

4th ENRF Briefing Note on Horizon Europe Get Prepared for Submission! Health Research in Horizon Europe



The <u>Horizon Europe Info Days 2021</u> aims to clarify some topics and to provide information that allow the success of Horizon Europe to potential participants/applicants.

One of the last Info Days was dedicated to the first cluster of Horizon Europe: the <u>Health Cluster</u>, that aims to improve and protect health and well-being of citizens through new

knowledge, innovative solutions and a gender perspective to prevent, diagnose and cure diseases. This cluster is based on the development of new health technologies to protect and promote safety and well-being, in general and at work. All this being closely linked to the goal of making the healthcare system more cost effective, sustainable and accessible in order to tackle and combat poverty-related diseases and include patient participation and self-management.

On 16 June, the European Commission adopted the main work programme of Horizon Europe for the period 2021-2022 (See here the Missions), which outlines the objectives and specific topic areas that will receive a total of €14.7 billion in funding, most of which will be invested in research and innovation to accelerate the green and digital transitions, and to contribute to sustainable recovery from the coronavirus pandemic and to EU resilience against future crises. The objective is to support European researchers through fellowships, training and



exchanges, build more connected and efficient European innovation ecosystems and create world-class research infrastructures. Moreover, they will encourage participation across Europe and from around the world, while at the same time strengthening the European Research Area. The first calls for proposals were launched see here.

As regards health, the Horizon Europe strategic plan, defining the key strategic orientations for the first four years (2021-2024) of Horizon Europe, describes the **Health Cluster** (Cluster 1) and its expected impact, raising that the "research and innovation actions under this cluster will be key to address health-related challenges by advancing knowledge and capabilities, improving our understanding of health and diseases, developing innovative methodological and technological solutions to better manage health and diseases, and designing sustainable approaches for the digital transformation and delivery of integrated, person-centred and equitable health and care services with improved accessibility and health outcomes supported by needs-driven innovation and reliable supply chains in Europe".

The **Health Cluster** is divided into **6 different destinations/expected impacts**:

 Destination 1 - Staying Healthy in a rapidly changing society - The main goal is to tailor access to healthy solutions, which include Research and innovative actions and Coordination and support actions.

Useful tips on **digital topic** to keep in mind, for a successful proposal:

- o Involvement of patients and citizens in the development of digital tools they really need.
- Development of a coordinated digital health literacy strategy at EU level in order to support and empower citizens to use digital tools.

Destination 1: Topics in 2021 - Single stage HORIZON-HITH-2021-STAYHITH-01-02: · HORIZON-HLTH-2021-STAYHLTH-01-03: Towards a molecular and neurobiological understanding of mental health and mental illness for Supporting digital empowerment health literacy of citizens Closure: 21.09.2021 the benefit of citizens and patients · Instrument: CSA · Closure: 21.09.2021 Tot: 3M€ · Instrument: RIA Project size: 3M€ Tot: 60M€ Project size: 10M€ HORIZON-HLTH-2021- STAYHLTH-01-05-Mobilising National Contact points for the Health Cluster HORIZON-HLTH-2021- STAYHLTH -01-04: A roadmap for personalised prevention Closure: 21.09.2021 Closure: 21.09.2021 Instrument: CSA Tot: 3M€ Instrument: CSA Tot: 3M€

- o Involvement of public authority as public education and institutions in the digital literacy process.
- Destination 2 Living and working in a healthpromoting environment - focussing on the impact of climate change, EMF technologies and studies on indoor air quality on the health of citizens.

Useful tips on to keep in mind, for a successful proposal:

- This phase is dedicated to all proposals which promote solutions in terms of climate change, the impact of EMF technologies (as 5G) on the population and the indoor air quality. All related studies at these arguments are eligible.
- To know if a country is eligible for funds, the applicants can consult the <u>Program Guide</u>. For example,
 Switzerland is considered as a third country with a high income As such, it can participate in the projects, but with its own funds.
- Destination 3 Tackling diseases and reducing disease burden - focussing on clinical validation of the development of AI.

Useful tips on to keep in mind, for a successful proposal:

- This destination focuses on the development of new knowledge on virus (not only COVID) and on communicable diseases.
- The main interest of the topic are treatments and care, but also provide risk assessment. The applicants can choose the intervention areas.
- The expected duration of the project is connected to the applicants' proposals. So, it changes according to their activities.
- US and all African countries are eligible for funds. For more information, consult the Program Guide
- It is not recommended to start clinical trials before the project approval. In this case, all the risks are borne by the consortium.
- 4. <u>Destination 4</u> Ensuring access to innovative, sustainable and high-quality health care

Useful tips on to keep in mind, for a successful proposal:

- This health crisis put the light on the need to reinforce the resilient of the healthcare system > digital transformation and data driven innovation are needed.
- Destination 4: Topics in 2021

 HORIZON-HLTH-2021-CARE-05-01: Data-driven decision-support tools agation safety
 Closure 21 09.2021
 Total: 25Me
 Project size: 5Me

 HORIZON-HLTH-2021-CARE-05-02: Health care delivery and policy-making with a focus on cancer
 Closure 21 09.2021
 Instrument RIA
 Total: 40Me
 Project size: 10Me

 HORIZON-HLTH-2021-CARE-05-04: Health care innovation procurement network of the later of the lat
- The disease approach has to be person centred.
- o Special focus on <u>Cancer</u> for 2021.
- o It is possible to focus on one specific medical area, but would prefer a more holistic approach.
- o No specific technology target to be considered. But, EU Health Data Space has to be considered.
- Involve all national and local actors to procure innovation.
- The proposal has to address primary and secondary care



e: 21,09,2021

Destination 2: Topics in 2021

21.09.2021

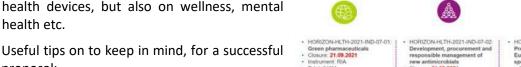
5. Destination 5 - Unlocking the full potential of new tools, technologies and digital solutions for a healthy society — focussing on the emerging and disruptive technologies to promote well-being of citizens. It is important to consider who will be the users for creating affordable tools and digital solutions for citizens to have high quality outcomes.



Destination 6: Topics in 2021

Useful tips on to keep in mind, for a successful proposal:

- Demonstrate how the proposal can contribute to build the EU Health Data Space guarantee a better access to data and data sets.
- Cross border aspects are extremely important for this topic.
- o The proposals can cover cancer research, but it has to specify the cancer area it refers to.
- o On privacy issues, all legal law will be taking into account in order to protect privacy.
- Destination 6 Maintaining an innovative, sustainable and globally competitive health related industry – focussing not only focus on health devices, but also on wellness, mental health etc.



proposal:

o Green pharmaceuticals: this call aims to promote green manufacture and

 Green pharmaceuticals: this call aims to promote green manufacture and pharmaceutical production.

- Sustainable dimension introduced in the pharmaceutical strategy to promote more sustainable technologies.
- o Take into account the sustainability of the production in the digital transformation process
- o Target all elements related to manufacture process, environmental process, and green pharmaceutical.

This health Cluster will support the following two Horizon Europe key strategic orientations for R&I and impact areas associated to them:

KEY STRATEGIC ORIENTATIONS FOR R&I	KSO A: Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains	KSO D: Creating a more resilient, inclusive and democratic European society	
IMPACT AREAS	Competitive and secure data-economy High quality digital services for all	A resilient EU prepared for emerging threats Good health and high-quality accessible healthcare	
EXPECTED IMPACTS	 5. Unlocking the full potential of new tools, technologies and digital solutions for a healthy society 6. Maintaining an innovative, sustainable and globally competitive health-related industry 	 Staying healthy in a rapidly changing society Living and working in a health-promoting environment Tackling diseases and reducing their burden Ensuring access to innovative, sustainable & high-quality health ca 	

R&I expected impacts, cluster intervention areas, and Horizon Europe partnerships:

EXPECTED IMPACT ¹	INTERVENTION AREAS COVERED	EUROPEAN PARTNERSHIPS	
Staying healthy in a rapidly changing society ()	1.2.1. Health throughout the Life Course 1.2.2. Environmental and Social Health Determinants		
2. Living and working in a health- promoting environment ()	1.2.2. Environmental and Social Health Determinants 1.2.1. Health throughout the Life Course	Partnership on Risk Assessment of Chemicals	
Tackling diseases and reducing disease burden ()	1.2.3. Non-Communicable and Rare Diseases 1.2.4. Infectious Diseases, including poverty-related and neglected diseases	EU-Africa Global Health Partnership ² Rare Diseases One Health AMR Fostering a European Research Area for Health Research (ERA for Health)	
4. Ensuring access to innovative, sustainable and high-quality health care ()	1.2.6. Health Care Systems	Transformation of Health Care systems Pandemic Preparedness	
5. Unlocking the full potential of new tools, technologies and digital solutions for a healthy society ()	1.2.5. Tools, Technologies and Digital Solutions for Health and Care, including personalised medicine	Personalised Medicine	
Maintaining an innovative, sustainable and globally competitive health-related industry ()	1.2.5. Tools, Technologies and Digital Solutions for Health and Care, including personalised medicine 1.2.6. Health Care Systems	Health Innovation Partnership (Innovative Health Initiative) ²	

This practical session on the Health Cluster shed the light on what it is necessary to do to success in the Horizon Europe. Pay attention to these aspects and do not miss the opportunity!!!

ENRF Briefing Note - 04 September 2021

Third ENRF Briefing Note on Horizon Europe - 08 May 2021 (Second ENRF Briefing Note on Horizon Europe - see below page 8 - First ENRF Briefing Note on Horizon Europe – see below page 11)

Aiming to help potential applicants to Horizon Europe calls on preparing their proposals, the EU meeting on "A successful proposal for Horizon Europe" focussed on better understanding what the needed steps are to present a successful proposal for Horizon Europe.

"It is essential to carefully choose the necessary scientific and technical excellence to success in a very competitive selection process as Horizon Europe" as stated by Peter Haertwich, Head of Unit for Research and Innovation at European Commission.

As a starting point, Angelica Marino presented the impact-driven Framework Program of Horizon Europe Cycle articulated into 3 points to take in consideration to measure the project impact:

HORIZON EUROPE CYCLE Impact-driven Framework Programme **IMPLEMENTATION** IMPACT DESIGN Strategic Plan Intervention logic Work Programme Clusters, destinations, missions, Proposal template Project reporting IMPACT TRACKING & EVALUATION Monitoring Key Impact Pathways Management 8 Implementation Data Interim and ex -post evaluation

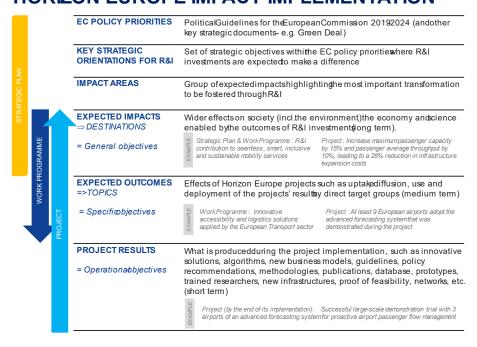
Candidate Institutionalised European Partnership based on Article 187 TFEU that requires the preparation and adoption of a Commission

- 1. **Impact Design** measured in 3 types of impact based on:
 - **Scientific Impact** based on promoting scientific excellence, supporting the creation of new knowledge, skills and researchers' mobility, attract new talents;
 - **Societal Impact** based on generating new knowledge, strengthen the impact of R&I to support and implement Union policies and to adopt innovative solutions to address global challenges;
 - **Economic Impact** based on promoting all innovation forms, supporting the technological development and the diffusion of innovative solutions.

2. Implementation Impact with specific focus on:

- Strategic Planning including:
 - EC Political priorities→ Political Guidelines for the European Commission 2019-2024 (and other key strategic documents - e.g. Green Deal);
 - Key Strategic Orientation for R&I→ strategic objectives defined within the EC policy priorities;
 - o **Impact Areas**→ group of impacts expected;
 - o **Expected Impacts**→ wider effects on society, economy and science.
- Work Program including:
 - Expected Impacts→ wider effects on society, economy and science;
 - Expected outcomes→ effects of Horizon Europe projects such as uptake, diffusion, use and deployment of the projects' results by direct target groups (medium term).
- Project Impact including:
 - **Expected Impacts** → wider effects on society, economy and science.
 - Expected outcomes → effects of Horizon Europe projects such as uptake, diffusion, use and deployment of the projects' results by direct target groups (medium term).
 - **Project Results** what is produced during the project implementation such as innovative solutions, algorithms, new business models.

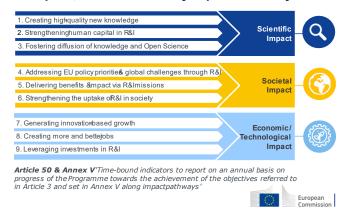
HORIZON EUROPE IMPACT IMPLEMENTATION



3. Impact Tracking and Evaluation with a specific focus on Monitoring Key Impact Pathways:

- Scientific Impact: Creating highquality new knowledge, Strengthening human capital in R&I and Fostering diffusion of knowledge and Open Science;
- Societal Impact: Addressing EU policy priorities and global challenges through R&I, Delivering benefits and impact via R&I missions and Strengthening the uptake of R&I in society;
- Economic/ Technological impact: Generating innovation-based growth, Creating more and better jobs and Leveraging investments in R&I.

HORIZON EUROPE LEGISLATION defines three types of impact, tracked with Key Impact Pathways



Angelica Marino concluded underlying how fundamental it is to measure the **impact criteria** to evaluate how the project impacts contribute on the **outcomes**.

loannis Sagias stated that communication, dissemination, exploitation and IP management are important in the proposal and focused on the definition of the results for policymakers, civil society and citizens. Key results of the project allow partners to measure the impact of the project. Other definitions important for the project are:

- **Communication** which helps to measure how to promote actions to the audience, through media and public.
- Dissemination which promotes public disclosure of the results by appropriate means, including by scientific publications in any medium.
- **Exploitation** based on the use of results in further research and innovation activities, including commercial exploitation such as developing, creating, manufacturing and marketing a product or process, creating and providing a service, or in standardization and policy making activities.

For the first time, Horizon Europe is stipulated in a <u>legal basis</u>: **Article 35 – Exploitation and Dissemination**:

- "Each beneficiary that has received Union funding shall use its best efforts to exploit the results it owns, or to have them exploited by another legal entity. Exploitation may be direct by the beneficiaries or indirect in particular through the transfer and licensing of results in accordance with Article 40"
- "Beneficiaries shall disseminate their results as soon as it is feasible, in a publicly available format, subject to any restrictions due to the protection of intellectual property, security rules or legitimate interests."

Moreover, the <u>Horizon Results Platform</u> has been created to facilitate networking, partnership and sharing results.

All the **progress** has to be reported to the **European Commission** for allowing to measure impact and intervene, if it is necessary, and respond to any needs. Therefore, some **elements** have to be considered when drafting Dissemination, Exploitation, Communication and IP management parts of the proposals. It needs to include:

- A measure plan to monitor the project;
- Concrete actions and targeting the right stakeholders during and after the implementation of the project;
- Follow up plans and choose the right channel to reach audience.

Regarding the **communication**, it is necessary to implement a clear strategic objectives to reach the target through media, measure media impacts and inform the society about the benefits of the project. The results have to be spread with a targeted audience.

Management of results is another fundamental point to take in consideration; it is essential to protect results facilitating the correct transferred of them. At this stage, the **IP strategy** is crucial.

Regarding the **proposal template**, some useful tips to know are:

- Collect as much as possible structured data that can be used for reporting purposes;
- Facilitate easier comparison between proposals (use of tables, charts, etc.);
- Ensure links with EC and external data sources and encourages the use of external single identification as ORCID;
- Facilitate the clustering of projects.

Victoria Tsoukala <u>made</u> a distinction between **H2020** based on the **Open Access** and, the Horizon Europe, based on the **Open Science (OS)** connected to a more legal base. Open science is a way of doing research that affect the project process. As defined by the **Horizon Europe Regulation and Model Grant Agreement**, "**Open science** means **an approach** to the scientific process based on open cooperative work, tools and diffusing knowledge".

It ensures excellence and impact, and the work program provides incentive to increase the use of Open Science. As Victoria Tsoukala said, the Open Science practices involve relevant actors as citizens and civil society and it is an important contribute for the research activities. Open Science is subjected to the evaluation of 2 criteria: **Excellence Criterion** and **Quality Implementation Criterion**.

The Excellence Criterion relates to the methodology used to describe OS practices, research data/output management and to evaluate the quality of open science practices; the Quality Implementation Criterion relates to the capacity of participants and consortium as a whole and the list of the achievements.

Finally, she listed 3 Model Grant Agreement requirements:

- 1. Open access to scientific publications
- 2. Research Data Management
- 3. Additional open science practices

In this context, it emerged that the **Trusted Repository** is a new technical requirement in the long term and reusable to everyone.

Anne Pepin <u>stated</u> that there are still persisting gender inequality in the science field and in general. Horizon Europe legal bases aim to strength gender equality translated in the introduction of specific requirements. Anne focussed therefore on:

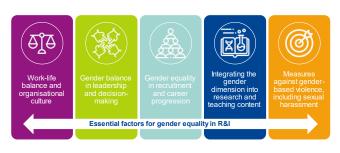
- 1. Eligibility Criteria: Gender Equality Plan (GEP)
- 2. Award Criteria: Integration of Gender Dimension
- 3. Ranking Criteria: Gender balance

On the **first** point, there are **4 mandatory GEP process requirements** with a list of actions which need to put in place:

- **Public Document:** Formal document; Signed by top management; Published on the institution's website; and Disseminated through the institution.
- Dedicated Resources: Funding for gender equality positions or teams; and Reserved time for others to work on gender equality.
- **Data collection and monitoring:** Data on sex or gender of staff across roles and leadership; and Annual reports and evaluation of progress and outcomes.
- Training and capacity building: Whole organisation engagement; Tackle gender biases of people and decisions; and Joint action on specific topics.

The integration of gender dimension in the innovation context means integrating gender in the analysis, in the methodology, in the evaluation, in reporting the results. Gender Equality in Research and Innovation area can benefit the entire research activity and the outcomes.

Recommended GEP content areas





Angelica Marino concluded underling key policy issues:

- Do not significant harm principle (1) "In line with the European Green Deal objectives, research and innovation activities should comply with the 'do no significant harm' (DNSH) principle according to which the research and innovation activities should not be supporting or carrying out activities that make a significant harm to any of the six environmental objectives, within the meaning of Article 17, on the establishment of a framework to facilitate sustainable investment (EU Taxonomy Regulation)". Six environmental objectives to which no significant harm should be done: climate change, sustainable use and protection of water and marine resources, pollution prevention and control, climate change adaptation, transition to a circular economy, protection and restoration of biodiversity and ecosystems.
- Do not significant harm principle (2) Compliance needs to be assessed both for activities carried out
 during the course of the project as well as the expected <u>life cycle impact of the innovation at a
 commercialization stage</u> (where relevant). Particular consideration of activities compliance with the
 DNSH principle is expected for <u>Cluster 4, 5, and 6</u> due to an increase potential of negative environmental
 outcomes and impacts of projects.

Other documents available:

- Standard Application Form (RIA/IA)
- General Model Grant Agreement
- General Equality in Academia Research GEAR Tool

ENRF Briefing Note - 08 May 2021

Second ENRF Briefing Note on Horizon Europe - 22 March 2021

The European Commission adopted the first <u>Strategic Plan for Horizon Europe</u> allocating € 95,5 billion in research and innovation priorities to create a more sustainable future. The strategic plan defines how the investments will be allocated in each sector in the next four years. The plan provides that the EU research and innovation actions concur to implement <u>EU priorities</u>, which include a greener Europe, better economy and a Europe able to welcome and manage the digital transformation.

In this context, Horizon Europe pays great attention to the **resilience of the health system** with the purpose of creating a more competitive and sustainable health industry, guaranteeing the possibility of achieving learning in innovative and digital health technologies. All this will favour not only the provision of a **high-quality health services**, but also the **creation of new jobs**.



Margrethe Vestager, Executive Vice-President for a Europe fit for the Digital Age, said: "This Plan provides a frame for top quality, excellence-based research and innovation to be delivered with the Horizon Europe Work Programme. With this strategic orientation we ensure that research and innovation investments can contribute to a recovery process based on the twin green and digital transition, resilience and open strategic autonomy."



Mariya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth, stated: "The strategic plan's orientations will ensure that our common EU policy priorities benefit from new knowledge, ideas and innovation. This new approach is another way to make sure that the research and innovation funded by the EU will address the challenges faced by Europeans."

The <u>Strategic Plan 2021-2024</u> provides **4 different strategic orientations** to allocate research and innovation investments in the different sectors for the next **four years**:

- Promote a strategic autonomy to implement the development of a digital and technological society.
- Restore Europe's ecosystem and biodiversity and manage resources in a sustainable way.
- Make Europe the first economy climate-neutral, sustainable and digital.
- Create a more resilient, inclusive and democratic society.

As already explained in a previous <u>Briefing Note</u>, Horizon Europe foresees an investment in **6 clusters**. These clusters include the **Health cluster** which aims to guarantee and increase Europe's greater autonomy in the provision of health care by contributing to the implementation of **safer**, more **effective** and **accessible digital tools** and **technologies** for everyone to give a better promotion of health and disease prevention and closer patients' monitoring to improve **the health and well-being** of citizens. This cluster aims to improve the understanding of health and diseases developing innovative **methodological and technological solutions** to manage health and diseases and to define digital transformation approaches which guarantee **person-centred** and **equal access** to the health care services.

The list below provides topic titles that are marked with an application deadline of **21 September** in the <u>latest</u> <u>draft of the work programme</u> updated in March 2021:

Topic title	Project type	Budget (M Euro)
Towards a molecular and neurobiological		
understanding of mental health and mental illness for		
the benefit of citizens and patients	RIA	10
Supporting digital empowerment and health literacy –	CCA	,
Healthy citizens 2.0	CSA CSA	3
A roadmap for personalised prevention Mobilising the network of National Contact Points in	CSA	3
the Health Cluster	CSA	3
Exposure to electromagnetic fields (EMF) and health	RIA	8
Indoor air quality and health	RIA	8
Health impacts of climate change, costs and benefits of	TAI A	, and the second
action and inaction	RIA	10
Towards improved supportive, palliative, survivorship	TO T	10
and end-of-life care of cancer patients	RIA	6
Building a European innovation platform for the		, and the second
repurposing of medicinal products	RIA	25
Innovative approaches to enhance poverty-related		
diseases research in sub-Saharan Africa	RIA	8
Clinical validation of artificial intelligence solutions for		
treatment and care	RIA	6
A roadmap towards the creation of the European One		
Health antimicrobial resistance partnership (OH AMR)	CSA	0,5
Building a European Research and Innovation		
Partnership for Pandemic Preparedness	CSA	2
Personalised medicine and infectious diseases:		
understanding the individual host response to viruses		
(e.g., SARS-CoV-2)	RIA	7
Enhancing quality of care and patient safety	RIA	5
Data-driven decision-support tools for better health		
and care delivery and policy-making	RIA	10
Health and care innovation procurement network	CSA	5
Smart medical devices and their surgical implantation		
for use in resource-constrained settings	IA	6
Next generation advanced therapies to treat highly		
prevalent and high burden diseases with unmet needs	RIA	6
Innovative tools for use and re-use of health data (in		
particular electronic health records and/or patient	DIA	_
registries	RIA	8
Green pharmaceuticals Development procurement and responsible	RIA	8
management of new antimicrobials	CSA	2
Promoting a trusted mHealth label in Europe: uptake of	CJA	
Technical specifications for "Quality and Reliability of		
Health and Wellness Apps"	CSA	2
ricatul and weilliess Apps	COA	I 2

International cooperation is fundamental to achieve all these orientations and to face all future global challenges. The strategic plan identifies the <u>European co-funded and co-programmed partnerships</u> and the <u>EU missions</u> supported though Horizon Europe. The partnerships will concern areas as energy, transport, biodiversity, **health**, food and circularity, and will complete the ten <u>Institutionalised European Partnerships</u> proposed by the Commission in February.



The <u>EU missions</u> will cover **global challenges** which we have to face every day by implementing ambitious goals as fighting cancer, adapting to climate change, protecting our oceans, making cities greener and ensuring soil health and food. The main purpose of the EU missions is to tackle and face complex issues and difficulties by using **research projects** and **policy measures.**

The plan is also concentrated on horizontal issues as gender, which will be a fundamental requirement in research and innovation.

The <u>Factsheet: Horizon Europe Strategic Plan</u> and the <u>National Contact Point</u> provide guidance, information and assistance on the participation in Horizon 2020 for each countries. The priorities provided by Horizon Europe's strategic plan will be implemented by the Horizon Europe work programme through a calls' system. The fist <u>calls</u> <u>for proposals</u> will be opened in the spring 2021 and will be presented at <u>European Research and Innovation Days</u> on 23-24 June.

On 24 March, the Webinar: How to prepare a successful proposal in Horizon Europe in which it will cover arguments as the <u>standard proposal template</u>, basic principles, evaluation criteria and it will be present a draft of the <u>General Model Grant Agreement</u>, a funding agreement concluded between the European

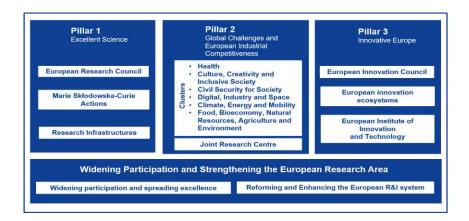
Commission/funding agency and the project participants to specify the rights and obligations of the contracting parties.

In conclusion, this follow-up shows the concreteness and feasibility of Horizon Europe as a fundamental instrument to implement and improve research and innovation in every sector and, above all, in health one. A big budget allocated represents a big opportunity for nursing research to improve and to demonstrate the essentiality of their work and their contribution to research. Nursing Research Community needs to strengthen its efforts to move into Horizon Europe!

ENRF Briefing Note - 22 March 2021

First ENRF Briefing Note on Horizon Europe - 26 February 2021

European Commission established that <u>Horizon Europe</u> will provide € 948 million for the health research across 6 topics, according to the <u>Draft Work Program 2021-2022</u> published in January. The final version will be published in April by the Commission with the rest of the Horizon Europe work programmes. The first calls on these 6 topics will open on 22 April and will cover disease prevention, environment and health, fight against major diseases, innovation of health systems, the development of digital health tools and the promotion of a competitive European health industry.



In greater detail, the 6 topics as described in the January work program:

Staying Healthy

This pillar focuses on promoting greater investigation into the causes that lead to diseases and better prevention of them. For 2021, more in-depth studies are expected on diseases related to obesity, aging, mental health, prevention and digital health literacy. In addition, the European Commission plans to support and implement the use of AI to predict and prevent the risk of chronic diseases. The budget made available for this year is € 69 million, of which € 60 million to investigate the molecular and neurobiological basis of mental health and disease, € 9 million will go to finance 3 projects in support of digital empowerment and health literacy. For 2022, a budget of 220 million is planned for this pillar. € 170 million will be allocated for proposals on improving mental health and the development of AI tools to predict and prevent the risk of chronic diseases and obesity. Another € 50 million, due on 21 April 2022, will fund projects that develop personalized schemes on chronic inflammation in the transition from health to disease.

Environment & Health

This pillar was born out of the need of the European Commission to clarify a better understanding of the environmental impacts on people's health, investigating the effects of pollution, chemicals, climate and other factors. For 2021, the European Commission has set up a budget of € 130 million for projects that will investigate: the effects produced by electromagnetic fields on health; on the relationship between health and air quality; and on the impact of climate change on health. Another € 200 million planned to facilitate public-private partnerships on the measurement of risks deriving from chemical products. For 2022, a € 20 million call is foreseen, expiring on 21 April 2022, to finance 5 projects, developing new methods for assessing the costs of environmental stress factors related to health.

Tackling Disease

For this pillar, the European Commission plans to allocate € 262,5 million, in 2021, to finance the improvement of care for cancer patients, the enhancement of research on poverty-related diseases in Africa, the implementation of related care tools to AI and understanding the patient's response to the virus that attacks it. For 2022, the disbursement of € 227 million is planned, divided into two calls: the first of € 160 million will support the preclinical development of next generation immunotherapies, the development of new vaccines and new therapies for rare diseases; the second of € 37 million will concern projects aimed at better preparedness to face future pandemics and at reducing the risks of noncommunicable diseases in young people. It is expected that an additional € 30 million will be made available for the creation of public-private partnerships in the field of health research.

Innovative Healthcare

The objective of the calls allocated to this pillar is to modernize health systems by improving their quality and developing new effective and efficient tools and methods for the benefit of all. For 2021, the planned budget is € 70 million. It will be used to finance projects dedicated to improving the quality of care and safety of the people and the creation of a supply network. Another € 70 million will be allocated for 2022. An additional € 100 million will be made available to facilitate the creation of public-private partnerships for the transformation of health and care systems.

Digital Tools

In 2021, the European Commission plans to launch a tender of € 115 million for projects that will develop digital medical devices; therapies to treat highly prevalent diseases with unmet needs; and tools for the use and reuse of health data. The goal is to accelerate the development and digitalisation process of health systems. For 2022, a budget of € 155 million is foreseen: € 95 million for projects that will focus on optimizing drugs using biomarkers and discovering new methods for efficient use of data; € 60 million for 19 projects. Analysis on the implementation of new strategies for patient stratification.

Competitive Health industry

For 2021, the European Commission plans to allocate € 44 million to make the healthcare industry innovate by making it more resilient and competitive. The allocated budget will go to projects that tackle the problem of pollution caused by drugs. For 2022, the planned budget is € 69 million and the aim is to support projects aimed at improving the cybersecurity of digital health tools.

Below, 3 documents which can be helpful:

- Horizon Europe Work Programme (Draft version January 2021)
- The <u>Horizon Europe Strategic Plan</u> (2021-2024) (Version November 2020)
- Horizon Europe Programme Proposal Template (This is just an example)

It is clear and evident that Horizon Europe stands as a tool of fundamental importance for the advancement of research and the achievement of better results in the health sector. Therefore, in order to achieve these goals, the European Union has made available a large budget. In this context, the nursing researchers will play a leading role in the creation of a more innovative, digital and resilient health system able of facing all the new challenges that will arise. Once again, nurses will have to take the field to implement this new transformation.

ENRF Briefing Note - 26 February 2021

European Nursing Research Foundation (ENRF) Registration Number : 0533.978.961 Clos du Parnasse 11B, 1050 Brussels, Belgium Tel: +32 2 511 34 84 - Fax: +32 2 512 35 50

Email: enrf@enrf.eu - Web: www.enrf.eu