

> DIPARTIMENTO DI SCIENZE BIOMEDICHE, Odontoiatriche e delle Immagini Morfologiche e Funzionali

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a cura della dott.ssa Lucrezia Auditore (Resp. U.Op. Ricerca BIOMORF)

HORIZON Europe Framework Program (HORIZON)

Call for Proposals for ERC Starting Grant (TOPIC ID: ERC-2023-STG)

Opening Date: 12 July 2022 Deadline: 25 October 2022, 17 Brussels time

Budget: 1500000,00 EUR (maximum) for a period of 5 years

Objectives: The ERC Starting Grants are designed to support excellent Principal Investigators at the career stage at which they are starting their own independent research team or programme. Principal Investigators must demonstrate the ground-breaking nature, ambition and feasibility of their scientific proposal.

Starting Grants may be awarded up to a maximum of EUR 1 500 000 for a period of 5 years. The maximum size of the grants is reduced *pro rata temporis* for projects of a shorter duration. (This does not apply to ongoing projects).

Additional funding up to EUR 1 000 000 can be requested in the proposal to cover the following eligible costs when these are necessary to carry out the proposed work: "start-up" costs for Principal (a) Investigators moving to the EU or an Associated Country from elsewhere as a consequence of receiving the ERC grant, and/or (b) the purchase of maior equipment, and/or (c) access to large

facilities, and/or (d) other major experimental and field work costs, excluding personnel costs.

Additional funding is not subject to pro rata temporis reduction for projects of shorter duration. All funding requested is assessed during evaluation.

Profile of the ERC Starting Grant Principal Investigator: The Principal Investigators shall have successfully defended their first PhD at least 2 and up to 7 years prior to 1 January 2023. Cut-off dates: Successful defence of PhD between 1 January 2016 and 31 December 2020 (inclusive). The eligibility period can be extended beyond 7 years in certain properly documented circumstances. See section Admissibility and eligibility criteria of the ERC Work Programme 2023. 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 as main author or without the participation of their PhD supervisor. Applicant 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 e.g. author) in major international peermultidisciplinary reviewed scientific journals, or significant publications in the leading international peer-reviewed journals of their respective field, or



research monographs. They may also demonstrate a record of invited presentations in well-established international conferences, granted patents, awards, prizes, or any other scientific achievements they deem relevant in relation to their research field and project. Link

Call for Proposals for ERC Synergy Grants (TOPIC ID: ERC-2023-SyG)

Opening Date: 13 July 2022 Deadline: 8 November 2022, 17 Brussels time

Budget: 1000000,00 EUR (maximum) for a period of 6 years

Other ERC Calls - TEMPTATIVE DATES The aim is to provide support for a small group of two to four Principal Investigators to iointly address ambitious research problems that could not be addressed by the individual Principal Investigators and their teams working alone. Svnergy projects should enable substantial advances at the frontiers of knowledge, stemming, for example, from the crossfertilization of scientific fields, from new productive lines of enquiry, or new methods techniques, including and unconventional approaches and investigations at the interface between established disciplines. The transformative research funded by Synergy Grants should the potential of becoming have а benchmark on a global scale.

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Principal Investigators must demonstrate the ground-breaking nature, ambition and feasibility of their scientific proposal. Principal Investigators must also demonstrate that their group can successfully bring together the scientific elements necessary to address the scope and complexity of the proposed research question.

One of the Principal Investigators must be designated as the Corresponding Principal Investigator. At any one time, one Principal Investigator per Synergy Grant Group except the Corresponding one can be hosted or engaged by an institution outside of the EU or Associated Countries.

Synergy Grants may be awarded up to a maximum of EUR 10 000 000 for a period of 6 years. The maximum award is reduced pro rata temporis for projects of a shorter duration. This does not apply to ongoing projects.

However, up to an additional EUR 4 000 000 in total 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 and/or (b) the purchase of major equipment and/or (c) access to large facilities and/or (d) other major field experimental and work costs, excluding personnel costs. As anv additional funding is to cover major one-off costs it is not subject to pro rata temporis reduction for projects of shorter duration. All funding requested is assessed during evaluation.

The 'Synergy Grant Group' applying for the ERC Synergy Grant must be made up of a



minimum of two and a maximum of four Principal Investigators with competitive track records and, as necessary, their teams.

Each Principal Investigator must present as part of the proposal either an early achievement track-record or a 10-year track-record, whichever is most appropriate for their career stage (see Starting, Consolidator and Advanced Grant profiles in the ERC Work Programme 2023). There is little prospect of an application succeeding in the absence of such a record.

<u>Link</u>

TEMPATIVE DATES

ERC Consolidator Grant 2023 – Opening date: 28/09/2022. Deadline: 02/02/2023. **ERC Advanced Grant 2023** – Opening date: 08/12/2022. Deadline: 23/05/2023. **ERC PROOF OF CONCEPT GRANTS 2023** – Opening date: 20/10/2022. Deadlines: 24/01/2023 - 20/04/2023 - 14/09/2023

HORIZON Europe Framework Program (HORIZON)

Call Research infrastructure services to support health research and accelerate the digital transformation (2022) (HORIZON-INFRA-2022-SERV-01)

Implementing digital services to empower neuroscience research for health and brain inspired technology via EBRAINS

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(TOPIC ID: HORIZON-INFRA-2022-SERV-01-01)

Deadline 21 September 2022, 17 Brussels time

Project results are expected to contribute to all the following outcomes:

- integrated multi-disciplinary collaborative tools and services widely serving the European neuroscientific community, providing them with FAIR data indexing and archival, multilevel data mining and modelling/simulation of brain functions, and empowering workflows for reproducible research;

- a rich collection of multilevel human brain models, atlases and workflows, directly supporting the research and development for personalised brain medical treatments e.g. target binding drugs, precise neurostimulation positioning and guided surgery, regarding brain diseases such as epilepsy. Parkinson. consciousness disorders, or rare or multi-factor diseases; - a comprehensive set of cognitive brain model scaffolds and associated modular / large-size neuromorphic and neurorobotic facilities for assisting the design and validation applicative cognitive of technologies benefitting from neurosciences latest knowledge, as enablers for autonomous and adaptive robotics approaches that use fast sensory decision-making processing and capabilities;

- supplementary population of EBRAINS with multidisciplinary facilities services/applications that answer wellidentified new neuroscience related S&T needs, in correlation with national and European research priorities for neuroscience, medicine brain and cognitive-technologies;



integration of EBRAINS with EOSC and linkage with common European data spaces in the life science and health sector;
better-aligned national investments in neuroscience across Europe, building on the Member States' and Associated Countries' specialised competence centres, which in turn will help creating additional synergies and enabling further research activities around the EBRAINS services.

Scope - Building on the EBRAINS architecture and base facilities developed under Horizon 2020, the scope of this action is to:

1. To implement a user-friendly service infrastructure along the principles of Infrastructure as a Service (IaaS) and Platform as a Service (PaaS) to widely serve the research communities in neurosciences, brain medicine and braininspired cognitive technologies. This includes the following dimensions:

Enabling the EBRAINS _ research infrastructure digital facilities supporting neuroscience dedicated tools and services, with a high quality of service including robustness, security, scalability, flexibility, usability and user-centricity. This includes a sustainable system for allocation and management of data capacities and of simulation and computing service resources.

- Establishing in-depth collaboration with teams from other European research and testing infrastructures and of EOSC, in order efficiency to ensure and harmonisation. e.g. regarding Authorisation, Authentication and Identification (AAI), Persistent Identifiers (PID), discovery ontologies and API for both services and data.

- Directly interfacing with the European HPC capacities towards exascale, deployed

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in EuroHPC and capitalising on the FENIX developments for big-data integration and interactive use.

- Delivering an efficient Europe-wide service to researchers, based on promoting excellence and innovation, and supporting users' digital experiments with the assistance of high-level support teams and feedback mechanisms, and guiding communities in developing novel software solutions that build on the EBRAINS base offering.

- Deploying an open metrics framework to assess the EBRAINS performances reached, the efficiency of the facilities offered in particular regarding the human-based services, and the uptake especially regarding the enabled science excellence and related results and the medical and technological innovation empowerment.

2. To develop, integrate in EBRAINS, and operate:

Constantly improving open science services/applications that respond to upto-date and upcoming identified needs of the neuroscientific community, with a codesign approach and in-depth engagement with scientific, medical and industrial stakeholders and the establishment of an appropriate and transparent prioritisation mechanism. This includes ensuring openness to other research groups and new applications; reaching out to scientific and industrial communities, including with tailored training and skills development programmes.

The deployment of complementary S&T services from regional or national competence nodes, supporting and enriching the cloud-based deliveries and facilitating the sharing of produced data and use of national resources.



In addition to the above, EBRAINS should open its approaches to other communities, going beyond neuroscience, for example by supporting compute-intensive simulation to identify candidate drugs addressing new disease targets in other explicit medical domains where this approach is justified.

The financial support to third parties mechanism (see specific call conditions) can be used to design and develop new services (under item 2) and/or to facilitate the co-design approaches and/or the targeted involvement of broader stakeholders, user communities and competence nodes.

<u>Link</u>

HORIZON Europe Framework Program (HORIZON)

Call: Research and Innovation actions supporting the implementation of the Mission on Cancer (HORIZON-MISS-2022-CANCER-01)

Improving and upscaling primary prevention of cancer through implementation research

TOPIC ID: HORIZON-MISS-2022-CANCER-01-01 Type of action: HORIZON-RIA HORIZON Research and Innovation Actions

Deadline: 7 September 2022, 17 Brussels time

For an increasing number of cancer indications potential mechanisms and means to prevent the onset of cancer have been identified. However, with cancer incidence steadily increasing across all age DIPARTIMENTO DI SCIENZE BIOMEDICHE, Odontoiatriche e delle Immagini Morfologiche e Funzionali

groups, parts of society, European Member States, Associated Countries and elsewhere, decisive action on primary prevention should be stepped up and made a collective responsibility. Implementing and upscaling of primary cancer-centred prevention programmes would contribute to achieving this goal.

Adoption and efficacy of primary cancer prevention programmes in real-life has been insufficient, due to factors related to local context, such as organisation and digitalisation of healthcare services, resources. cultural. and geographical То appropriately situation. adapt interventions and scale-up to different economic cultural geographical, and settings, proposals should aim at delivering results through implementation research, which are directed, tailored towards and contributing to all of the following expected outcomes:

- Citizens will benefit from the outcomes of evidence-based, tailored and affordable primary prevention programmes targeting known cancer risk factors and health determinants, including behavioural factors, that are tailored to the specific needs of local communities and effectively adopted;

- Healthcare professionals and patient organisations will be able to provide evidence-based information targeted at individuals and families on cancer prevention, including through vaccination, improved health literacy, issuing of better guidelines and counselling;

Regional and national policymakers and authorities will engage in implementing and scaling-up the most suitable prevention programmes, including possible legislative policies;



- Civil society, charities, foundations, and innovators will seize opportunities to further upscale and innovate primary prevention programmes at local, urban, rural, regional, national or international level.

Scope: Investments are needed to establish, scale-up or improve primary cancer prevention programmes. The barriers that uptake prevent their and effective implementation should be identified and addressed. Also, primary cancer prevention programmes should be tailored to the particular needs of the target populations, into account socio-economic, taking cultural geographical conditions. and Digital tools and datasets may be considered where needed.

Proposals should address all of the following: Focus on implementation and upscaling of evidence-based primary cancer prevention interventions, at local. regional or national level, addressing known risk or protective factors and determinants. Proposals should clearly justify and describe the existing evidence supporting the chosen intervention. including evidence of cost-effectiveness and affordability, across health or other sectors.

As effective prevention includes behavioural change, due consideration should be given to the factors that facilitate or impede behavioural change.

Identify and address the bottlenecks and barriers that might influence uptake and implementation of cancer prevention programmes in accessible, affordable and equitable ways, and their impact in a defined public health context.

Provide evidence and recommendations to inform policy and decision-makers and propose a pathway to integrate the DIPARTIMENTO DI SCIENZE BIOMEDICHE, Odontoiatriche e delle Immagini Morfologiche e Funzionali

intervention into local, regional or national health systems, policies and practices.

Applicants are required to co-create with stakeholders. including relevant representatives of citizens, people at risk of survivors. health cancer. patients. practitioners, payers, and policymakers in the design and conduct of research and evaluation of its outcomes. Such partners will be integral to the success and sustainability of the programme and it is essential that they are engaged early in the definition of problems and barriers.

Proposals should align with commitments or planned commitments at a regional or country level to implement evidence-based interventions. Researchers should collaborate closely with responsible authorities. The latter should provide the interventions and the financial means.

Approaches, methodologies and frameworks used should be specific to implementation science, and based on appropriate outcomes, such as feasibility, acceptability, sustainability, uptake and cost effectiveness.

The design of the proposed interventions should take the gender dimension and ethics into account, and contribute to reducing health inequalities.

The organisational and resource requirements (data, digital tools, personnel and financing) necessary for the implementation of the intervention must be described, tracked and evaluated in detail. The research and system-wide scientific monitoring should allow future users (researchers, healthcare providers, policy makers, and the public) to review the step-by-step, partial outcomes of the intervention, thus facilitating a wider adoption of these practices. The appropriate contextual, financial and



political-economic analyses should be provided.

Clinical trials and translational research are not within the scope of this topic.

requires the This topic effective contribution of social sciences and humanities (SSH) disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

Applicants should demonstrate awareness of relevant projects on implementation research in primary cancer prevention. Successful applicants will be asked to liaise with these different initiatives where applicable, with the Commission acting as a facilitator. Where applicable, funded actions should make use of resources made available by the Knowledge Centre on Cancer.

Furthermore, all projects funded under this encouraged topic are strongly to participate in networking and joint activities with other ongoing projects under the mission on cancer and other cancer relevant projects, as appropriate. These networking and joint activities could, for example, involve the participation in ioint workshops. the exchange of knowledge, the development and adoption of best practices, or joint communication activities. This could also involve networking and joint activities with projects funded under other clusters and pillars of Horizon Europe, or other EU programmes, as appropriate.

The Commission may facilitate Missionspecific coordination through future actions. Therefore, proposals should include a budget for the attendance to DIPARTIMENTO DI SCIENZE BIOMEDICHE, Odontoiatriche e delle Immagini Morfologiche e Funzionali

regular joint meetings and may consider covering the costs of any other potential joint activities without the prerequisite to detail concrete joint activities at this stage. The details of these joint activities will be defined during the grant agreement preparation phase and project duration. In this regard, the Commission will take on the role of facilitator for networking and exchanges, including with relevant initiatives and stakeholders, if appropriate. Link

Towards the creation of a European Cancer Patient Digital Centre

TOPIC ID: HORIZON-MISS-2022-CANCER-01-04 Type of action: HORIZON-CSA HORIZON Coordination and Support Actions

Deadline: 7 September 2022, 17 Brussels time

The overall goal of the Mission on Cancer and the Europe's Beating Cancer Plan includes a better quality of life for patients and their families living with, and after, cancer.

Project results will support the creation of a virtual European Cancer Patient Digital Centre (ECPDC), which is a federated network of patient controlled (national) health data infrastructures enabling the voluntary exchange of patients and survivors' health data in a standardised approach, for primary and secondary use.

To that end, proposals under this topic should aim for delivering results that are directed, tailored towards and contributing to all of the following expected outcomes:

Citizens, including cancer patients and survivors, are able to donate, access and manage their own clinical data, including



patient-reported outcomes (PRO), and have control over the access to these data in a secure, standardised, ethical and interoperable manner.

Citizens, including cancer patients and survivors, their families and caregivers have access to and use the ECPDC as a global centre of knowledge on cancer, including on prevention, diagnosis, treatment guidelines, treatment sideeffects, access to cross-border health care, psychosocial and legal support, including guidance and support on returning to work, addressing financial issues and asserting survivors' rights.

Tools are provided to clinicians allowing them to collaborate with patients to develop the best methods of care and personalized treatments regardless of their location.

Citizens, including cancer patients and survivors, receive information on personalised care through the ECPDC, which monitors data trends and provide insights on treatment side effects and other outcome measures based on standardised patient-reported outcome and experience measures, by aggregating and analysing large data sets using state-of-the-art secure cloud computing and data analytics and visualisation methods and tools, including AI.

Citizens, including cancer patients and survivors, are empowered in co-deciding on their care as well as in participating in research. The rights of patients are reinforced and their confidence in sharing their data for cancer research, innovation and policy development is increased.

Researchers, citizens, including cancer patients and survivors, and policy-makers have access to a valuable resource of aggregated patient data that are evolving DIPARTIMENTO DI SCIENZE BIOMEDICHE, Odontoiatriche e delle Immagini Morfologiche e Funzionali

over time, to correlate different sources of information and whereby disease trajectories of patient's and survivor's health could be inferred. This will improve the knowledge and understanding of cancer and its impact on the lives of citizens, including cancer patients and thus contributing survivors, to the development of improved diagnostics, treatment, care and quality of life support and to the development of policies.

Scope:

Patient-controlled health data networks in Europe show a high level of heterogeneity with regard to the involvement of EU Member States, as well as the types and interoperability of collected data, organisation and governance of data storage, its access and security, and the possibility to reuse data for research purposes.

Proposals should address the existing challenges and develop a roadmap towards the creation of the ECPDC as a virtual, federated network national of infrastructures of patient-controlled health data ('national or regional nodes'), taking into account synergies with the future UNCAN.eu platform, integrated within a larger European network of infrastructures, to which each Member State should have a single access portal.

The proposals should draw on existing expertise at the EU and national level and on EU- and Member State/Associated Country-tailored procedures for access, use and re-use of patient data. Moreover, synergies with the European Network of Cancer Registries should be established to ensure the ECPDC will create an ecosystem on knowledge of cancer. It could also include a call centre function.



In particular, proposals should take account of the results of a recently launched call on a pilot project for an EU infrastructure ecosystem for the secondary use of health data for research, policymaking and regulatory purposes, the future EU legislation on European Health Data Space (EHDS), the future Cancer Survivor Smart-Card, the cancer use case under the 1+Million Genomes initiative (1+MG), the Cancer Imaging Initiative as well as the European Open Science Cloud. Successful applicants will be asked to liaise with these different initiatives where applicable, with the Commission acting as a facilitator.

Accordingly, proposals should cover all of the following activities:

Actively engage and facilitate assessment of relevant existing patient-controlled health data networks at the EU and Member State/Associated Country level, to assess how the ECPDC will integrate and interact with existing national care pathways and the IT systems. А multidisciplinary team, including also users such as patients, care professionals and researchers, should be involved in the development of the proposed federated network.

Develop a roadmap outlining the necessary intermediate steps towards the creation of the federated network of national health data infrastructures, including technical requirements, governance aspects and timelines.

Design and perform a testing phase of the network before its release, allowing the adjustment of its tools/functionalities, validate the proposed approach and inform on how it could be scaled and sustained.

Analyse and provide solutions for extraction of health data, e.g. from the electronic health records, genomic DIPARTIMENTO DI SCIENZE BIOMEDICHE, Odontoiatriche e delle Immagini Morfologiche e Funzionali

databases (e.g. 1+MG), the Cancer Imaging Initiative and the future Cancer Survivor Smart-Card. Data protection rules should be taken into account.

Analyse and provide solutions for crossborder transfer of personal data and options to access and store patient data, taking into account the eIDAS, GDPR, other EU and national legislations, and the integration of the ECPDC within the European Health Data Space.

Establish robust communication and effective information exchange between diverse actors such as cancer patients and survivors, formal and informal caregivers, policy makers and researchers.

The funded actions should build upon resources made available by the Knowledge Centre on Cancer, and complement actions under the Europe's Beating Cancer Pla, including the Cancer Imaging Initiative, and the future European Health Data Space.

Furthermore, all projects funded under this strongly encouraged topic are to participate in networking and ioint activities with other ongoing projects under the mission on cancer (especially with UNCAN.eu) and other cancer relevant projects, as appropriate. These networking and joint activities could, for example, involve the participation in ioint workshops, the exchange of knowledge, the adoption development and of best practices, or joint communication activities. This could also involve networking and joint activities with projects funded under other clusters and pillars of Horizon Europe, or other EU programmes, as appropriate.

The Commission may facilitate Missionspecific coordination through future actions. Therefore, proposals should



include a budget for the attendance to regular joint meetings and may consider covering the costs of any other potential joint activities without the prerequisite to detail concrete joint activities at this stage. The details of these joint activities will be defined during the grant agreement preparation phase and project duration. In this regard, the Commission will take on the role of facilitator for networking and exchanges, including with relevant initiatives and stakeholders, if appropriate. Link

Strengthening research capacities of Comprehensive Cancer Infrastructures

TOPIC ID: HORIZON-MISS-2022-CANCER-01-02 Type of action: HORIZON-CSA HORIZON -Coordination and Support Actions

Deadline: 7 September 2022, 17 Brussels time

The Mission Board of the EU Mission on Cancer has defined Comprehensive Cancer Infrastructures as 'national or regional infrastructures that provide resources and services to support, improve and integrate cancer care, research, training of care professionals and education for cancer patients, survivors and families/carers.'

Today, the level of development of Comprehensive Cancer Infrastructures and their capacities, such as their digital, research and innovation-related capacities, vary considerably across Member States and Associated Countries, leading to inequalities, in particular in terms of research, quality and access to care.

The Horizon Europe Mission on Cancer will complement the set-up across Member States and several Associated Countries of DIPARTIMENTO DI SCIENZE BIOMEDICHE, Odontoiatriche e delle Immagini Morfologiche e Funzionali

an EU network of Comprehensive Cancer Centres that will be established through the Europe's Beating Cancer Plan by 2025. The Mission aims to achieve the target of ensuring that 90% of eligible cancer patients have access to Comprehensive Cancer Infrastructures by 2030. In that context, this topic should set up, across Member States and several Associated Countries, a capacity-building programme for countries of the EU network of Comprehensive Cancer Centres to be established through the Europe's Beating Cancer Plan, to support them in improving or developing their existing or future Comprehensive Cancer Infrastructures. focussing on developing their digital, research & innovation-related capacities and their integration with cancer care.

Proposals under this topic should aim at delivering results that are directed at and contributing to all of the following expected outcomes:

- Research and health policy makers will benefit from support to further develop or set up Comprehensive Cancer Infrastructures, leading to improvement in terms of research and access to care;

- Research and healthcare professionals will benefit from a better integration between research and care;

- Researchers will benefit from innovative infrastructures to perform research and participate in studies;

Citizens, including patients and their caregivers will have enhanced access to screening, diagnostics and treatments, improved care pathways and more integrated care. Their involvement and participation to clinical trials will be facilitated.

Scope: Building inter alia on the work carried out in several joint actions, the



work of organisations in the area of accreditation and certification, the work that will be carried out under the Europe's Beating Cancer Plan, as well as existing and potential future mappings, a capacitybuilding programme should be set up for Member States and several Associated EU network Countries in the of Comprehensive Cancer Centres, to be established through the Europe's Beating Cancer Plan, in order to help them develop or further improve digital, research & innovation-related capacities of future or Comprehensive existing Cancer Infrastructures.

Proposals should address all of the following:

The capacity-building programme should be organised over the course of three years, with at least one training session taking place in each Member State and those Associated Countries in the EU network of Comprehensive Cancer Centres, to be established through the Europe's Beating Cancer Plan. In the planning of the capacity-building programme, sufficient time should be allocated to ensure proper follow-up and implementation of the recommendations provided to the participating countries.

Each training session shall be tailored to the needs of the participating country. These needs shall be identified and discussed with the participating country prior to the session. This concerns in particular the required participants / stakeholder groups, duly reflecting health and research system specificities.

The capacity-building programme should start in countries with no existing Comprehensive Cancer Infrastructure, followed by those with some existing Comprehensive Cancer Infrastructures but DIPARTIMENTO DI SCIENZE BIOMEDICHE, Odontoiatriche e delle Immagini Morfologiche e Funzionali

needing substantial improvement, and then support the further development of Comprehensive Cancer Infrastructures in countries with an already established system.

The training sessions shall consist of balanced theoretical and practical parts, including simulations, case studies, group exercises, mutual learning exercises and on-the-spot visits (when possible) to gather practical experience.

At the end of each training session, a report shall be produced indicating the areas identified for improvement and suggesting recommendations and a follow-up for the participating country. This should include information on available EU (funding) instruments as well as any other suitable sources of support for the areas identified for improvement.

After the initial session, the project should provide an on-demand support service to the participating country(ies) to ensure proper follow-up and support for the implementation of the recommendations provided.

Proposals should consider, as part of this follow-up, to invite the country to participate to a supplementary and more focused session. The possibility of a twinning activity with another country which is more advanced on the areas identified for improvement should be explored as part of this follow-up.

Proposals should consider including the following areas of development or improvement of future or existing Comprehensive Cancer Infrastructures in their capacity building activities:

- Enhanced involvement in and quality of scientific research, including development and participation to clinical trials and epidemiological studies (e.g. clinical trial



design, process of trial approval, ethical aspects, recruitment, staffing and training requirements including digital skills. organisational aspects, regulatory requirements, core facilities. patient participation and empowerment (in the planning and implementation of patientoriented cancer research);

- Better integration between research and care programmes;

- Improvement of patient care pathways and integrated care;

- Development and use of indicators (e.g. quality, outcomes) and registries;

- Implementation of quality assurance and related standards;

- Support in accreditation and certification;

- Networking capacities (within and across Member States), including through improvement of data exchange capacities (e.g. interoperability and data protection related aspects);

- Gender-related aspects (with respect to representation in research and career pathways and any other relevant aspects).

At the end of the capacity-building programme, an overall report shall be produced, highlighting transferable best practices and lessons learned from the capacity-building programme and the support provided.

Due consideration should be given to other relevant EU-funded initiatives. This capacity-building programme should be built and conducted in full synergy and complementarity with the actions foreseen under the Europe's Beating Cancer Plan, with the Commission acting as a facilitator.

The funded action should build upon resources made available by the Knowledge Centre on Cancer.

Furthermore, the project funded under this topic is strongly encouraged to participate

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in networking and joint activities with other ongoing projects under the mission on cancer and other cancer relevant projects, as appropriate. These networking and joint activities could, for example, involve participation the in ioint workshops, the exchange of knowledge, the development and adoption of best practices, or joint communication activities. This could also involve networking and joint activities with projects funded under other clusters and pillars of Horizon Europe, or other EU programmes, as appropriate.

The Commission may facilitate Missioncoordination specific through future Therefore, actions. proposals should include a budget for the attendance to regular joint meetings and may consider covering the costs of any other potential joint activities without the prerequisite to detail concrete joint activities at this stage. The details of these joint activities will be defined during the grant agreement preparation phase and project duration. In this regard, the Commission will take on the role of facilitator for networking and including exchanges. with relevant initiatives and stakeholders, if appropriate. Link

Pragmatic clinical trials to optimise treatments for patients with refractory cancers

TOPIC ID: HORIZON-MISS-2022-CANCER-01-03 Type of action: HORIZON-RIA HORIZON Research and Innovation Actions

Deadline: 7 September 2022, 17 Brussels time



While cancer research and innovation have generated novel treatment options, cancer patients across Europe need access to more effective and patient-centred interventions which keep up with increasing demands in a complex and fragmented oncology healthcare landscape with spiralling healthcare costs.

Furthermore, the COVID-19 pandemic with its detrimental impact on cancer control has demonstrated the need for different clinical trial designs with fewer inclusion and exclusion criteria that would allow evaluation of real-world effectiveness driving better and more affordable treatment solutions that are widely accessible across EU regions, Member States and Associated Countries.

Pragmatic clinical trials focus on choosing between care options. Pragmatic trials evaluate effectiveness, the effect of treatment in routine (real-world) clinical practice. Some examples include treatment versus active surveillance in patient management, combination of treatment interventions, determination of optimal dose and dose schedule, de-escalation of treatment intervention. comparative effectiveness different of treatment interventions.

Proposals under this topic should aim for delivering results that direct, tailor towards and contribute to all of the following expected outcomes:

Cancer patients and their caregivers will have access to optimised and affordable treatment interventions that increase their quality of life, across EU regions, Member States and Associated Countries;

Healthcare professionals and academia will generate clinical evidence, by evaluating effectiveness in randomised or clusterrandomised academic investigator-

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initiated pragmatic clinical trials, how to best perform and deploy evidence-based treatment interventions that improve outcomes in real life for routine healthcare, including quality of life, for cancer patients who often present with co-morbidities; National healthcare providers. policymakers and authorities in EU Regions, Member States and Associated Countries will have the evidence to implement optimised and affordable treatments in their healthcare systems, including in everyday medical practice.

Scope - Proposals should address all of the following: design and conduct randomised cluster-randomised academic or investigator-initiated pragmatic clinical trials to deliver effective and evidencebased treatment interventions for implementation by healthcare systems at the level of local communities, EU Regions, Member States and Associated Countries. taking into account socio-economic and biological stratification, such as biology of the disease, gender, cancer stage, and age.

The chosen treatment intervention(s) should be adapted to the particular needs of the target population and to the specificities of the provision of care at local, regional, or national level, duly reflecting the diversity across Member States and Associated Countries. Furthermore, affordability and accessibility should be taken into account.

The successful proposals will address treatment interventions for patients with refractory cancers (cancers with a 5-year overall survival of less than 50% from time of diagnosis) at any stage of the disease, for any cancer subtype, in any age group or part of society.

The successful proposals should clearly justify and describe the evidence



supporting the chosen treatment intervention.

The primary and secondary endpoints of the pragmatic clinical trial should target overall survival, patient-preferred clinical benefit, patient-reported outcomes and quality of life issues considered important by and for cancer patients and their caregivers. Such endpoints should be defined together with patients and their caregivers through research models that use open knowledge, (social) innovation systems and support end-user engagement (e.g. living labs).

Implementers of pragmatic clinical trials and trial results should include physicians, academia, patients and their caregivers, patient representatives, payers, charities and foundations, research organisations, civil society, regional and national research and innovation organisations, and health authorities.

Successful pragmatic clinical trials, including their analyses, should be completed within 5 years after the start of the project. Translational research is not within the scope of this topic.

In all instances, sex- and gender-related issues must be taken into account. All data should be disaggregated by sex, gender, age and other relevant variables, such as by measures of socio-economic status.

This topic requires the effective contribution of social sciences and humanities (SSH) disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

All projects funded under this topic are strongly encouraged to participate in

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networking and joint activities with other ongoing projects under the mission on cancer and other cancer-relevant projects, as appropriate. These networking and joint activities could, for example, involve the participation in joint workshops, the exchange of knowledge, the development and adoption of best practices, or joint communication activities. This could also involve networking and joint activities with projects funded under other clusters and pillars of Horizon Europe, or other EU programmes, as appropriate.

The Commission may facilitate Missioncoordination through specific future Therefore, proposals actions. should include a budget for the attendance to regular joint meetings and may consider covering the costs of any other potential joint activities, without the prerequisite to detail concrete joint activities at this stage. The details of these joint activities will be defined during the grant agreement preparation phase and project duration.

In this regard, the Commission will take on the role of facilitator for networking and exchanges, including with relevant initiatives and stakeholders, if appropriate. Link

HORIZON Europe Framework Program (HORIZON)

MSCA Postdoctoral Fellowships 2022 (HORIZON-MSCA-2022-PF-01-01)

Deadline: 14 September 2022, 17:00:00 Brussels time

Project results are expected to contribute to the following outcomes:



1. For supported postdoctoral fellows

Increased set of research and transferable skills and competences, leading to improved employability and career prospects of MSCA postdoctoral fellows within academia and beyond;

New mind-sets and approaches to R&I work forged through interdisciplinary, inter-sectoral and international experience; Enhanced networking and communication capacities with scientific peers, as well as with the general public that will increase and broaden the research and innovation impact.

2. For participating organisations

Increased alignment of working conditions for researchers in accordance with the principles set out in the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers;

Enhanced quality and sustainability of research training and supervision;

Increased global attractiveness, visibility and reputation of the participating organisation(s);

Stronger R&I capacity and output among participating organisations; better transfer of knowledge;

Regular feedback of research results into teaching and education at participating organisations.

Scope - Fellowships will be provided to excellent researchers, undertaking international mobility either to or between EU Member States or Horizon Europe Associated Countries, as well as to nonassociated Third Countries. Applications will be made jointly by the researcher and a beneficiary in the academic or nonacademic sector.

Postdoctoral Fellowships either can take place in Europe (i.e. in an EU Member State or a Horizon Europe Associated Country) DIPARTIMENTO DI SCIENZE BIOMEDICHE, Odontoiatriche e delle Immagini Morfologiche e Funzionali

or in a Third Country not associated to Horizon Europe:

European Postdoctoral Fellowships are open to researchers of any nationality who wish to engage in R&I projects by either coming to Europe from any country in the world or moving within Europe. The standard duration of these fellowships must be between 12 and 24 months.

Global Postdoctoral Fellowships are open European nationals or long-term to residents[1] who wish to engage in R&I projects with organisations outside EU Member States and Horizon Europe Associated Countries. These fellowships require an outgoing phase of minimum 12 and maximum 24 months in a nonassociated Third Country, and a mandatory phase 12-month return to а host organisation based in an EU Member State or a Horizon Europe Associated Country.

Specific eligibility conditions apply to MSCA Postdoctoral Fellowships in the research areas covered by the Euratom Research and Training Programme 2021-2025.

Secondments - Researchers receiving a Postdoctoral Fellowship may opt to include a secondment phase, within the overall duration of their fellowship in any country worldwide. The secondment phase can be a single period or be divided into shorter mobility periods.

For European Postdoctoral Fellowships, secondments cannot exceed one third of the requested duration of the action (excluding from the duration of the action any additional period for a non-academic placement) and should be in line with the project objectives, adding significant value and impact to the fellowship.

For Global Postdoctoral Fellowships, optional secondments are permitted for up



to one third of the outgoing phase. A maximum of three months can be spent at the start of the project at the beneficiary (or associated partners linked to the beneficiary), allowing the researcher to spend time there before going to the associated partner in the Third Country. This period of maximum three months will be considered as part of the outgoing phase.

Secondments cannot take place during the mandatory twelve-month return period to the host organisation in an EU Member State or Horizon Europe Associated Country.

Placements in the non-academic sector -Postdoctoral Fellowships can provide an additional period of up to six months to support researchers seeking a placement at the end of the project to work on R&I projects in an organisation from the nonacademic sector established in an EU State or Horizon Member Europe Associated Country. While this possibility is also available to fellows recruited in the non-academic sector, such a placement must be implemented at a different nonacademic host organisation established in an EU Member State or Horizon Europe Associated Country. The request for such a placement must be an integral part of the proposal, explaining the added-value for the project and for the career development of the researcher, and will be subject to evaluation. It must be substantiated by a letter of commitment from the European non-academic organisation where the placement takes place. This incentive aims at promoting career moves between sectors and organisations and thereby stimulate knowledge innovation and transfer while expanding career opportunities for researchers.

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If the placement does not meet the requirements (missing letter of commitment or taking place in an academic organisation or in a Third Country), the proposal will be evaluated without taking into account the placement. This might affect the final score.

Training activities - The training activities implemented under the Postdoctoral Fellowships should include training for key transferable skills, foster innovation and entrepreneurship, (e.g. commercialisation of results, Intellectual Property Rights, communication, public engagement and citizen science) and promote Open Science practices (open access to publications and to research data, FAIR data management, etc.).

Career Development Plan - In order to equip MSCA postdoctoral fellows with skills that enhance and expand their career opportunities inside and outside academia. a Career Development Plan should be established jointly by the supervisor(s) and the researcher. In addition to research objectives, this plan should comprise the researcher's training and career needs, including training on transferable skills. teaching, planning for publications and participation in conferences and events aiming at opening science and research to citizens. The Plan will have to be submitted as a project deliverable at the beginning of the action and can be updated when needed.

Euratom - Aiming to enhance nuclear expertise and excellence as well as synergies between Programmes, organisations active in nuclear research established in one of EU Member States or countries associated to the Euratom Research and Training programme 2021-2025, are eligible to participate. MSCA



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Postdoctoral Fellowships in this area of research will be supported by the Euratom Research and Training Programme 2021-2025 through an indicative annual financial contribution of EUR 1 million to the MSCA Postdoctoral Fellowships call.

ERA Fellowships - The ERA Fellowships implemented through Work Programme Annex 11, Widening Participation and Strengthening the European Research Area, provide specific support to researchers to undertake their fellowship in a widening country. This will help spread excellence and contribute to fostering balanced brain circulation in widening countries. Link