

ORIZONT EUROPA 2021-2027 versus ORIZONT 2020

APELURI DESCHISE ERC 2021 – TOATE DOMENIILE INCLUSIV UMANISTE

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Retrospectiva Horizon 2020 – structura

Horizon 2020 is divided into 3 three pillars and 2 specific objectives, corresponding to its main priorities:

- Excellent Science
- Industrial Leadership
- Societal Challenges
- Spreading excellence & widening participation
- Science with and for society

Horizon Europe: Structura preliminară



Pilonul 1

Excelență științifică

Consiliul European pentru Cercetare

Acțiunile Marie Skłodowska-Curie

Infrastructurile de cercetare



Pilonul 2

Provocări globale și competitivitate industrială europeană

- Sănătate
- Cultură, creativitate și societate favorabilă incluziunii
- Securitate civilă pentru societate
- Dezvoltarea digitală, industria și spațiul
- · Climă, energie și mobilitate
- Alimente, bioeconomie, resurse naturale, agricultură și mediu

Centrul Comun de Cercetare



Pilonul 3

O Europă inovatoare

Consiliul european pentru inovare

Ecosistemele europene de inovare

Institutul European de Inovare și Tehnologie

Extinderea participării și consolidarea Spațiului european de cercetare

Extinderea participării și răspândirea excelenței

Reformarea și consolidarea sistemului european de C&I



Orizont Europa: Noutăți față de H2020

- Misiuni la Pilonul II;
- Parteneriatele Europene, clustere nouă abordare;
- Consiliul European pentru Inovare la Pilonul III (în loc de Future&Emerging Technologies de la Pilonul I – H2020)
- Extinderea participării şi răspândirea excelenţei abordare extinsă
- O politică a științei deschise Open Science
- O politică de gen Gender Equality Plan
 - female experts: FP 6 28%, FP 7 35%, H2020 40%, HE – 50% target
- Cooperare internațională abordare extinsă

Pilonul 1 – EXCELENȚĂ ȘTIINȚIFICĂ

Obiectiv: consolidarea și extinderea excelenței științifice a Uniunii Europene.

Componente

- •Consiliul European pentru Cercetare ERC Cercetare de frontieră realizată de cei mai buni cercetători împreună cu echipele lor;
- •Acţiunile Marie Skłodowska-Curie Dotarea cercetătorilor cu noi cunoștințe și competențe prin intermediul mobilității și al formării;
- •Infrastructurile de cercetare Infrastructuri de cercetare de nivel mondial, integrate și interconectate

Pilonul 2 - Provocări globale și competitivitate industrială europeană CLUSTERE - MISIUNI

Obiectiv: stimularea tehnologiilor esențiale și a soluțiilor care susțin politicile UE și obiectivele de dezvoltare durabilă.

- Sănătate
- ·Cultură, creativitate și societate favorabilă incluziunii
- Securitate civilă pentru societate
- Dezvoltarea digitală, industria (competitivitate, specializare inteligentă) și spațiul
- Climă, energie (reabilitare energetică) și mobilitate (transporturi)
- Alimente, bioeconomie, resurse naturale, agricultură şi mediu (from farm to fork)

DOMENIILE MISIUNILOR - ȚINTE

- Cancer soluții pentru salvarea mai multor vieți de cancer;
- Adaptarea la schimbările climatice, inclusiv transformarea societății - creșterea rezilienței climatice;
- Orașe inteligente și neutre din punct de vedere al impactului asupra climei – realizarea a 100 de orașe neutre din punct de vedere climatic;
- Sănătatea solului și a alimentelor asigurarea sănătaății a 75% din soluri;
- Oceane, mări, ape costiere sănătoase refacerea oceanelor și apelor

Pilonul 3 - O EUROPĂ INOVATOARE

Objectiv

Stimularea inovațiilor revoluționare creatoare de piețe și a ecosistemelor favorabile inovării.

Sructura

- Consiliul European pentru inovare Sprijin pentru inovațiile cu potential revoluționar și creator de piețe;
- •Ecosistemele europene de inovare Conectarea cu actorii regionali și naționali din domeniul inovării;
- •Institutul European de Inovare și Tehnologie (EIT) -Reunirea principalilor actori (din cercetare, educație și mediul de afaceri) în jurul obiectivului comun de stimulare a inovării.

What you need to know about ERC grants

Starting Grant – 8.04.2021 – 1 stage - support up-and-coming research leaders who are about to establish a proper research team and to start conducting independent research in Europe. The scheme targets promising researchers who have the proven potential of becoming independent research leaders. It will support the creation of excellent new research teams. For researchers of any nationality with 2-7 years of experience since completion of PhD (or equivalent degree) and scientific track record showing great promise.

Consolidator Grant – 20.04.2021 – 2 stages - support researchers at the stage at which they are consolidating their own independent research team or programme. The scheme will strengthen independent and excellent new individual research teams that have been recently created. For researchers of any nationality with 7-12 years of experience since completion of PhD (or equivalent degree) and scientific track record showing great promise.

Guiding principles and objectives of the ERC Starting and Consolidator Grants

- Scientific excellence is the sole criterion on the basis of which ERC frontier research grants are awarded.
- Applications can be made in any field of research.
- Individual research teams led by a single PI can apply for funding.
- Principal Investigators from anywhere in the world can apply for an ERC grant.
- Support ground-breaking, high-gain/high-risk research
- Is expected to lead to advances at frontiers of knowledge and to set a clear and inspirational target for frontier research across Europe
- The ERC's frontier research grants aim to empower individual researchers and provide the best settings to foster their creativity.
- Grants are awarded to the host institution that engages and hosts the PI. The PI will be employed by the host institution a minimum of 50% of their total working time.
- Host institutions must provide conditions for the PI to independently direct the research and manage its funding.
- Host institutions must be established in an EU Member State or Associated Country.

Size of ERC Starting and Consolidator Grants

- Starting Grants can be up to a maximum of EUR 1 500 000 for a period of 5 years (pro rata for projects of shorter duration).
 Consolidator Grants can be up to a maximum of EUR 2 000 000 for a period of 5 years (pro rata for projects of shorter duration).
- However, up to an additional EUR 1.000 000 for Starting Grants and EUR 1.000 000 for Consolidator Grants can be requested in the proposal to cover:
- (a) eligible "start-up" costs for Principal Investigators moving to the EU or an Associated Country from elsewhere as a consequence of receiving the ERC grant (b) and/or the purchase of major equipment and/or (c) access to large facilities.
- The European Union financial contribution will take the form of the reimbursement of up to 100% of the total eligible and approved direct costs and of a flat-rate financing of indirect costs corresponding to 25%10 of the total eligible direct costs

Profile of the ERC Starting and Consolidator Grant Principal Investigator Specific Eligibility Criteria

Starting Grant

- The Principal Investigator shall have been awarded his/her first PhD
- ≥ 2 and ≤ 7 years
- prior to 1 January 2021
- Cut-off dates: PhD from 1 January 2014 to 31 December 2018 (inclusive)

Consolidator Grant

- The Principal Investigator shall have been awarded his/her first PhD
- > 7 and ≤ 12 years
- prior to 1 January 2021
- Cut-off dates: PhD awarded from 1 January 2009 to 31 December 2013 (inclusive)

Scientific profile of PI

- A competitive Starting Grant Principal Investigator must have already shown the potential for research independence and evidence of maturity, for example by having produced at least one important publication (5) as main author or without the participation of their PhD supervisor.
- A competitive Consolidator Grant Principal Investigator must have already shown research independence and evidence of maturity, for example by having produced several important publications (10) as main author or without the participation of their PhD supervisor.
- Principal Investigators should also be able to demonstrate a promising track record of early achievements appropriate to their research field and career stage, including significant publications (as main author) in major international peer-reviewed multidisciplinary scientific journals, or in the leading international peer-reviewed journals of their respective field.
- They may also demonstrate a record of invited presentations in wellestablished international conferences, granted patents, awards, prizes etc. For further information please see the ERC Work Programme 2021 and the 'Instructions for completing Part B of the proposal'.

Research proposal Part B1 Sections a, b, c

- a. Extended Synopsis of the scientific proposal (max. 5 pages)
- The Extended Synopsis should give a concise presentation of the scientific proposal, with particular attention to the ground-breaking nature of the research project and the feasibility of the outlined scientific approach. Describe the proposed work in the context of the state of the art of the field. References to literature should also be included. References do not count towards the page limits. It is important that this extended synopsis contains all essential information including the feasibility of the scientific proposal since the panel will only evaluate Part B1 at step 1.
- b. Curriculum Vitae of PI (max. 2 pages):
- The CV should include the standard academic and research record. A
 suggested outline is available in the Part B1 downloadable template. The structure of
 the CV may be modified. Any research career gaps and/or unconventional paths
 should be clearly explained so that they can be fairly assessed by the evaluation
 panels.
- The succinct 'funding ID' which must specify any current research grants and their subject, and any on-going application for work related to the proposal must follow the table format indicated in the Part B1 template. The funding ID will not count towards the page limits and needs to be completed with the following information for on-going grants and applications:
- Project Title, Funding source, Amount, Period, Role of the PI, Relation to the ERC proposal

Research proposal Part B1 Sections a, b, c

- c. Early achievements track-record (max. 2 pages):
- The Principal Investigator (PI) must provide a list of achievements reflecting their track record.
- The applicant should list (if applicable):
- 1. Publications (up to five for Starting Grant and up to ten for Consolidator Grant) in major international peer-reviewed multi-disciplinary scientific journals and/or in the leading international peer-reviewed journals, peer-reviewed conferences proceedings and/or monographs of their respective research fields, highlighting those as main author or without the presence as co-author of their PhD supervisor (properly referenced (including all authors), field relevant bibliometric indicators may also be included);
- 2. Research monographs and any translations thereof;
 - 3. Granted patent(s);
- 4. Invited presentations to peer-reviewed, internationally established conferences and/or international advanced schools;
- 5. Prizes/Awards/Academy memberships.

- The scientific proposal (max. 15 pages)
- This part is evaluated only in step 2 of the peer review evaluation.
 Please note that Part B1 is also available at Step 2.
- Please use the Word-template provided online in the Participant Portal Submission Page for the call. References do not count towards the page limit.
- The scientific, technical, and/or scholarly aspects of the project should be described more in detail demonstrating the ground-breaking nature of the research, its potential impact and research methodology. The fraction of the applicant's research effort that will be devoted to this project and a full estimation of the real project costs also need to be indicated.
- a. State of the art and objectives: Specify clearly the objectives of the proposal, in the context of the state of the art in the field. When describing the envisaged research it should be indicated how and why the proposed work is important for the field, and what impact it will have if successful, such as how it may open up new horizons or opportunities for science, technology or scholarship. Specify any particularly challenging or unconventional aspects of the proposal, including multi- or inter-disciplinary aspects.

b. Methodology

• Describe the proposed methodology in detail including, as appropriate, key intermediate goals. Explain and justify the methodology in relation to the state of the art, including any particularly novel or unconventional aspects addressing 'high-risk/high-gain' balance. Highlight any intermediate stages where results may require adjustments to the project planning. In case it is proposed that team members engaged by another host institution participate in the project, their participation has to be fully justified. This should be done emphasising the scientific added value they bring to the project.

c. Resources (incl. project costs)

- It is strongly recommended to use the budget table template included in Part B2 to facilitate the assessment of resources by the panels. (For detailed information on eligible- and non-eligible direct and indirect costs as well as the different cost categories, applicants should consult the H2020 ERC Model Grant Agreement and the H2020 ERC Annotated Model Grant Agreement). Please use whole Euro integers only when preparing the budget table.
- State the amount of funding considered necessary to fulfil the objectives for the duration of the project. The resources requested should be reasonable and fully justified in the proposal. The requested grant should be in proportion to the actual needs to fulfil the objectives of the project.

- Specify briefly your commitment to the project and how much time you are willing to devote to the proposed project. Please note that for Starting Grants you are expected to devote at least 50% of your total working time to the ERC-funded project. For Consolidator Grants you are expected to devote at least 40% of your total working time to the ERC-funded project. (see the ERC Work Programme 2021).
- Describe the size and nature of the team, indicating, where appropriate, the key team members and their roles. The participation of team members engaged by another host institution should be justified in relation to the additional financial cost this may impose to the project. Take into account the percentage of your dedicated time to run the ERC funded activity when calculating your personnel costs.
- Specify any existing resources that will contribute to the project. Describe
 other necessary resources, such as infrastructure and equipment. It is
 advisable to include a short technical description of the equipment
 requested, a justification of its need as well as the intensity of its planned
 use. When estimating the costs for travel, please also consider participation
 of the PI and team members in conferences and dissemination events.

The terms and conditions laid down in the ERC Model Grant Agreement address how scientific publications must be made available through Open Access. Applicants should be aware that it will be mandatory to provide Open Access (free of charge, online access for any user) to all peer-reviewed scientific publications resulting from ERC projects funded through this call. Open Access can be ensured through green or gold Open Access-routes, and Open Access must in any case be ensured through a repository at the latest 6 months after publication (12 months for publications from the Social Sciences and Humanities). Please see Article 29.2 of the ERC Model Grant Agreement for more details, or contact ERC-OPEN-ACCESS@ec.europa.eu.

- Costs for providing immediate Open Access to publications (article processing charges) are eligible and can be charged against the ERC grant if they are incurred during the lifetime of the project. When drafting the budget, it is highly advisable to consider the need to include such expenditure, and if that is the case, to make a realistic estimation of the amount needed. In addition, the ERC recommends that all funded researchers follow best practice by retaining files of research data produced and used, and are prepared to share these data with other researchers when not bound by copyright restrictions, confidentiality requirements, or contractual clauses.
- The costs are given for the full duration. A breakdown by reporting period is not requested for the evaluation process. The 'Total eligible costs' as well as the 'Total requested EU grant' figures should be equal to those inserted in the online proposal submission forms (section 3 Budget). The ERC funds 100% of the total eligible costs. In case the total costs differ from the requested grant, it should be specified in the proposal what exactly is funded from other sources.

Evaluation

- The peer review evaluation of ERC Starting and Consolidator Grant proposals is in the hands of 27 peer review evaluation panels (ERC panels), covering all fields of science, engineering and scholarship, which for operational reasons are subdivided into three main research domains:
- Physical Sciences and Engineering 11 Panels
- Life Sciences 9 Panels
- Social Sciences and Humanities 7 Panels
- Details on the structure of the ERC panels are provided in Annex 1.
- The main areas that are addressed during the ethics review process include:
- 1. Human protection (including study participants and researchers)
- 2. Animal protection and welfare
- 3. Data protection and privacy
- 4. Environment protection and safety
- 5. Participation of non-EU countries
- 6. Malevolent use of research results
- Applicants should be aware that no grant agreement can be signed by ERCEA prior to a satisfactory conclusion of the ethics review procedure.
- http://ec.europa.eu/research/participants/portal/desktop/en/funding/guide.htmlhttp://e c.europa.eu/research/participants/docs/h2020-funding-guide/cross-cuttingissues/ethics en.htm

Evaluation

- At the end of step 1 of the evaluation, on the basis of the assessment of Part B1 of the proposal, applicants will be informed that 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;
- C. is not of sufficient quality to pass to step 2 of the evaluation.
- At the end of step 2 of the evaluation, on the basis of the assessment of the full proposal, applicants will be informed that 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.
- The evaluation panels may review the level of the requested budget for proposals recommended for funding and, as appropriate, suggest adjustments.

Evaluation criteria

1. Excellence

 Are the objectives of the proposed project consistent with the requirements specified in the work programme and/or call for proposals? Do they, where appropriate, correspond to, or go beyond, best current practice?

2. Impact

- Will the project have a substantial impact in the context of the ERC objectives?
- 3. Quality and efficiency of the implementation
- Is the proposed methodology and work plan effective in reaching the goals of the project? Do they ensure the highest quality and/or utility of results?

ACȚIUNI PENTRU ETAPA URMATOARE

- BPG a anunțat pe site-ul AR lista apelurilor deschise ți in pregătire;
- Analizarea la nivelul fiecărui institut a potențialilor candidați care îndeplinesc standardele științifice, precum și condițiile de încadrare ca investigator principal în cele două categorii, starting/consolidator;
- Formarea grupurilor de lucru pentru elaborarea părții tehnicoștiințifice a propunerilor;
- Acordarea de sprijin prin Centrul suport de la Institutul de Economie Mondială, îndeosebi pentru partea de impact socio-economic ţi management, precum şi pentru înregistrarea propunerii;
- Pre-evaluarea propunerilor de experţii BPG.

Obiectivul de politică 1 – O Europă mai inteligentă

- Program Operaţional PO 4 Creştere inteligentă, Digitalizare şi Instrumente Financiare (POCIDIF)
 - Dr. Viorel Gaftea Secretar științific la Secția de Știința și Tehnologia Informației a Academiei Române, Cercetător la Centrul de Modelare Macroeconomică in cadrul INCE al Academiei Române; Tel. 0744344511, e-mail: viorel.gaftea@acad.ro;
 - Prof. Emerit Aurelia Meghea Şef Birou Proiecte şi Granturi al Academiei Române; Tel. 0744700466, email: aurelia@acad.ro; bpg@acad.ro

Obiectivul de politică 2 – O Europă mai verde •Program Operațional PO 2 – Dezvoltare durabilă (PODD)

Comisia 2.1 – Schimbări climatice, riscuri, apă
 Acad. Dan Bălteanu – Membru titular în Secția de Științe Geonomice a
 Academiei Române, Directorul Institutului de Geografie al Academiei Române, Tel.

 0745081687, e-mail : igar@geoinst.ro;

Dr. Crişan Demetrescu – Membru Corespondent al Academiei Române, Sectia de Științe Geonomice a Academiei Române, Director al Institutului de Geodinamică Sabba S. Ștefănescu al Academiei Române, Tel. 0722929254; e-mail: crisan@geodin.ro.

Comisia 2.2 – Economia circulară și biodiversitate
 Dr. Monica Ștefania Dumitrașcu – Director adj. Institutul de Geografie al Academiei - Române, 0721243489, stefania_dumitrascu@yahoo.com

Dr. Georgeta Predeanu, CS I - Şef Birou Proiecte şi Granturi al Academiei Române; Tel. 0724283809; email: georgeta@acad.ro; bpg@acad.ro

Obiectivul de politică 4 – O Europă mai socială

Program Operațional PO 5 – Sănătate (POS)

Acad. Victor Voicu – Vicepreședinte al Academiei Române, Președintele Secției de Științe Medicale a AR: Tel. 0722345924, email: <u>victorvoicu@acad.ro</u>, victor.voicu@yahoo.com;

Dr. Carmen-Cristina Diaconu, CS I – Director al Institutului de Virusologie "Ştefan S. Nicolau" al Academiei Române, Tel. 0742544320, email: ccdiaconu@yahoo.com

Program Operațional PO 6 – Educație și Ocupare (POEO)

Sorin Cace, CS I, Director adjunct Institutul pentru Cercetarea Calității Vieții - ICCV; Telefon: 0735229064; Email: cacesorin@gmail.com
Simona Stănescu, CS I, Institutul pentru Cercetarea Calității Vieții - ICCV;

Telefon: 0723711156; Email: simona_vonica@yahoo.com

Obiectivul de politică 4 – O Europă mai socială

 Program Operaţional PO 7 – Incluziune şi Dezvoltare Socială (POIDS)

Sorin Cace, CS I, Director adjunct Institutul pentru Cercetarea Calității Vieții - ICCV; Telefon: 0735229064; Email: cacesorin@gmail.com Mihnea Preotesi, CS II, Institutul pentru Cercetarea Calității Vieții - ICCV; Telefon: 0721260633; Email: mihneapre1@yahoo.com

Program Operațional PO 1 - Tranziție Justă (POTJ)

Luminița Chivu, Director general, Institutul Național de Cercetări Economice - INCE; Telefon: 0722234953; Email: chivu@ince.ro lulian Stănescu, CS II, Institutul pentru Cercetarea Calității Vieții - ICCV; Telefon: 0741074798; Email: stanescu.iccv@gmail.com

Obiectivul de politică 5 – O Europă mai aproape de cetățenii săi – Turism, patrimoniu, cultură

Program Operațional PO 8 – Regionale (POR)

Acad. Cornelia Sabina Ispas, Director al Institutului de Etnografie și Folclor C. Brăiloiu al Academiei Române, Președinta Comisiei de folclor a Academiei Române, Tel. 0726198425, email: sabinacornelia41@gmail.com;

Constantin Ciobanu, CS I Secretar științific al Institutului de Istoria Artei G. Oprescu, București; Tel. 0213411878, 0732882489, e-mail: constantini_ciobanu@yahoo.com

Program Operaţional PO 9 – Asistenţă Tehnică (POAT)

Prof. Gheorghe Zaman – Membru corespondent al Academiei Române, Vicepreședinte executiv al Secției de Știinte economice, juridice și sociologie a Academiei Române, Directorul Institutului de Economie națională al Academiei Române – **Membru titular PO – AMPOAT din 2016**. Tel. 0726781277, gheorghezaman@ien.ro

Prof. Emerit Aurelia Meghea – Şef Birou Proiecte şi Granturi al Academiei Române; **Membru supleant PO – AMPOAT din 2016**; 0744700466, aurelia@acad.ro; bpq@acad.ro

Va multumesc pentru atentie!