## The European Research Council

## An Introduction to the ERC

Benjamin Pelletier Scientific Officer panels SH1 - SH2 30/09/2021 Webinar Series 2021 Euraxess ASEAN countries and India



#### **European Research Council**

Established by the European Commission



## European Commission and ERC



European Research Council





Directorate-General Research and Innovation (RTD)



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## ERC is....1. Funding: it is part of Horizon Europe



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## ERC is.... 2. The Scientific Council



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Prof. Eveline CRONE (Psychology) Vice-President



Prof. Andrzej JAJSZCZYK (Electronics and Communication Engineering) Vice-President

ERC President (From 1/11/2021)

Prof. Maria LEPTIN (Biology)



Prof. Nektarios TAVERNARAKIS (Molecular Systems Biology) Vice-President



Prof. Mercedes GARCÍA-ARENAL (History)



Prof. Nicola Spaldin (Materials Theory)



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(Psychology)

Prof. Liselotte

HØJGAARD

(Medicine)



Prof. Dirk INZÉ (Plant Biology)



Prof. Milena ŽIC FUCHS (Linguistics)



Prof. Geneviève ALMOUZNI (Biology)



Prof. Evstein JANSEN (Earth Science)



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ARELLANO

(Economics)

Prof. Michael KRAMER (Astrophysics)



Prof. Rodrigo MARTINS (Materials, Nanotechnologies, Electronics)

Prof. Paola

BOVOLENTA

(Neurobiology)



Prof. Margaret BUCKINGHAM (Biology)



Prof. Kurt MEHLHORN (Computer Science)



Prof. Barbara ROMANOWICZ (Geophysics)

Prof. Ben

FERINGA

(Organic Chemistry)







VALKÁROVÁ (Physics)

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Prof. Alice

## ERC is.... 3. The ERCEA





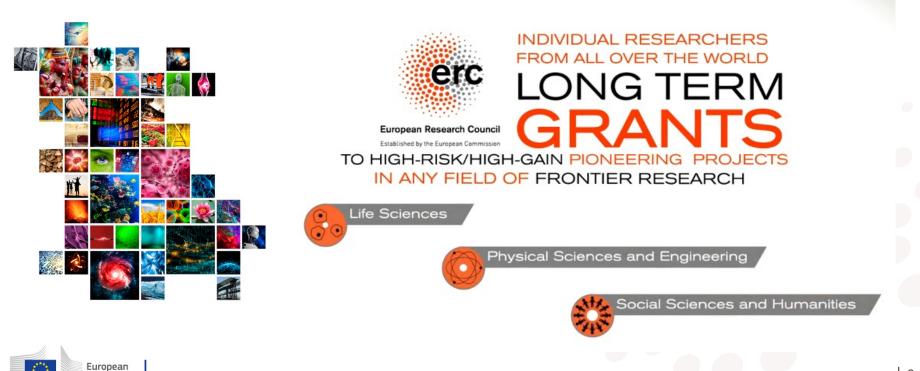


#### **ERC** basics

Commission



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#### **ERC** funding schemes



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#### **Starting Grant**

Size of the grant: up to €1.5 million + up to €1 million
Duration: up to 5 years
2-7 years of experience since completion of their PhD

#### Consolidator Grant Size of the grant: up to €2 million + up to €1 million

Duration: up to 5 years 7-12 years of experience since completion of their PhD



Advanced Grant Size of the grant: up to €2.5 million + up to €1 million Duration: up to 5 years An excellent scientific track record of recognized achievements in the last 10 years

## **ERC** funding schemes



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#### Synergy grant

Size of the grant: €10 million + up to €4 million Duration: up to 6 years Be composed of 2 to 4 researchers and their research groups (one researcher can be based outside EU/AC)

#### **Proof of Concept**



Size of the grant: €150 000 Duration: up to 18 months Demonstrate that the idea funded by the original ERC grant has innovation potential and significant economic or societal benefits



## PIs from all over the World Can Apply to ERC



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## **Opportunities for non ERA\* researchers:**

- Additional "start-up" funding for researchers moving to Europe (1 M€ irrespective of call scheme)
- Grantee can keep affiliation with home institute outside Europe ("significant part" of work time in Europe, at least 50%)
- Team members can be based outside Europe
- Grantee can move within Europe with the grant
- **\*** ERA = European Research Area (EU + Associated Countries)





## ERC in figures

European Commission



## 2021 Call Calendar



ERC calls	Call Opening	Submission Deadline
Starting Grants ERC-2022-StG	23/09/2021	13/01/2022
Consolidator Grants ERC-2022-CoG	19/10/2021	17/03/2022
Advanced Grants ERC-2022-AdG	20/01/2022	28/04/2022
Synergy Grants ERC-2022-SyG	15/07/2021	10/11/2021
Proof of Concept ERC-2022-PoC1 ERC-2022-PoC2	15/07/2021 16/11/2021	14/10/2021 15/02/2022, 19/05/2022, 29/09/2022



## **ERC** Panel structure



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#### Life Sciences (LS)

- 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 Aging
- 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
- 3 Domains / 27 Panels

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Operated by the Scientific Department B

#### Social Sciences and Humanities (SSH)

- 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
   Physical Sciences & Engineering (PSE)
- 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

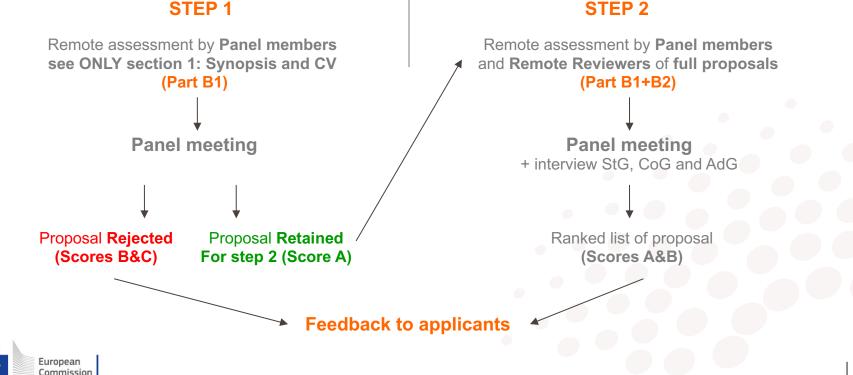
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- PE10 Earth System Science
- PE11 Materials Engineering

## How are the ERC proposals evaluated

For individuals calls: a single submission but a two step evaluation





## 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).
- Publication record is not decisive in selection decisions.
- The Host Institution is not an evaluation criterion.





#### **Evaluation process**



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## is the sole evaluation criterion

#### **Excellence of the Research Project**

- Ground breaking nature
- Potential impact
- Scientific Approach

#### **Excellence of the Principal Investigator**

- Intellectual capacity
- Creativity
- Commitment



#### Some rumours



Rumour 1: You can only apply for an ERC grant if you are a highly accomplished scientist.

★ NOT true: Accomplishments are appreciated in relation to your stage/seniority as giving some evidence of your capacity to conduct the research you propose and of creativity within the past 10-12 years of your career.

Rumour 2: To be successful, you need to continue on an established research line, to prove continuity and credibility **X** NOT true: Generally, the opposite is true.

Rumour 3: If you have already obtained an ERC grant you are less/more likely to get another one.

★ NOT true: Panels look at each proposal on its own merit and in comparison with the other applications, irrespectively of whether you have or have not obtained an ERC grant in the past. (Of course this does not apply for applications to a Proof of Concept grant.)

Rumour 4: The more socially or medically relevant a grant proposal is, the higher the chances of it getting funded.

X NOT true: ERC funds frontier research, not research that promises to be only an incremental advancement of knowledge. This is irrespective of the field and whether it has societal, medical or clinical applications.



#### Particular emphasis on...



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

- 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.



## **Some ERC research projects**



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The Cambodian Archaeological Lidar Initiative: Exploring Resilience in the Engineered Landscapes of Early SE Asia

PI: Damian Evans | CALI

Host Institution: French School of Asian Studies (EFEO)

Project Nr: 639828

Keywords: lidar; remote sensing; water management; palaeoenvironment; urbanism; resilience; Angkor; Southeast Asia

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Novel Algorithmic Techniques through the Lens of Combinatorics

PI: Parinya Chalermsook | ALGOCom

Host Institution: Aalto University

#### Project Nr: 759557

**Keywords:** Approximation Algorithms, Hardness of Approximation, Data Structures, Online Algorithms, Combinatorial Optimization.

Tropical forests and climate change: understanding links to predict future responses

PI: Pieter Alle Zuidema | TROFOCLIM

Host Institution: Wageningen University

Project Nr: 242955

**Keywords:** Climate change; Tropical forests; Tree ring analysis; Stable isotope analysis; Tree demography

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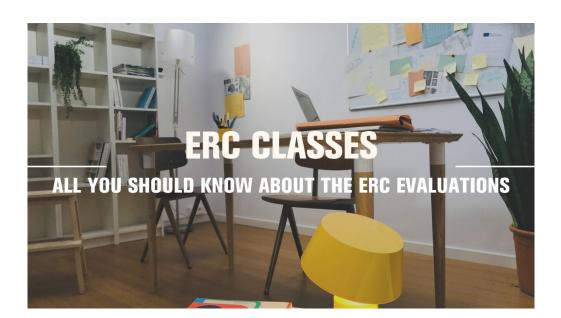
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Cardiovascular Health effects of Air pollution in Andhra Pradesh, India PI: Cathryn Tonne | CHAI Host Institution: Institute for Global Health Barcelona Project Nr: 336167 Keywords: air pollution, exposure sciences, cohort study, India

## Where can you find more information?



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#### Videos - ERC Classes

- What to consider before applying
- How to fill in the application (Part B1 and B2)
- The interview
- How the evaluation works

https://www.youtube.com/watch?v=x bFbzkVWgCU&list=PLtv6FnsXqnXA YRk6HCErwMxwML0ZKoMcy



## Where can you find more information?



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Our website: erc.europa.eu

# Our social media channels:

National Contact Points (NCP):

https://erc.europa.eu/funding/national-contact-points

Funding & Tender Opportunities:

https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home

