Le opportunità H2020 per l'area Salute

Caterina Buonocore

H2020 National Contact Point SC1 e Infrastrutture

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Health Research opportunities around H2020

Collaborative R&I projects

Public-Private Partnership with big Pharma

Public-Public Partnerships with EU Member States & beyond

Grants for small businesses

Horizon 2020

SME Instrument · eurostars

FAST TRACK TO INNOVATION IN HORIZON 2020

innovative medicines initiative

E D C T P

AAL PROGRAMME

JPND research

jpiamr

MORE YEARS
BETTER LIVES

Blue sky research

InnovFin
Loans for small & large companies

Horizon Prize BIRTH DAY
Prizes

Education – R&D - Innovation

eit Health

European Research Council · erc

FET Horizon 2020

HORIZON2020 Marie Skłodowska-Curie actions

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Health research in Horizon 2020

Collaborative health research (SC1)

Public-private partnership

Frontier research

Support to innovation

Human Brain Project

Modelling & predictive (neuro)sciences
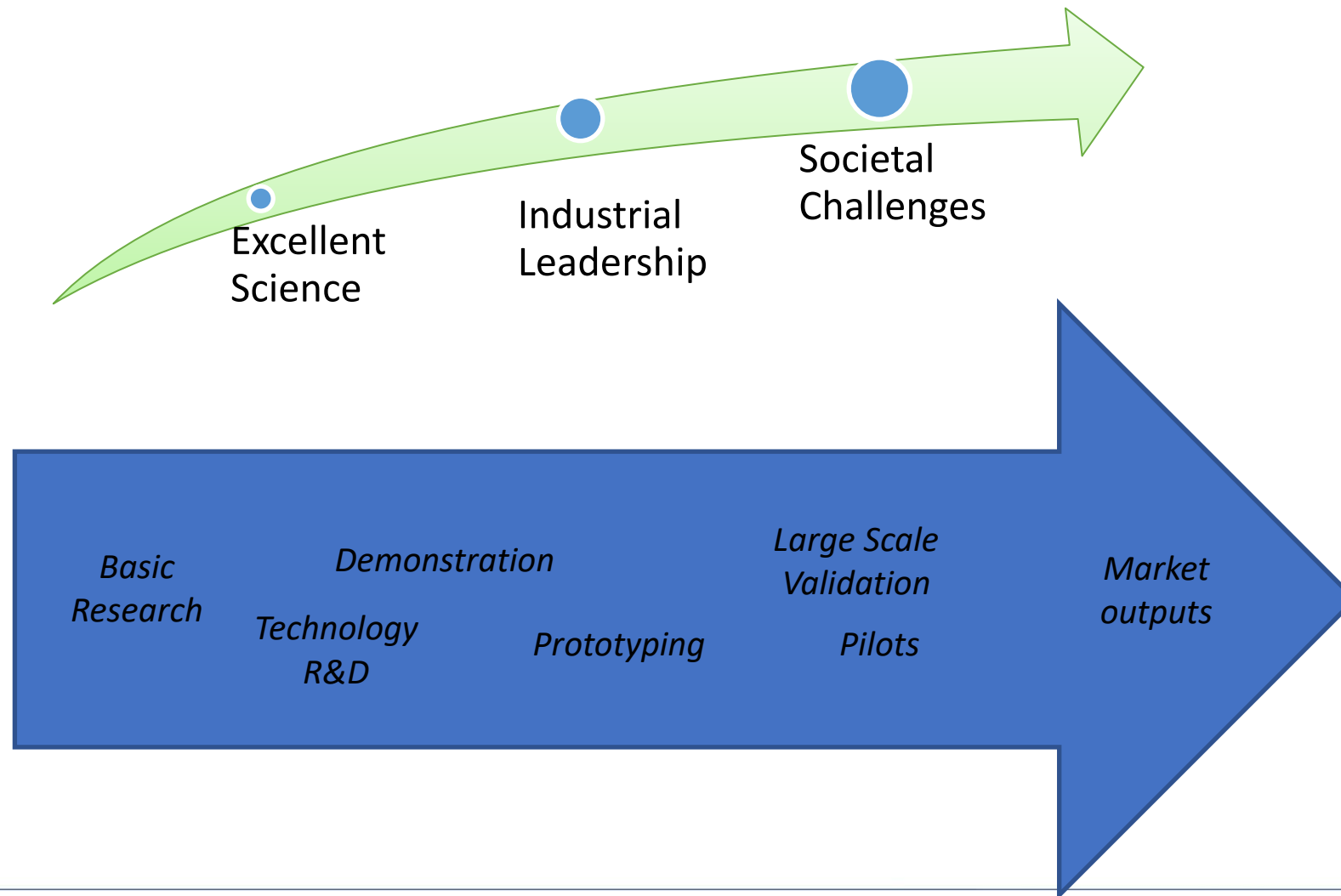
Research Education Innovation

Public-public partnerships

Health research infrastructures

Loans for de-risking R&I

Deployment of innovative solutions
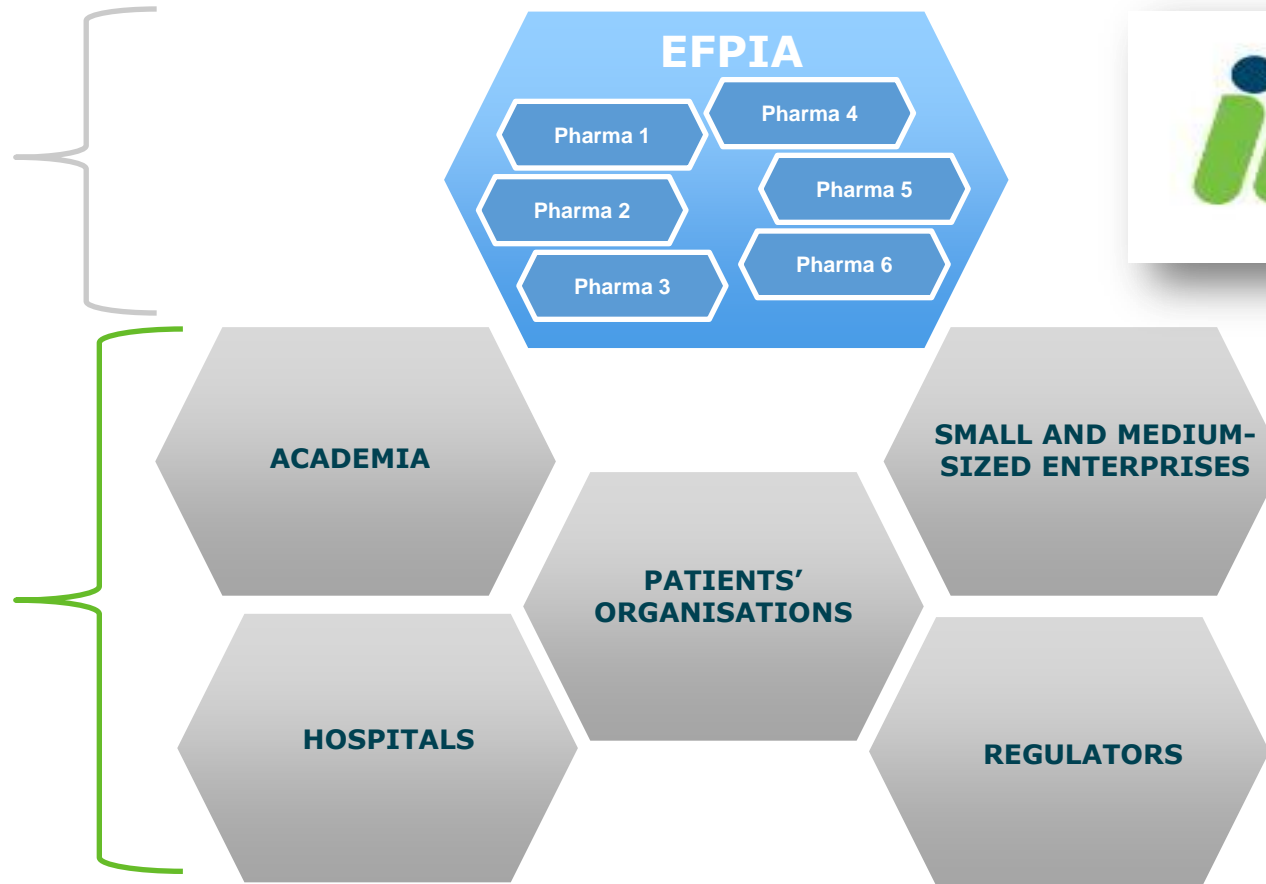
Coverage of the full innovation chain

Excellent Science

Industrial Leadership

Societal Challenges

Basic Research

Demonstration

Technology R&D

Prototyping

Large Scale Validation

Pilots

Market outputs

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Scadenze 2020 programmi bottom up

- **FET proactive: 22 aprile 2020**
- **FET OPEN: 13 maggio 2020**
- **NCP calderaro@apre.it**
- **Fast track to innovation:**
- **9 February 2020**
- **09 June 2020**
- **27 October 2020**
- **NCP Carbone@apre.it**

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A Typical IMI Consortium

Private Investment *in kind* **(€ 1 billion)**

EU Public Funding *cash* **(€ 1 billion)**

Who is eligible for funding?

- **Academic institutions**

- **Small & medium-sized enterprises (SMEs)**

- **Mid-sized enterprises (≤ €500m)**

- **Non-profit organisations** e.g. research organisations, patient organisations, NGOs, public bodies, intergovernmental organisations etc.

Established in:

- **EU Member States**

- **Associated Countries**

Other countries:
No funding **unless**
- **participation deemed essential** by IMI for carrying out the action
- **Annual Work Plan** / Calls documents

➡ **At least <u>three</u> legal entities**

*IMI partner search tool***: https://cloud.imi.europa.eu/web/eimi-pst**

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Opportunità per il settore health

Excellent Science

- **European Research Council**
  - Frontier research by the best individual teams

- **Future and Emerging Technologies (New: Pathfinder)**
  - Collaborative research to open new fields of innovation

- **Marie Skłodowska Curie actions**
  - Opportunities for training and career development

- **Research infrastructures** (including e-infrastructure)
  - Ensuring access to world-class facilities

Industrial Technologies

- **Leadership in enabling and industrial technologies**
  - ICT, nanotechnologies, materials, biotechnology, manufacturing, space

- **Access to risk finance**
  - Leveraging private finance and venture capital for research and innovation

- **Innovation in SMEs (Fast Track to innovation)**
  - Fostering all forms of innovation in all types of SMEs

Societal Challenges

- **Health, demographic change and wellbeing**

- **Food security, sustainable agriculture, marine and maritime research & the bioeconomy**

- **Secure, clean and efficient energy**

- **Smart, green and integrated transport**

- **Climate action, resource efficiency and raw materials**

- **Inclusive, innovative and reflective societies**

- **Secure societies**

European Institute of Innovation and Technology (EIT)
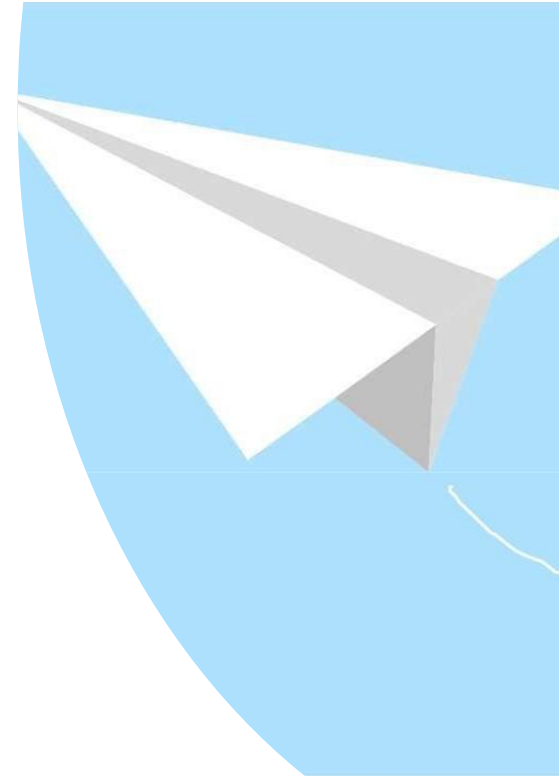
Spreading Excellence and Widening Participation

Science with and for society

Joint Research Center (JRC)

European Innovation Council (EIC)

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- **Innovativeness**
- **Trans-disciplinarity**
- **Open to any focus of diseases**
- **Collaborations: <u>public/private!</u>**
- **Patient centred research/citizen**
- **Focus on impact**S (companies)
- **Clinical studies (up to fase 3)**
- **Emphasis on gender medicine when relevant**
- **Ethical aspects**

Clinical Studies – What do we fund?

Scope, methodology, nature of the intervention, disease and target group

Adults

Children

Elderly

Gender

Phase I

Phase II

Phase III

Observational studies

Regenerative therapies

Rare diseases

Non-communicable diseases

Infectious diseases

Quality of life interventions

Palliative care

Off-patent trials

Repurposing trials

Paediatric trials

Drug, surgery, radiotherapy, QoL trials

Medical devices and companion diagnostics trials

Comparative effectiveness trials

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SC1 - Health, demographic change and wellbeing

7 priorities, 3 Calls for Proposals

1. Personalised medicine

2. Innovative health and care industry

3. Infectious deseases and improving global health

4. Innovative health and care systems – Integration of care

5. Decoding the role of the environment, including climate change, for health and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

6. Digital transformation in Health and Care

Call 2. Digital transformation in Health and Care (DG CNECT + DG RTD)

7. Trusted digital solutions and Cybersecurity in Health and Care

Call 3. Trusted digital solutions and Cybersecurity in Health and Care (DG CNECT)

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Data-driven health and care innovation

Prevention and early risk detection

New therapies and diagnostics

Personalised Medicine

New health and care models

Data-driven innovation

High-performance computing   *Advanced Data-Analytics*

Artificial Intelligence

Cloud computing

Internet of Things (IoT)

Wearables

mHealth

Telehealth

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SC1 - Health, demographic change and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

Action Plan

1. **Personalised medicine**

AIM

- Delivering personalised health and care to benefit patients and citizens

FOCUS

- Complex disorders, human microbiome, rare diseases and data sharing for enabling personalised medicine, economic models, reinforcing international and regional collaboration

POLICY DRIVERS

- Council conclusions on Personalised Medicine
- International Consortium on Personalised Medicine
- European Reference Networks

Per Med

Shaping Europe's Vision for Personalised Medicine
Strategic Research and Innovation Agenda (SRIA)

ICPerMed
INTERNATIONAL CONSORTIUM

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SC1 - Health, demographic change and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

1. Personalised medicine

Topics!

7-04-2020

SC1-BHC-06-2020: Digital diagnostics – developing tools for supporting clinical decisions by integrating various diagnostic data **(RIA)**

SC1-HCO-01-2018-2019-2020: Actions in support of the International Consortium for Personalised Medicine **(CSA)**

SC1-HCO-03-2020: Bridging the divide in health research and innovation – boosting return on investment **(CSA)**

SC1-HCO-14-2020: ERA-NET: Sustained collaboration of national and regional programmes in cancer research

SC1-HCO-16-2020: ERA-NET: Sustained collaboration of national and regional programmes in research on brain- related diseases and disorders of the nervous system

SC1-HCO-17-2020: Coordinating and supporting research on the human microbiome in Europe and beyond **(CSA)**

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SC1 - Health, demographic change and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

1. Personalised medicine

Topics!

7-04-2020

SC1-BHC-06-2020: Digital diagnostics – developing tools for supporting clinical decisions by integrating various diagnostic data **(RIA)**

CHALLENGE

On-going progress in the fields of bioinformatics and biostatistics, advanced analytical tools (e.g. machine learning) up to Artificial Intelligence (AI) solutions, should make possible the **development of devices, platforms or novel approaches leading to highly personalised diagnosis, based on the integration of data available from various sources.**

The ultimate result would be **a detailed health status assessment from a multitude of viewpoints, in a systemic way and easy to use for clinical purposes,** leading to better diagnostic accuracy, increased effectiveness and efficiency of treatments. Novel hardware enabling truly innovative, integrative diagnostic platforms can also be considered

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SC1 - Health, demographic change and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

1. Personalised medicine

Topics!

7-04-2020

SC1-BHC-06-2020: Digital diagnostics – developing tools for supporting clinical decisions by integrating various diagnostic data **(RIA)**

SCOPE

Develop tools, platforms or services (...) [to] integrate various data sources such as medical records, in vitro and/or in vivo diagnostics, medical imaging, -omics data, functional tests (lab-on-a-chip) etc., while taking into account the actual needs of health care practitioners, and should be tested and validated in real-life settings in pilot centres, facilitating Health Technology Assessment.

The aim is to steer the development of solutions towards concrete patient and public sector needs, having the citizen and health care providers at the centre.

Careful attention should be paid to appropriately addressing ethical and legal concerns and ensuring data safety and privacy.

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SC1 - Health, demographic change and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

1. Personalised medicine

Topics!

7-04-2020

SC1-BHC-06-2020: Digital diagnostics – developing tools for supporting clinical decisions by integrating various diagnostic data **(RIA)**

EXPECTED IMPACT

- Increase **EU's capacity to innovate** in the area of medical instruments technologies

- Improving the **quality and sustainability of healthcare systems** through quicker and more encompassing diagnosis of medical conditions, (...) with reduction of errors and delays (and costs associated to them).

- **Contribute to the growth of the European diagnostics sector, in particular for** SMEs

- Reinforce EU's role among world leaders in the production of medical diagnostic devices

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SC1 - Health, demographic change and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

2. Innovative health and care industry

AIM

- **Turn innovative knowledge and technologies into practical applications benefiting citizens, healthcare systems and business**

FOCUS

- **Regenerative medicine, advance therapeutics and regulatory science**

POLICY DRIVERS

- **Upgrading the single market**

HTA

SC1 - Health, demographic change and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

2. Innovative health and care industry

Topics!

7-04-2020

SC1-BHC-08-2020: New interventions for Non-Communicable Diseases (RIA)
Double stage

SC1-BHC-11-2020: Advancing the safety assessment of chemicals without the use of animal testing (RIA)

SC1-HCO-18-2020: Developing methodological approaches for improved clinical investigation and evaluation of high-risk medical devices (CSA)

SC1-HCO-19-2020: Reliable and accessible information on cell and gene-based therapies (CSA)

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SC1 - Health, demographic change and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

2. Innovative health and care industry

Topics! | **7-04-2020**

SC1-BHC-11-2020: **Advancing the safety assessment of chemicals without the use of animal testing (RIA)**

SCOPE

- Integrative approaches that build on advances in all relevant fields of science and technology, including elements such as novel *in vitro* and *in silico* tools and the understanding of human biology and related toxicity pathways, with the aim of proposing and demonstrating scientifically valid means for comprehensive safety assessment of chemical substances without resorting to animal testing.
- (…) Attention should be given to establishing and pursuing concrete measures to seek acceptance and uptake by end-users
- (…) Proposals should involve, amongst others, academic research communities, industry, SMEs, relevant stakeholders, and regulatory bodies as appropriate.
- (…) Applicants are encouraged to seek during the life-time of the project additional support and cooperation from various industry sectors in order to facilitate and accelerate progress.

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SC1 - Health, demographic change and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

3. Infectious deseases and improving global health

AIM

- **Fighting infectious diseases and the growing threat of antimicrobial resistance. Addressing the needs of the most vulnerable and the global increase in chronic diseases**

FOCUS

- **Emerging infectious diseases, poverty and neglected diseases, stratified host-directed approaches to communicable diseases, maternal and child health, global collaboration on non-communicable diseases (cohorts, brain research, hypertension, diabets, cancer)**

POLICY DRIVERS

- **European One Health Action Plan against Antimicrobial Resistance**
- **Global Action Plan on antimicrobial resistance**

A European One Health Action Plan against Antimicrobial Resistance (AMR)

World Health Organization

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SC1 - Health, demographic change and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

3. Infectious deseases and improving global health | **Topics!** | **7-04-2020**

SC1-BHC-17-2020: Global Alliance for Chronic Diseases (GACD) – Prevention and/or early diagnosis of cancer (RIA)

SC1-BHC-20A-2020: Pre-commercial procurement (PCP) for integrated care solutions

SC1-BHC-20B-2020: Public procurement for innovative solutions (PPI) for integrated care solutions

SC1-BHC-33-2020: Addressing low vaccine uptake (RIA)

SC1-BHC-34-2020: New approaches for clinical management and prevention of resistant bacterial infections in high prevalence settings (RIA)

SC1-BHC-35-2020: Creation of a European wide sustainable network for harmonised large-scale clinical research studies for infectious diseases (RIA)

SC1-HCO-07-2020: ERA-NET to support the Joint Programming Initiative on Antimicrobial resistance (JPIAMR)

SC1 - Health, demographic change and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

3. Infectious deseases and improving global health

Topics!

7-04-2020

SC1-BHC-35-2020: **Creation of a European wide sustainable network for harmonised large-scale clinical research studies for infectious diseases** (RIA)

CHALLENGE

There is a need to **establish a pan-European clinical research network that has the capacity and capability to directly enroll patients with infectious diseases**, and to increase efficiency for testing and developing new diagnostic, preventive and/or therapeutic strategies and therapies.

Europe should also **contribute to the G7 aim concerning the need to establish a global clinical studies network on drug resistance** that provides access to a large clinical research infrastructures for the design , coordination and conducting of clinical trials and studies

(...) Respond to the Council Recommendation on strengthened cooperation against vaccine preventable diseases.

SC1 - Health, demographic change and wellbeing

Call1. Better Health and care, economic growth and sustainable health systems (DG RTD)

3. Infectious deseases and improving global health

Topics!

7-04-2020

SC1-BHC-35-2020: Creation of a European wide sustainable network for harmonised large-scale clinical research studies for infectious diseases (RIA)

SCOPE

Set up a European-wide multidisciplinary network able to provide a platform for a rapid response in the conduct of clinical studies in relation to any severe infection. The initial clinical studies to be performed should be included in the proposal, whereas criteria and processes for including further clinical studies in the project should be clearly described.

(...) The proposed consortium should comprise expertise of stakeholders from academic organizations, SMEs, larger industry, patient organizations, ethics committee, public health bodies and regulators.

(...) Build on results of (...) PREPARE and COMBACTE (....) ECRIN.

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SC1 - Health, demographic change and wellbeing

Call 2. Digital transformation in health and care (DG CNECT+DG RTD)

6. Digital transformation in Health and Care

Topics!

22-04-2020

SC1-DTH-02-2020: Personalised early risk prediction, prevention and intervention **(RIA)**

SC1-DTH-04-2020: International cooperation in smart living environments for ageing people **(RIA)**

SC1-DTH-06-2020: Accelerating the uptake of in-silico trials for testing medicines and medical devices **(RIA)**

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SC1 - Health, demographic change and wellbeing

Call 2. Digital transformation in health and care (DG CNECT+DG RTD)

6. Digital transformation in Health and Care

Topics!

22-04-2020

SC1-DTH-14-2020: Pre-commercial procurement for digital health and care solutions **(PCP)**

SC1-HCC-08-2020: Scaling up innovation for active and healthy ageing **(CSA)**

SC1-HCC-09-2020: Supporting deployment of eHealth in low and lower middle income countries in Africa for better health outcomes **(CSA)**

SC1 - Health, demographic change and wellbeing

Call 3. Trusted digital solutions and Cybersecurity in Health and Care (DG CNECT)

7. Trusted digital solutions and Cybersecurity in Health and Care

AIM

- Multidisciplinary technologies and solutions in health and care with a focus on cybersecurity to assure data privacy, security and protection of health and care infrastructures.

FOCUS

- Secure and user-driven ICT-based solutions in early risk detection and interventions with big data approaches that enable aggregation of a variety of new and existing data sources (eg. medical records, registries, social platforms and other environmental, physiological and behavioural data, including data from large scale pilots on smart living environments)

POLICY DRIVERS

- Digitisation Research And Innovation - Transforming European industry and services. European Commission (Focus Area)
- Security Research And Innovation - Boosting effectiveness of the Security Union. European Commission (Focus Area)

SECURITY RESEARCH AND INNOVATION
Boosting effectiveness of the Security Union

DIGITISATION RESEARCH AND INNOVATION
Transforming European industry and services

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SC1 - Health, demographic change and wellbeing

Call 3. Trusted digital solutions and Cybersecurity in Health and Care (DG CNECT)

7. Trusted digital solutions and Cybersecurity in Health and Care

Topics!

22-04-2020

DT-TDS-04-2020: AI for Genomics and Personalised Medicine (RIA)

13-11-2019

DT-TDS-05-2020: AI for Health Imaging (RIA)

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Health-related topics 2020 WP's other than SC1

Topic ID	Topic Title	Deadline	Work Programme
NMBP-21-2020	**Biological scaffolds for tissue regeneration and repair (RIA)**	**12/12/2019** (first stage)	**NMBP**
DT-NMBP-06-2020	**Open Innovation Test Beds for nano-pharmaceuticals production (IA)**	**12/12/2019** (first stage)	**NMBP**
NMBP-21-2020	**Biological scaffolds for tissue regeneration and repair (RIA)**	**12/12/2019** (first stage)	**NMBP**
DT-TRANSFORMATIONS-02-2018-2019-2020	**Transformative impact of disruptive technologies in public services - Research and Innovation action (RIA)**	**12/03/2020**	**Inclusive/innovative/reflective societies**
DT-ICT-12-2020	**The smart hospital of the future (IA)**	**22/04/2020**	**ICT/ Health**
ICT-36-2020	**Disruptive photonics technologies (RIA)**	**22/04/2020**	**ICT**
ICT-55-2020	**Interactive Technologies (IA)**	**13/11/2019**	**ICT**
INFRAEDI-05-2020	**Centres of Excellence in exascale computing (RIA)**	**13/11/2020**	**Infrastructures**
INFRAEOSC-07-2020	**Increasing the service offer of the EOSC Portal (RIA)**	**22/04/2020**	**Infrastructures**
INFRAIA-02-2020	**Integrating Activities for Starting Communities (RIA)**	**17/03/2020**	**Infrastructures**

Health-related topics 2020 WP's other than SC1

Tecnologie innovative

Topic ID	Topic Title	Deadline	Work Programme
NMBP-21-2020	**Biological scaffolds for tissue regeneration and repair (RIA)**	**12/12/2019** **(first stage)**	**NMBP**
Specific Challenge	The increasing availability of novel biomaterials with tissue regeneration properties offers the solution for many diseases, including those of a degenerative nature, particularly as integral parts of advanced therapy medicinal products or medical devices (…).		
Scope	Proposals should cover one of the following domains: • Targeted musculoskeletal delivery of cells or biologically active agents and innovative biomaterials for **articular cartilage/disc, ligament and tendon repair in weight-bearing joints**; • Stimulation of healing in **chronic and infected wounds and ulcerative processes** (with or without biofilms as necessary); • Preventing microbial infection and concurrently promoting tissue regeneration in **dental implants and/or dental root surgery**; • **Implementation of innovative manufacturing technologies (e.g. 3D printing)** for affordable fabrication of patient-specific scaffolds planned in respect of the foregoing. 4-6 Million EUR [from TRL 3 to TRL 5]		
Budget			

Health-related topics 2020 WP's other than SC1

Tecnologie innovative

Topic ID	Topic Title	Deadline	Work Programme
NMBP-21-2020	**Biological scaffolds for tissue regeneration and repair (RIA)**	**12/12/2019** (first stage)	**NMBP**

Specific Challenge	Organ-on-Chip' (OoC) is a promising technology for achieving more effective **in-vitro** research in a broad range of life science sectors, including medicine and pharmacy, cosmetics, agriculture and food, and for chemical safety testing including regulatory testing. More effective drug development, efficacy and safety screening, would reduce the need for animal testing and clinical testing (…).
Scope	• Multidisciplinary research for the development of Organ-on-Chip technologies able to **mimic human organs and organ-systems**, based on integrated platforms involving technologies • **Demonstrator applications involving modelling, diagnosis and therapy of human disease(s) of high and yet unmet medical need.** • **Industrial development/piloting** towards improved robustness, reliability, scalability, parallelisation and standardisation of tools and methods, and providing interfaces to standard laboratory equipment; • Taking into account **medical regulatory requirements**. 4-6 Million EUR [from TRL 3 to TRL 5]
Budget	

Health-related topics 2020 WP's other than SC1

Tecnologie innovative

Topic ID	Topic Title	Deadline	Work Programme
DT-NMBP-06-2020	**Open Innovation Test Beds for nano-pharmaceuticals production (IA)**	**12/12/2019 (first stage)**	**NMBP**
Specific Challenge	(…) A major challenge is to **produce the novel nano-pharmaceuticals to GMP (Good Manufacturing Practice) quality**, maximising bioavailability and stability and in sufficient quantity for <u>late pre-clinical and clinical testing</u>. To this end the production of the nano-pharmaceuticals needs to be scaled-up from a <u>small laboratory scale in the milligram range to a larger scale.</u> A high level of GMP quality needs to be ensured, for example in terms of particle size and sterility (where appropriate), as required by the regulations for medicines.		
Scope	- Open Innovation Test Beds (OITB) should **upgrade or develop nano-pharmaceutical materials** production facilities and make available to industry and interested parties, including SMEs, services for the design and development of production processes, characterisation and quality control of nano-pharmaceuticals; - The OITB should provide **GMP certified batches of nano-pharmaceuticals suitable for late pre-clinical and clinical testing** and in accordance with European regulatory requirements for medicines; - The OITB need to provide guidance for late pre-clinical and clinical testing, which itself could be done outside the OITB, **benefitting from already existing infrastructures**, and/or within the same OITB; - Open access at fair conditions and cost as well as outreach and dissemination across Europe, based on a distinct methodology; - The users / clients of the OITB will typically be SME's and laboratories with innovative proofs-of-concept and IPR for developing novel nano-pharmaceuticals and demonstration of the scalability of the production process of the technology. 7-15 Million EUR [from TRL 4 to TRL 7] = 70% (except for non-profit legal entities, where a funding rate of 100% applies)		
Budget			

Health-related topics 2020 WP's other than SC1

Digitalizzazione

Topic ID	Topic Title	Deadline	Work Programme
DT-ICT-12-2020	**The smart hospital of the future (IA)**	**22/04/2020**	**ICT/ Health**

Specific Challenge	(…) New digital technologies will play a role in transforming health and care systems. In particular, **artificial intelligence and robotics, have the potential to transform health and care facilities across their range of functions from the clinical aspects** (screening and prevention, diagnosis, treatment, surgical support) **to organisational and logistical aspects** (such as the management and distribution of medicines and wider supplies across the facility). Given that health facilities such as **hospitals** consume the major proportion of resources available to health and care budgets, efficiency gains in these facilities may support sustainability of **the system as a whole**. (…)
Scope	**Devise in-facility pilot demonstrators** that deliver innovative AI-based solutions in a health and care setting such as a **hospital, primary care facility or care home**. Pilots should enable or support clinical, diagnosis and treatment, etc. carried out with clinical outcomes comparable to human delivered procedures and with comparable results. (…)
Budget	7-10 Million EUR = 70% (except for non-profit legal entities, where a funding rate of 100% applies)

Health-related topics 2020 WP's other than SC1

Digitalizzazione

Topic ID	Topic Title	Deadline	Work Programme
ICT-36-2020	**Disruptive photonics technologies (RIA)**	**22/04/2020**	**ICT**
Specific Challenge	The challenge is the development of **advanced photonics technologies which have the potential to revolutionise an existing application sector or to create completely new applications and markets.**		
Scope	The focus is on the following themes (sub-topics): i. **3D light field and holographic displays**: Actions should develop innovative photonics components and systems which enable 3D light field or holographic displays for use in mixed-reality applications such as automotive, <u>healthcare</u>, telecommunication, entertainment and gaming. In addition, the display components actions may also develop sensors and actuators for necessary support functionality such as **sensing, connectivity, user interaction, and scene recognition** etc. Actions must include **validation in application settings.** (…) At least one proposal will be selected to cover each of these themes.		
Budget	3-6 Million EUR		

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Health-related topics 2020 WP's other than SC1

Digitalizzazione

Topic ID	Topic Title	Deadline	Work Programme
ICT-55-2020	**Interactive Technologies (IA)**	**13/11/2019**	**ICT**

Specific Challenge	**Interactive Technologies such as Augmented (AR) and Virtual Reality (VR)** are set to **transform the ways in which people communicate, interact and share information on the Internet and beyond**. This will directly impact a larger number of European industries ranging from manufacturing, data life cycle, **healthcare,** engineering, to education, entertainment, media and culture, enabling new business opportunities. The challenge is to forge a competitive and sustainable ecosystem of European technology providers in Interactive Technologies.
Scope	The full scope of the EU intervention in this areas includes: 1/ **support a pan-European coordination effort to strengthen the collaboration among the constituency (ICT-25-2018);** 2/ **improve competiveness** through research into future high-quality multi-sensorial interactive hardware and multi-user interaction systems (ICT-25-2018) and 3/ **increase the European innovation capacity** through the development of new authoring tools and the access to a broader community which will be the objective of this specific call through Innovation Actions. **(…)** **develop solutions in key sectors such as** in manufacturing, automotive, healthcare or cultural and creative industries or in sectors where the use of such technology is not mainstream.
Budget	1,5-2 Million EUR (12-24 months) = 70% (except for non-profit legal entities, where a funding rate of 100% applies)

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Health-related topics 2020 WP's other than SC1

Governance

Topic ID	Topic Title	Deadline	Work Programme
DT-TRANSFORMATIONS-02-2018-2019-2020	**Transformative impact of disruptive technologies in public services - Research and Innovation action (RIA)**	**12/03/2020**	**Inclusive/innovative/reflective societies**

Specific Challenge	The challenge is to **assess the potential benefits and risks of using disruptive technologies in public administrations** as well as the social impact, including the impact on public servants, of using them for government processes and governance (e.g. for registers, for archiving, for tax collection, for decision-making processes etc.). The political, ethical, socio-economic, legal and cultural implications of disruptive technologies and their acceptance are important not only for public administrations, but also for citizens.
Scope	The use of disruptive technologies (such **as artificial intelligence and big data analytics, block chain, Internet of Things, virtual and augmented reality, simulations or gamification**) in public administrations and in governance including citizens engagement, decision support systems and policy impact assessments is growing (…) As a result, deploying these disruptive technologies in public administration requires experimentations and a thorough assessment of their potential impact, benefits and risks (e.g. excluding some parts of the population due to age / gender / disabilities / social inequality / lack of e-literacy…).
Expected Impact	
Budget	(...) It will also contribute to **developing new practices, to optimising work processes and to integrating evidence-based decision-making processes** in public services and in services such as <u>health</u>, education, culture, social welfare and mobility.

Health-related topics 2020 WP's other than SC1

Research Infrastructures

Topic ID	Topic Title	Deadline	Work Programme
INFRAEOSC-07-2020	**Increasing the service offer of the EOSC Portal (RIA)**	**22/04/2020**	**Infrastructures**

Specific Challenge	(…) effectively coordinate at pan-European level the provision through the EOSC Portal of state of-the-art research enabling services from a wide range of national, regional and institutional public infrastructures in Europe, covering diverse thematic domains, and further non-research resources in order to: 1**) scale up the EOSC Portal**; and 2) **set-up a model for interaction between service providers and the EOSC Portal operators** through pan-European e-infrastructure entities, based on transparency and effectiveness of cost compensation.
Scope & Budget per area	(…) Proposals should clearly identify one and only one of the following areas: (a1) **Distributed and cloud computing resources** enabling researchers and other users to process and analyse data in a distributed computing environment. [8 Million EUR] *(a2) Data services providing cost-effective and interoperable solutions for data management and long-term curation and preservation. [7 Million EUR] (a3) **Services supporting scholarly communication and open access** [4 Million EUR] (a4) **Above the net services** are added-value applications and services that enable users to communicate, interact and collaborate effectively in a heterogeneous and distributed federated environment. [2 Million EUR] *(a5) **Services and resources from non-research public sector data providers** (such as Open Data initiatives/EU Open Data Portal and other initiatives under the European Common Data Space) [1 Million EUR] (a6) **Additional research enabling services** that are not covered under any of the areas described in areas a1 to a5 and that do not overlap with existing services accessible through the EOSC Portal. Services should be of a generic value to the whole research community, such as text and data mining or Copernicus services. [2 Million EUR]

Health-related topics 2020 WP's other than SC1

Research Infrastructures

Topic ID	Topic Title	Deadline	Work Programme
INFRAEDI-05-2020	**Centres of Excellence in exascale computing (RIA)**	**13/11/2020**	**Infrastructures**

Specific Challenge *Scope* *Budget*	Supporting Centres of Excellence (CoE) that advance and promote the use of upcoming exascale computing capabilities in areas where user communities in collaboration with other High Performance Computer (HPC) stakeholders can develop or scale up existing parallel codes towards exascale performance, resulting into tangible benefits for scientific, industrial or societal challenges. (…) This topic builds and complements the INFRAEDI-02-2018 HPC PPP - Centres of Excellence on HPC applications call Proposals should clearly **identify the target area/domain that will be the focus of their work, which must have great potential to achieve exascale performance** in Europe (e.g. Materials Science, Engineering, Artificial Intelligence, Cybersecurity, **Personalised Medicine**, etc.). Proposals must convincingly demonstrate this potential and the need for exascale requirements. Proposals must also develop synergies with existing CoEs and show European added value. Should the proposed work target an area or domain already covered by existing CoEs, proposals must clearly elaborate on how their proposal further expands and develops progress beyond what existing CoEs are implementing Max. 5 Million EUR

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Health-related topics 2020 WP's other than SC1

Research Infrastructures

Topic ID	Topic Title	Deadline	Work Programme
INFRAIA-02-2020	**Integrating Activities for Starting Communities (RIA)**	**17/03/2020**	**Infrastructures**

Specific Challenge	Research Infrastructures Communities never supported for their integration under EU FPs. (bottom-up approach) Emphasis on networking, standardization and common access procedure, complementary and coherence with the existing European RI landscape; on the contribution to a catalogue of RI services and on the adoption of the European Charter for Access to RI
Scope	An Integrating Activity will mobilise a comprehensive **consortium of several key research infrastructures in a given field as well as other stakeholders** (e.g. public authorities, technological partners, research institutions) (…) Proposals should adopt the guidelines and principles of the [European Charter for Access to Research Infrastructures](#) All **three categories of activities are mandatory** as synergistic effects are expected from these different components: • **Networking activities**, to foster a culture of co-operation between research infrastructures, scientific communities, industries and other stakeholders as appropriate, and to help develop a more efficient and attractive European Research Area; • **Trans-national access or virtual access activities**, to support scientific communities in their access to the identified key research infrastructures; • **Joint research activities,** to improve, in quality and/or quantity, the integrated services provided at European level by the infrastructures.
Budget	Max. 5 Million EUR

Search Topics – via the Funding & Tender Portal

http://bit.ly/Funding-Tenders-Portal

Nanotechnologies, Advanced Materials, Biotechnology,Advanced Manufacturing and Processing (NMBP)

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-leit-nmp_en.pdf

Information and Communication Technologies (ICT)

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-leit-ict_en.pdf

Space

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-leit-space_en.pdf

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http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-health_en.pdf

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http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-energy_en.pdf

Transport

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-transport_en.pdf

Climate/Environment

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-climate_en.pdf

Inclusive Societies

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-societies_en.pdf

Security

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-security_en.pdf

Science with and for Society (SWAFS)

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-swfs_en.pdf

Informazioni dalla Commissione Ue

- **Funding and Tender:**

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

- **Horizon 2020 Helpdesk - Research Enquiry Service:**

  http://ec.europa.eu/research/index.cfm?pg=enquiries

- **Health National Contact Points (NCPs) Network:**

  https://www.healthncp.net/health-ncp-net-hnn-20

- **Enterprise Europe Network:**

  http://een.ec.europa.eu/about/branches

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