



Funding Opportunities for Academia Industry Collaboration in Research

Horizon 2020, Horizon Europe

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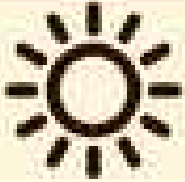


Krajowy Punkt Kontaktowy
PROGRAMÓW BADAWCZYCH UE
Instytut Podstawowych Problemów Techniki PAN

W niniejszej prezentacji wykorzystano materiały udostępnione m.in. przez KE i/lub Ministerstwa oraz Agendy RP



1



God creates light and separates it from darkness.

2



God creates the heavens above and separates it from the waters below.

3



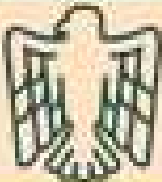
God creates dry land and separates it from the sea.

4



God fills the light with the sun and the darkness with stars.

5



God fills the sky with birds and the water with fish.

6



God fills the dry land with people and animals.

Days of creation

One day of inattention
and people created
problems

**For finding solutions
Horizon Europe creates
5 MISSIONS....**

for 5 „working days“

time is short



MISSION AREAS:

Soil health and food



Cancer



Adaptation to climate change, including societal transformation



Climate-neutral and smart cities



Healthy oceans, seas, coastal and inland waters



#HorizonEU



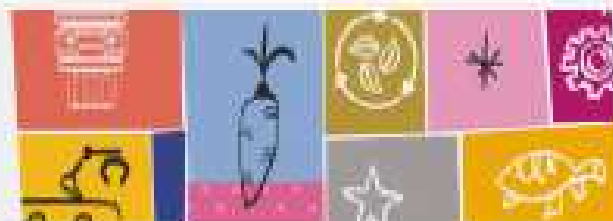
European Commission







EUROPEAN RESEARCH & INNOVATION DAYS



24 → 26

SEPTEMBER

Brussels • BELGIUM

Tue
24
SEP

15:30 - 16:30 – The Missions – « Let's get started »

With Commissioner Carlos Moedas - missions are public policy initiatives with a systemic view and supported by research and innovation

Wed
25
SEP

Dedicated session to each Mission

Open debate with stakeholders on the key elements of the Mission design

Thu
26
SEP

Restricted meeting with Member States

Exchange of views on added-value of the missions implementation at European level

Horizon Village: 3 days of Interaction with interested stakeholders and citizens / A dedicated section per Mission



Horizon 2020



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Innovative Medicines Initiative (IMI2 JU)



innovative
medicines
initiative

Europe's partnership
for health

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We are an EU public-private partnership
funding health research and innovation

€5.3bn
BUDGET

135
PROJECTS

2 963
PARTICIPANTS

>7 000
PROJECT OUTPUTS

>3 800
PUBLICATIONS



www.kpk.gov.pl

Horizon 2020



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<https://www.imi.europa.eu/>



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Project Factsheets

Search for projects by name, participants, keywords

SEARCH

Status

- Any -

Call

- Any -

Programmes

- Any -

Disease areas

Cancer

Products

- Any -

Tools and resources to improve drug development

- Any -

[x Clear all filters](#)

Displaying 11 projects/programmes

BD4BO

Big Data for Better Outcomes

Ongoing | IMI2 | [Cardiovascular diseases](#), [Neurodegenerative diseases](#), [Cancer](#), [Alzheimer's disease](#), [BD4BO](#), [Patient involvement in R&D](#), [Big data and knowledge management](#), [Real-world data, evidence](#)



CANCER-ID

www.euplga.eu

CANCER



IMI2 funding

(2014-2020)

IMI FUNDING MODEL



PUBLIC CONTRIBUTION
€1.638 bn

funding from
Horizon 2020

efpia

IN-KIND PRIVATE CONTRIBUTION
€1.425 bn

EFPIA companies
receive no
funding

€ 3.276 bn
TOTAL IMI2 BUDGET

OTHER CONTRIBUTIONS
€213 MILLION

(Associated Partners,
e.g. charities, non-EFPIA
companies)

EU funding goes to ▶

SMEs





Join IMI as an Associated Partner

(IMI2 more than 30 entities)

<https://www.imi.europa.eu/get-involved/associated-partners>

The Associated Partner category was created with the goal of opening up our activities to a wider range of stakeholders.

As such, examples of organisations that could become IMI Associated Partners include philanthropic organisations and charities that **run their own health research programmes, as well as organisations working in sectors related to healthcare such as ICT, imaging, diagnostics, animal health, etc.**





Open Consultation deadline 4 October 2019

https://ec.europa.eu/research/pdf/horizon-europe/ec_rtd_orientations-towards-the-strategic-planning.pdf

**Orientations
towards the first Strategic Plan
implementing the research and innovation
framework programme Horizon Europe**

**CO-DESIGN
VIA WEB OPEN CONSULTATION
Summer 2019**





New approach to European Partnerships

New generation of objective-driven and more ambitious partnerships in support of agreed EU policy objectives

Key features

- Simple architecture and toolbox
- Coherent life-cycle approach
- Strategic orientation

Co-programmed

Based on Memoranda of Understanding / contractual arrangements; implemented independently by the partners and by Horizon Europe

Co-funded

Based on a joint programme agreed by partners; commitment of partners for financial and in-kind contributions & financial contribution by Horizon Europe

Institutionalised

Based on long-term dimension and need for high integration; partnerships based on Articles 185 / 187 of TFEU and the EIT-Regulation supported by Horizon Europe





Public-Public Partnerships (P2Ps)

- ↳ Joint Programming Initiatives (JPIs)
- ↳ Art. 185 Initiatives
- ↳ ERA-NET CoFund
- ↳ EJP CoFund

Public-Private Partnerships (PPPs)

- ↳ Joint Undertakings (JU)/Joint Technology Initiatives (JTIs)
- ↳ contractual PPP (cPPPs)

Other partnerships, platforms, networks

- ↳ European Innovation Partnerships (EIPs)
- ↳ European Technology Platforms (ETPs)
- ↳ EIT
- ↳ FET Flagships
- ↳ EUREKA
- ↳ COST



Horizon 2020 is the EU's research and innovation funding programme



Horizon 2020 HEALTH research and innovation funding

An investment in better health for all

more than 10 billion
2014-2020

15 funding
channels

to meet specific health research and innovation needs
includes support for individual grants and fellowships, SMEs, large collaborative public-private consortia

5 AREAS



COLLABORATIVE RESEARCH

Support multidisciplinary and cross-sector research on health and care for generating and translating new knowledge into applications and benefits for the society



INNOVATIVE HEALTH AND CARE INDUSTRY

Translate innovation into practical health and care applications benefiting citizens, healthcare systems and businesses



WORKING WITH MEMBER STATES AND INTERNATIONAL PARTNERS

Foster European and global coordination in health and disease research



BLUE SKY RESEARCH

Reinforce and extend the excellence of the EU's science base (including in life sciences and health-related research)



INFRASTRUCTURES

Support facilities, resources and services used by the science community to conduct research and foster innovation (including in the health area)



Horizon 2020 overview figure



- ◆ INNOVATIVE MEDICINE INITIATIVE
- ◆ SME INSTRUMENT
- ◆ FAST TRACK TO INNOVATION
- ◆ INNOVFIN INFECTIOUS DISEASES
- ◆ EIT HEALTH
- ◆ HORIZON PRIZES

- ◆ EUROPEAN AND DEVELOPING COUNTRIES CLINICAL
- ◆ ACTIVE AND ASSISTED LIVING PROGRAMME
- ◆ ERA-NET
- ◆ JOINT PROGRAMMING INITIATIVES
 - NEURODEGENERATIVE DISEASE RESEARCH
 - ANTIMICROBIAL RESISTANCE
 - MORE YEARS, BETTER LIVES

- ◆ EUROPEAN RESEARCH COUNCIL
- ◆ FUTURE AND EMERGING TECHNOLOGIES
- ◆ MARIE SKŁODOWSKA-CURIE ACTIONS
- ◆ EUROPEAN STRATEGY FORUM ON RESEARCH INFRASTRUCTURES



Personalized Medicine for Health in European Research 23 October 2019

<https://healthmeeting2019.io.gliwice.pl/>



Maria Skłodowska-Curie Institute – Oncology Center Gliwice Branch



CENTRUM ONKOLOGII – INSTYTUT
IM. MARII SKŁODOWSKIEJ-CURIE
ODDZIAŁ W GLIWICACH



REGIONALNY PUNKT KONTAKTOWY
POLITECHNIKA ŚLĄSKA



Krajowy Punkt Kontaktowy
PROGRAMÓW BADAWCZYCH UE



Wsparcie dla biznesu w zasięgu ręki



Górnoląaska
Agencja
Przedsiębiorczości
i Rozwoju sp. z o.o.





Partnering Event, Gliwice, 23 October 2020

Focused on topics:

SC1-BHC-06-2020 **7.04.2020**

SC1-BHC-17-2020 **7.04.2020**

SC1-HCC-10-2020 **7.04.2020**

SC1-DTH-02-2020 **22.04.2020**

SC1-DTH-04-2020 **22.04.2020**

SC1-DTH-12-2020 **7.04.2020**

DT-TDS-04-2020 **22.04.2020**

DT-TDS-05-2020 **13.10.2019**





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

Deadline: 7 April 2020

Scope

- To develop tools, platforms or services that will use information provided by most relevant diagnostic means for a particular area, resulting in an accurate, detailed, structured, systemic and prioritized assessment of the health status in a patient
- These tools/platforms/services should contribute to improving diagnosis and clinical decision, not only integrate existing data, and should involve intelligent human-computer interface solutions to facilitate its daily use in clinical practice.

Expected impact

- Increase EU's capacity to innovate in the area of medical instruments technologies
- Improve the quality and sustainability of healthcare systems
- 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.

Practical aspects

Research and Innovation Action, 40 M€ – 8-15 M€/proposal





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

Deadline: 7 April 2020

Scope

- Focus on widening countries and leveraging on ESIF investments
- Support to carry out institutional reforms, in terms of governance, science evaluation, internationalisation, attracting and retaining talents
- Building on earlier “bridging-the-divide” CSAs (2014 and 2017)

Expected impact

- Institutional culture that rewards scientific performance and innovation
- Better embeddedness in international networks
- Increased participation in Horizon projects

Practical aspects

Coordination and Support Action, 2 M€ – 1.5-2 M€/proposal





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

Scope

- Align national, regional and **charity** research funding programmes on translational cancer research by implementing a transnational call with EU co-funding and additional calls without EU co-funding.
- Demonstrate potential impact and leverage at national and EU level using key indicators.

Deadline: 7 April 2020

Expected impact

- Identification of common research and innovation priorities, taking into account international developments where relevant.
- Leveraged funding, based on a common strategic research agenda.
- Streamlined national, regional and foundation or charity-based practices in organising research and innovation funding.
- Demonstrated sharing of data and analyses of funded cancer research and their impact.

Practical aspects

ERA-NET Cofund, 5 M€ – min. 5 M€/proposal





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

Deadline: 7 April 2020

Scope

- Implementation research (also promising interventions)
- Prevention and/or early diagnosis of cancer on in LMIC and/or in vulnerable populations in HIC

Expected impact

- Advance local, regional or national cancer prevention and/or early diagnostic health policies
- Inform health service providers, policy and decision makers on effective scaling up of cancer interventions at local, regional, and national levels
- Provide pathway to cancer care for the patients diagnosed with cancer

Practical aspects

Research and innovation action, 20 M€ – 1-3 M€/proposal
Part of the GACD scientific community



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SC1-HCC-10-2020: Towards a Health research and innovation Cloud: Capitalising on data sharing initiatives in health research

Deadline: 7 April 2020

Scope:

- Building on existing EU data-intensive initiatives, design an implementation roadmap for a FAIR health research data portal respecting legal and ethics requirements.
- Define and promote, among research projects, procedures to make data FAIR as well as a standard way of communicating such data, so that any IT-system can easily provide metadata to the portal.
- Build a community to align strategies and capitalise on the work done
- Develop two use cases to test the above.

Expected impact

- A catalogue of all relevant publicly-funded health research databases, allowing access to high quality health research data (link to EOSC).
- Through use cases, demonstrate the added value of close collaboration between health researchers and healthcare providers.

Practical aspects

Coordination and Support Action, 3 M€ - 2-3 M€/proposal





Indicative topics with opportunities for clinical trials:

~~SC1-BHC-08-2020 : New therapies for Non Communicable Diseases~~

~~SC1-BHC-24-2020 : Healthcare interventions for the management of the elderly multimorbid patient~~

Two-Stage call 1st stage closes: 24 September 2019

2nd stage closes: 7 April 2020

SC1-BHC-37-2020: Towards the new generation of clinical trials – trials methodology research





SC1-BHC-37-2020: Towards the new generation of clinical trials – trials methodology research

Deadline: 7 April 2020

Scope

- Methodology research to develop innovative solutions in order to improve the design, conduct and analysis of clinical trials.
- Identification of best practices to prevent bottlenecks in execution of clinical trial (e.g., issues related to patient recruitment, adherence and compliance, governance, ethics, sex and gender-based analysis, data sharing).
- Identification and validation of methods that will improve the generalizability of evidence generated through differently designed trials, including personalized medicine approaches and combinatorial interventions.

Expected impact

- Improved relevance, quality and efficiency of clinical trials conducted with public funding
- Potential to establish a novel clinical trial methodology supported by regulatory authorities.

Practical aspects

Research and Innovation Action Lump Sum, 6 M€ – 4-6 M€/proposal





SC1-HCO-20-2020: Coordination of clinical research activities of the European Reference Networks

Deadline: 7 April 2020

Scope

- Coordinate the research and innovation actions of the ERNs
- Identify the research priorities to be tackled by ERNs
- Facilitate the clinical research collaborations among ERNs and beyond
- Coordinate of the clinical research activities of ERNs with the major initiatives of rare diseases research, the International Rare Diseases Research Consortium (IRDiRC) & the European Joint Programme on Rare Diseases (EJP RD)

Expected impact

- Contribute to IRDiRC's goal, by 2027, to enable accurate diagnosis, care and available therapy of a rare disease within one year of consulting a doctor
- Enhance synergy with the Connecting Europe Facility Programme and the EU Health Programme
- Contribute to a European ecosystem for rare diseases bringing efficiently results of research and innovation to the benefit of the patient

Practical aspects

Coordination and Support Action, 2 M€ – 1.5-2M€/proposal



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Digital Transformation in Health and Care

- Better access to healthcare and sustainability of health and care systems
- To empower the participation of citizens and facilitate the transformation of health and care services to more digitised, person-centred and community-based care models
- eHealth and mHealth
- ICT for Active and Healthy Ageing

IMPACT: to maximise the potential of the digital economy in the health and care sectors





SC1-DTH-02-2020: Personalised early risk prediction, prevention and intervention based on Artificial Intelligence and Big Data technologies

Deadline: 22 April 2020

Scope

- Innovative ICT solutions through data, data analytics, advanced or novel digital technologies, services, products, organisational changes (also including citizens data ownership and increasing health literacy)
- Validation and active stakeholder engagement in the design
- Personalised early risk prediction, prevention and intervention approaches and better understanding of disease symptoms and effects and behavioural changes
- Addressing the needs of individuals, improving the uptake of preventive approaches and leading to more effective health and care systems





SC1-DTH-02-2020: Personalised early risk prediction, prevention and intervention based on Artificial Intelligence and Big Data technologies

Expected impact

- Adequate information on personalised risk prediction, prevention and intervention
- Clear improvements of outcomes for individuals, care systems and wider society and contribution to new health and care pathways
- Large-scale collection of user-generated data in compliance with data protection, privacy and security rules and principles

Practical aspects

Research and Innovation action, 32 M€ - 4-6 M€/proposal





Deadline: 22 April 2020

SC1-DTH-04-2020: International cooperation in smart living environments for ageing people

Scope

- Develop and validate new solutions that provide personalised advice, guidance and follow-up by smart living environments for ageing people, supporting independent active and healthy lifestyles, fostering social participation and avoiding social exclusion (considering ethics, privacy, security and regulatory aspects, gender issues),
- Building on active user engagement
- Validation in realistic test sites (eg. home or care centres)
- Collaboration with Japan (standardisation)
- Collaboration with Canada (Transitions in Care Initiative)





SC1-DTH-04-2020: International cooperation in smart living environments for ageing people

Expected impact

- Independent living, and quality of life of older persons compared to current state of the art;
- Usefulness and effectiveness of personalized recommendations and follow-up in terms of the goals of preserving physical, cognitive, mental and social well-being for as long as possible;
- Evidence of user-centred design and innovation, effective ways of human computer interaction, and user acceptance;
- Fostering social participation and reducing social exclusion's risks;
- Validation of non-obtrusive technology for physical, cognitive, social and mental wellbeing;
- Strengthened international cooperation in Research and Innovation on ICT for AHA.

Practical aspects

Research and Innovation action, 8 M€ - 2-4 M€/proposal





SC1-DTH-12-2020: Use of Real-World Data to advance research on the management of complex chronic conditions

Scope: clinical research integrating Real World Data (RWD), either newly acquired or from existing sources, and linking them with data collected with a research purpose if relevant. Use of RWD to improve the clinical management of adults with complex chronic conditions (CCC).

Deadline: 7 April 2020

Expected impact

- Demonstrate the potential of the use of Real World Data to advance clinical research on complex chronic conditions;
- Demonstrate potential and use of RWD by health authorities to understand safety, quality and effectiveness of therapies;
- Improve the clinical outcomes as well as quality of life of CCC patients;
- Advance the understanding of management of complex diseases;
- Contribution to the cross-border health data exchange and to the DSM.

Practical aspects

Research and Innovation action, 41 M€ - 4-6M€/proposal



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Trusted digital solutions and Cybersecurity in Health and Care

- Multidisciplinary technologies and solutions in health and care with a focus on cybersecurity
- Secure and user-driven ICT-based solutions in early risk detection and interventions
- Aggregation of a variety of new and existing data sources

FOCUS AREAS

- Digitising and transforming European industry and services
- Boosting the effectiveness of the Security Union





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

Deadline: 22 April 2020

Scope

- Demonstrate the potential and benefits of AI technologies for advancing research and personalised medicine through the linking of relevant genomics data and repositories, according to adequate organisational, regulatory, security, ethical and technical requirements
- Develop and test AI solutions for linking genomics repositories across the EU, including banks of "-omics" and health related data, biobanks and other registries - supporting clinical research, decision making, diagnostic capacity in personalised medicine
- potential to build a large-scale distributed repository of relevant genomic data and other -omics and medical data for AI solutions
- compliance with the relevant privacy, cybersecurity, ethical and legal rule (incl. exchange of cross-border data)





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

Expected impact

- Development and testing of effective AI technologies on genomics and other linked -omics and healthdata repositories
- Promoting the sharing of data and infrastructure for prevention and personalised medicine research, linking with ongoing '-omics' and human cell mapping initiatives, secure access and cross-border exchange, interoperability of relevant registries
- Measuring patient-based value healthcare outcomes
- Supporting the pooling of health data and resources across the EU
- Standards for genomic data generation, analysis, privacy and sharing
- Providing open, reusable data for prevention, genomics and personalised medicine research.
- Trust of users on AI solutions to process and link genomics data with other -omics and health related data for better decision-making and value-based patient health outcomes

Practical aspects

Research and Innovation action,
35 M€ – up to 10 M€/proposal

www.kpk.gov.pl



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Deadline: 13 November 2019

DT-TDS-05-2020: AI for Health Imaging

Scope

- AI tools and analytics for prevention, prediction and treatment of the most common forms of cancer while providing solutions to securely share health images across Europe
- Set up and contribute to populate a large interoperable repository of health images enabling the development, testing and validation of AI-based health imaging solutions to improve diagnosis, disease prediction and follow-up
- High quality, interoperable, anonymised or pseudo-anonymised data sets of annotated cases, based on data donorship, using open APIs
- Ethics, security requirements and data protection legislation
- Evidence establishing the AI tools safety, validity, reproducibility, usability, reliability and usefulness for better health outcomes
- Explanation reasoning behind AI-based conclusions and recommendations, possible failures and inaccuracies





DT-TDS-05-2020: AI for Health Imaging

Expected impact

- Creation of a EU-wide repository of health images dedicated to the most common forms of cancer, enabling experimentation of AI-based solutions to improve diagnosis, treatment and follow-up and contribute to a more precise and personalised management of cancer
- Developing technical, organisational and ethical standards for AI for health imaging
- Promoting access to anonymised health image data sets to be made more openly reusable across the EU for training AI applications
- Increasing trust in AI solutions among users (healthcare professionals and patients), investors and stakeholders at industry and academia

Practical aspects

Research and Innovation action,
35 M€ – 8-10 M€/proposal





Excellent Science

ERC

ERC STARTING GRANTS:	17.07.2019 – 16.10.2019
ERC SYNERGY GRANT:	18.07.2019 – 05.11.2019
ERC CONSOLIDATOR GRANTS:	24.10.2019 – 04.02.2020
ERC ADVANCED GRANTS:	14.05.2020 – 26.08.2020

MSCA

ITN:	12.09.2019 – 14.01.2020
NIGHT:	08.10.2019 – 09.01.2020
RISE:	05.12.2019 – 28.04.2020
IF:	08.04.2020 – 09.09.2020
COFUND:	08.04.2020 – 29.09.2020

Access to JRC infrastructure:

<https://ec.europa.eu/jrc/en/research-facility/open-access>





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