / your collaborators!

Playing it safe

Research should advance science significantly, not just incrementally. Big leaps can however be supported by smaller advances (often a good idea)

Not thinking big enough

If the project is not planned at a extremely high level, why start it in the first place?

Not asking enough

Insufficiently funded projects run a high risk of failing

Pitfalls to avoid - Part 2 - Documents

- Forgetting about visuals: Format application with clear fonts, emphasise graphics and and prelidata
- Forgetting your numbers: Even if not asked so make your numerical output stand out. Include at least grant sum, h-index, n. of peer-reviewed papers and citations. Reading is believing and the reviewers are lazy.
- Not explaining your history: clearly explain mil. / civil service & paternal & maternal leaves etc. absences from work in your CV
- Forgetting promotional material: We all do Google Scholar checks, consult the applicants webpages, GITs and other resources. Make sure these are in shape and that Google will find you!

The unfitting parts – drop them

- Anything that is way out of your field of expertise
- Anything you think is fashionable, but does not fit the central concept
- Technical gadgets, extra datasets to have and international added value etc.
- Anything that has already been done (preliminary data of course ok at proposal stage)
- Anything proposed by someone else that does not 'feel right'

Negative comments by evaluators

- Does not contain sufficient new ideas
- Research focus too narrow / too wide
- Lack of ambition to go beyond the 'state of the art'
- Not enough ground-breaking idea
- Incremental study



Panels and panel choice

LS panels

Life Sciences

LS1 Molecular Biology, Biochemistry, Structural Biology and Molecular Biophysics

Molecular synthesis, modification, mechanisms and interactions, biochemistry, structural biology, molecular biophysics, metabolism, signalling pathways.

LS2 Genetics, 'Omics', Bioinformatics and Systems Biology

Molecular genetics, quantitative genetics, genetic epidemiology, epigenetics, genomics, metagenomics, transcriptomics, proteomics, metabolomics, glycomics, bioinformatics, computational biology, biostatistics, systems biology.

LS3 Cellular and Developmental Biology

Cell biology, cell physiology, signal transduction, organogenesis, developmental genetics, pattern formation, stem cell biology, in plants and animals, or, where appropriate, in microorganisms.

LS4 Physiology, Pathophysiology and Endocrinology

Organ physiology, pathophysiology, endocrinology, metabolism, ageing, tumorigenesis, cardiovascular diseases, metabolic syndromes.

LSS Neuroscience and Neural Disorders

Neural cell function and signalling, systems neuroscience, neural bases of cognitive and behavioural processes, neurological and psychiatric disorders.

LS6 Immunity and Infection

The immune system and related disorders, biology of infectious agents and infection, biological basis of prevention and treatment of infectious diseases

LS7 Applied Medical Technologies, Diagnostics, Therapies and Public Health

Development of tools for diagnosis, monitoring and treatment of diseases, pharmacology, clinical medicine, regenerative medicine, epidemiology and public health.

LS8 Ecology, Evolution and Environmental Biology

Population, community and ecosystem ecology, evolutionary biology, behavioural ecology, microbial ecology.

LS9 Applied Life Sciences, Biotechnology, and Molecular and Biosystems Engineering

Applied plant and animal sciences, forestry, food sciences, applied biotechnology, environmental and marine biotechnology, applied bioengineering, biomass and biofuels, biohazards.

PE panels

Physical Sciences & Engineering

PE1 Mathematics

All areas of mathematics, pure and applied, plus mathematical foundations of computer science, mathematical physics and statistics.

PE2 Fundamental Constituents of Matter

Particle, nuclear, plasma, atomic, molecular, gas, and optical physics.

PE3 Condensed Matter Physics

Structure, electronic properties, fluids, nanosciences, biological physics.

PE4 Physical and Analytical Chemical Sciences

Analytical chemistry, chemical theory, physical chemistry/chemical physics.

PE5 Synthetic Chemistry and Materials

Materials synthesis, structure-properties relations, functional and advanced materials, molecular architecture, organic chemistry.

PE6 Computer Science and Informatics

Informatics and information systems, computer science, scientific computing, intelligent systems.

PE7 Systems and Communication Engineering

Electrical, electronic, communication, optical and systems engineering.

PE8 Products and Processes Engineering

Product design, process design and control, construction methods, civil engineering, energy processes, material engineering.

PE9 Universe Sciences

Astro-physics/chemistry/biology; solar system; stellar, galactic and extragalactic astronomy, planetary systems, cosmology, space science, instrumentation.

PE10 Earth System Science

Physical geography, geology, geophysics, atmospheric sciences, oceanography, climatology, cryology, ecology, global environmental change, biogeochemical cycles, natural resources management.

SSH panels

Social Sciences & Humanities

SH1 Individuals, Markets and Organisations

Economics, finance and management.

SH2 Institutions, Values, Environment and Space

Political science, law, sustainability science, geography, regional studies and planning.

SH3 The Social World, Diversity, Population

Sociology, social psychology, social anthropology, demography, education, communication.

SH4 The Human Mind and Its Complexity

Cognitive science, psychology, linguistics, philosophy of mind.

SH5 Cultures and Cultural Production

Literature, philology, cultural studies, study of the arts, philosophy.

SH6 The Study of the Human Past

Archaeology and history.

Keywords and panels

- You need to choose a primary panel
- ERC Keyword 1: Mandatory
- ERC Keywords 2,3,4: Optional, links your proposal to the panel
- Free keywords are used to identify best referees from the panel



Ways to figure out the right panel?

- ERC website abstract search
- Reviewer browsing and google the reviewers
- Between panels? Take two
- Same people on board every other year

Stories on idea clarification and panel issues

- The one that wanted to continue what he was doing
- The one that was between LS and SH
- The one that went too far (at least according to the reviewers)
- The one that started of too collaboratively
- The one that thought the rules don't apply to their field
- The one that had no other plans
- The one that thought you have to please the EU
- The one that didn't like pictures or tables
- The one(s) that loved critisism

The database for project and reviewer list

https://erc.europa.eu/projects-figures/erc-funded-projects/results

https://erc.europa.eu/document-category/evaluation-panels