

HORIZON 2020

Taller de oportunidades de financiación europea en los ámbitos de Salud y Bioinformática

UAB, 10 de julio de 2019

Oportunidades de financiación europea en Salud, Bioinformática y Nanomedicina

Reto Social "Health, demographic change and wellbeing" y
otros retos dentro del programa Horizon 2020.

Juan E. Riese PhD MBA

Punto Nacional de Contacto – Reto Social 1 H2020 & IMI2

Experto Nacional en el Comité de Programa Reto Social 1

Oficina de Proyectos Europeos

*Subdirección General de Programas Internacionales
de Investigación y Relaciones Institucionales*



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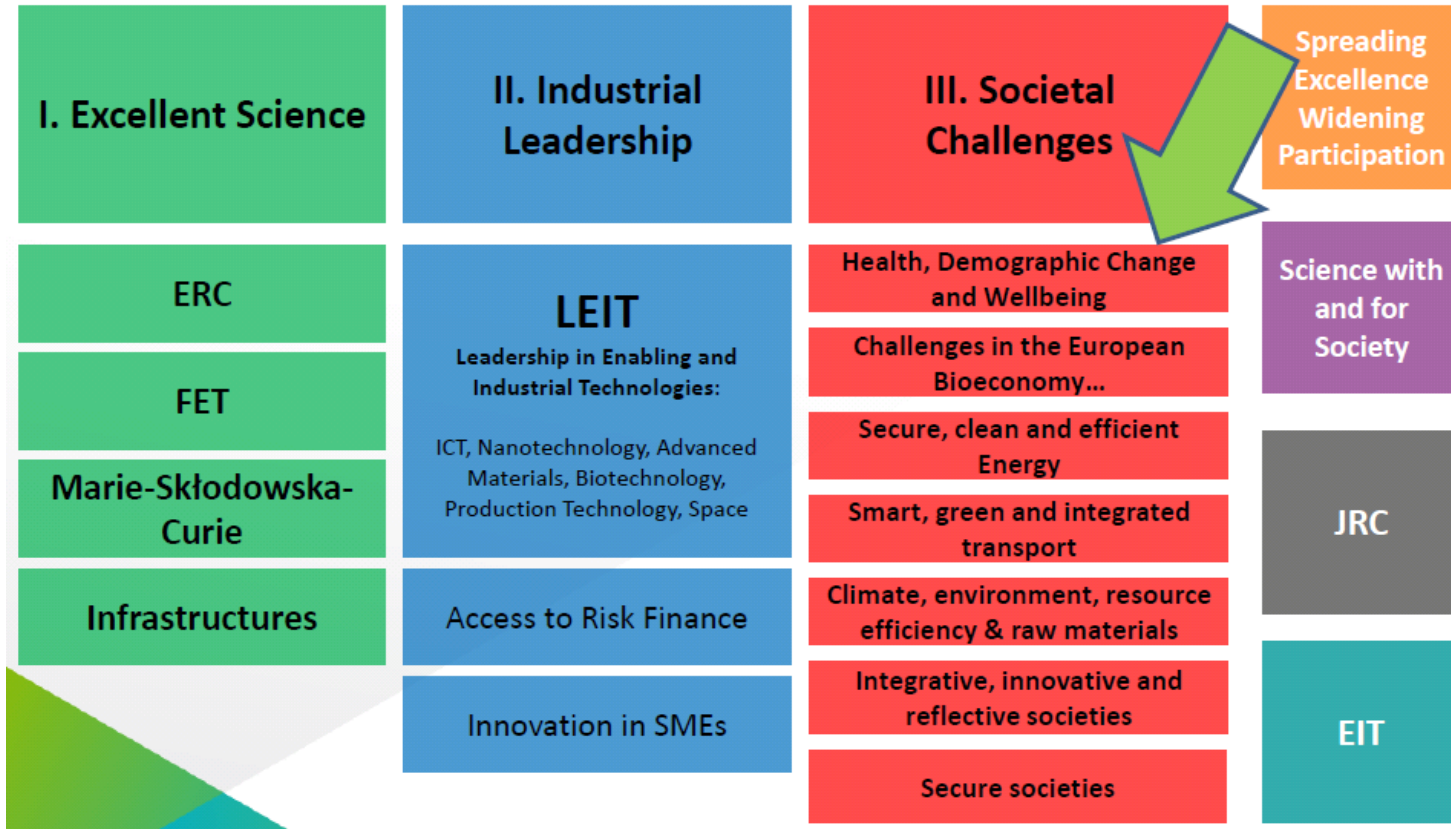


Instituto
de Salud
Carlos III

UAB

Universitat Autònoma de Barcelona

Pilar 3: los Retos Sociales



Oportunidades de financiación en Salud, Bioinformática y Nanomedicina





SC1 “Salud, Cambio Demográfico y Bienestar”



- **Envejecimiento** de la población.
- Ciudadanos mejor informados y mayores exigencias a los proveedores de atención médica por parte de los pacientes.
- Solicitud de sistemas sanitarios más personalizados y sostenibles.

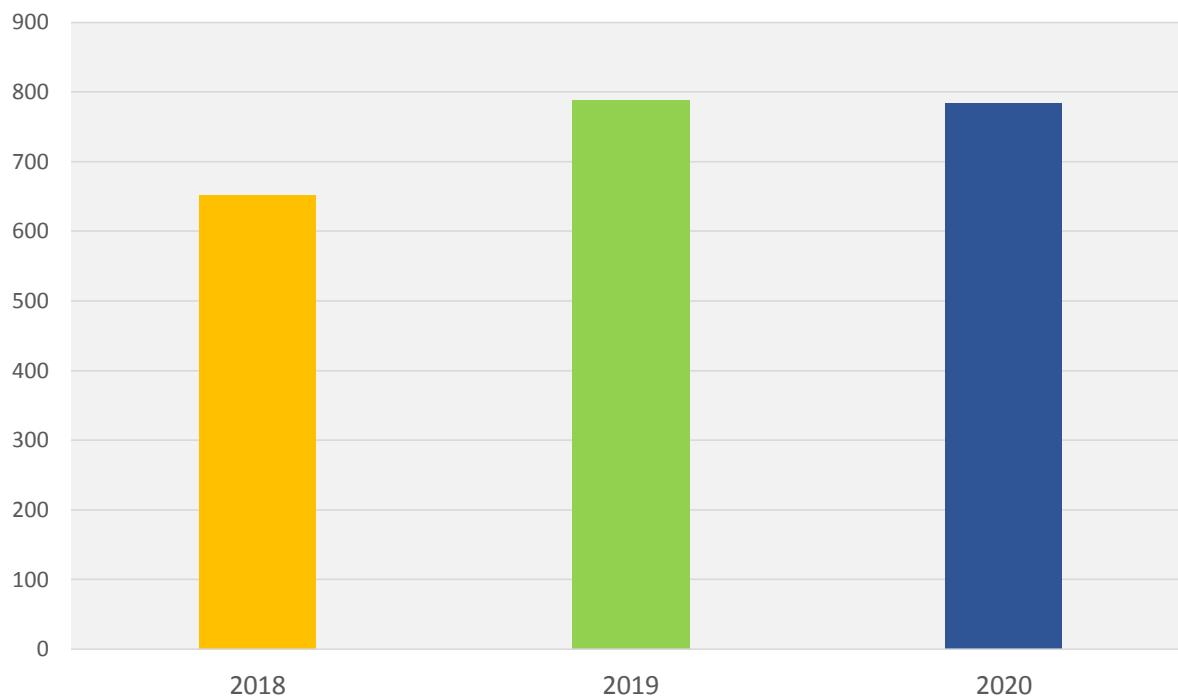
Retos específicos:

- Entender mejor la salud y la enfermedad (**medicina personalizada**).
- La carga de las **enfermedades crónicas** e infecciosas.
- Mejoras en el **desarrollo de fármacos**.





Presupuesto total para las convocatorias del SC1



- Call SC1 2018: 650,99 M€
- Call SC1 2019: 787,18 M€
- **Call SC1 2020: 783,92 M€**



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Reglas básicas de elegibilidad y participación

- Consorcio formado mínimo por 3 personas jurídicas de 3 países de la UE o Estados Asociados.
- Inclusión de aspectos SSH (Social Sciences and Humanities): culturales, sociales, etc.
- Aspectos de género:
 - Gestión del proyecto
 - Objeto de la I+i
- Aspectos éticos.
- Ciencia abierta, acceso abierto:
 - Difusión y comunicación
- Participación de los EEUU y terceros países. Países BRICS+M no pueden recibir financiación excepto si se menciona específicamente en el texto del topic o son necesarios para los objetivos del proyecto.
- Solicitudes en una o dos fases.
- El presupuesto del proyecto debe ser el adecuado para poder realizar las actividades previstas y alcanzar los objetivos fijados.
- El presupuesto en el texto de la convocatoria es normalmente indicativo.
- La duración del proyecto debe ser la adecuada para alcanzar sus objetivos (habitualmente 3/5 años).



7 prioridades repartidas en 3 áreas

(I) Better health and care, economic growth and sustainable health systems (Topics BHC)

1. Personalised medicine
2. Innovative health and care industry
3. Infectious diseases and improving global health
4. Innovative health and care systems – Integration of care
5. Decoding the role of the environment for health and well-being
6. Contribution to the Call on Digital Transformation in Health and Care

(II) Digital transformation in health and care (Topics DTH)

(III) Trusted digital solutions and cybersecurity in health and care (Topics TDS)

Otras acciones se encuentran en el programa piloto European Innovation Council: premios, Instrumento PYME, FTI, FET Open





(I) Better health and care, economic growth and sustainable health systems

(Topics BHC)

1. Personalised medicine
2. Innovative health and care industry
3. Infectious diseases and improving global health
4. Innovative health and care systems – Integration of care
5. Decoding the role of the environment for health and well-being
6. Contribution to the Call on Digital transformation in Health and Care

H2020



Call Identifier: [SC1-BHC-06-2020](#)

Name: Digital diagnostics – developing tools for supporting clinical decisions by integrating various diagnostic data

Scope:

- Proposals should develop tools, platforms or services that will use information provided by most relevant diagnostic means for a particular area.
- The solutions should 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.
- They should be tested and validated in real-life settings in pilot centers.
- Any medical data relevant for a particular disease may be considered.
- Ethical and legal concerns.



Total Budget: 40 M€



Contribution per project: 8 – 15 M€



Opening date: 4 July 2019



Deadline: 7 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: SC1-BHC-08-2020

Name: New interventions for Non-Communicable Diseases

Scope:

- Proposals should conduct early stage clinical trial(s) to validate novel or refined healthcare interventions for patients suffering from non-communicable diseases.
- Clinical trial(s) should be supported by proof-of-concept of clinical safety and efficacy and may be investigator-initiated.
- Preclinical research and the draft clinical protocol should be completed at the time of submission of the proposal.
- Potential clinical benefit, including consideration of patient-reported outcomes should be demonstrated. Sex and gender differences must be considered; age and other stratification criteria.



Total Budget: 80 M€



Contribution per project: 4 – 6 M€



Opening date: 4 July 2019



Deadline 1st stage: 24 September 2019



Deadline 2nd stage: 7 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: SC1-BHC-11-2020

Name: Advancing the safety assessment of chemicals without the use of animal testing

Scope:

- Proposals should consider 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.
- Also should consider the involvement of the European Commission's Joint Research Centre, any relevant complementary initiatives or any regulatory bodies.

Expected Impact:

- Scientifically sound, practicably implementable non-animal solutions readily deployable to aid in meaningful safety assessment of chemicals.
- Recognition from regulatory bodies and their engagement to translate results, methods and solutions into safety assessment practice.



Total Budget: 60 M€



Contribution per project: 10 – 20 M€



Opening date: 4 July 2019



Deadline: 7 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: SC1-BHC-17-2020

Name: Global Alliance for Chronic Diseases (GACD) - Prevention and/or early diagnosis of cancer

Scope:

- GACD will focus on early diagnosis of cancer in Low and Middle-Income Countries (LMIC) and/or in vulnerable populations in High-Income Countries (HIC).
- Proposals should then focus on implementation research for the prevention and/or early diagnosis of cancer, derived from existing knowledge about effective and/or promising interventions.
- Also should include a strategy to test the proposed model of intervention and to address the socioeconomic and contextual factors of relevance to the targeted region and community.



Total Budget: 20 M€



Contribution per project: 1 – 3 M€



Opening date: 4 July 2019



Deadline: 7 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: SC1-BHC-20A-2020

Name: Pre-commercial procurement (PCP) for integrated care solutions

Scope:

- PCP actions target to modernize public services including personal-health and self-care solutions, professional care solutions and ICT-based solutions, as well as all areas of public sector interest.
- Proposals should demonstrate sustainability of the action beyond the life of the project.

Expected impact:

- Reduced fragmentation of demand for innovative solutions in the area of integrated care.
- Increased opportunities for wide market uptake and economies of scale for the supply side.



Total Budget: 25 M€



Contribution per project: 5 – 6 M€



Opening date: 4 July 2019



Deadline: 7 April 2020



Type of Action: Pre-Commercial Procurement



Call Identifier: [SC1-BHC-20B-2020](#)

Name: Public procurement of innovative solutions (PPI) for diagnostics for infectious diseases

Scope:

- This topic contributes to the EU One Health Action Plan on Antimicrobial Resistance, with the potential implementation of rapid diagnostic tools for infectious diseases in clinical practice.

Expected Impact:

- Implementation of innovative procurement practices for diagnostics for infectious diseases in the EU, based on the most economically advantageous tendering approach.
- Contribute to the European Plan in relation to Better Prevention and Control of AMR and the goal to address patient safety in hospital environments.



Total Budget: shared with BHC-20A



Contribution per project: 3 – 5 M€



Opening date: 4 July 2019



Deadline: 7 April 2020



Type of Action: Public Procurement of Innovative Solutions



Call Identifier: SC1-BHC-33-2020

Name: Addressing low vaccine uptake

Scope:

- Proposals should work to increase understanding of the determinants of low vaccine uptake in specific contexts situated in the EU and/or Associated Countries (AC), and develop strategies to increase vaccination rates of essential vaccines within these contexts.
- The approach taken should include a detailed examination of the causes, and the design and testing of one or more interventions to improve vaccine uptake.

Expected Impact:

- Develop practical and readily implementable guidelines.
- Contribute to increasing vaccine coverage in Europe.



Total Budget: 9 M€



Contribution per project: 2 – 3 M€



Opening date: 4 July 2019



Deadline: 7 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: [SC1-BHC-34-2020](#)

Name: New approaches for clinical management and prevention of resistant bacterial infections in high prevalence settings

Scope:

- Proposals should focus on the identification of best practices, and the development and validation of interventions, infection prevention and clinical management plans for dealing with resistant bacterial infections in high prevalence settings.

Expected Impact:

- Availability of tested cost effective models for prevention and treatment of bacterial infections in health care settings.
- Reduced spread of resistant hospital acquired infections in these settings.
- Knowledge that can be of use for other countries, benefitting their local population and diminishing the global spread of resistant bacteria.



Total Budget: 25 M€



Contribution per project: 10 - 15 M€



Opening date: 4 July 2019



Deadline: 7 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: [SC1-BHC-35-2020](#)

Name: Creation of a European wide sustainable network for harmonised large-scale clinical research studies for infectious diseases

Scope:

- Proposals should set a multidisciplinary network able to provide a platform for a rapid response in the conduct of clinical studies in relation to any severe infection.
- They should build on established structures for infectious disease clinical research at national or regional scales.
- It is expected to perform clinical studies and further advance clinical research in the field of infectious diseases.

Expected Impact:

- Reduced cost and time through efficiently implemented clinical trials.
- Create and strengthen the operational capacity and the infrastructures for providing real-time evidence for optimal medical intervention.



Total Budget: 30 M€



Contribution per project: 25 – 30 M€



Opening date: 4 July 2019



Deadline: 7 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: [SC1-BHC-24-2020](#)

Name: Healthcare interventions for the management of the elderly multimorbid patient

Scope:

- Proposals should focus on interventions for effective, integrated patient-centered approaches, to improve the management of multimorbid elderly patients.
- Also should support the delivery of best care adapted to such patients; with a holistic, inclusive, cross-sectoral and interdisciplinary approach.

Expected Impact:

- Contribute to better management of multimorbid elderly patients and cost containment in healthcare interventions, addressing to new validated pathways and healthcare models, new clinical guidelines and/or developed quality key performance indicators for the management.



Total Budget: 50 M€



Contribution per project: 4 – 6 M€



Opening date: 4 July 2019



Deadline 1st stage: 24 September 2019



Deadline 2nd stage: 7 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: SC1-BHC-37-2020

Name: Towards the new generation of clinical trials – trials methodology research

Scope:

- Proposals should focus on methodology research and develop innovative solutions to improve the design, conduct and analysis of clinical trials.
- Also, it should identify and validate methods that will improve the generalizability of evidence generated through different trials.
- Applicants should identify best practices to prevent bottlenecks in execution of clinical trial, including issues related to patient recruitment.
- In this topic, the European Medicines Agency (EMA) will support the selected applicant consortium in the implementation of the action.

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.



Total Budget: 6 M€



Contribution per project: 4 – 6 M€



Opening date: 4 July 2019



Deadline: 7 April 2020



Type of Action: RIA **Lump Sump**

Oportunidades de financiación en Salud, Bioinformática y Nanomedicina

Fuente: Comisión Europea



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Call Identifier: [SC1-BHC-29-2020](#)

Name: Innovative actions for improving urban health and wellbeing - addressing environment, climate and socioeconomic factors

Scope:

- Proposals should develop and test effective actions and policies for improved urban health and wellbeing in Europe. Where applicable, health inequalities and environmental aspects should be addressed.
- Also, projects should address improved physical and/or mental health, while considering the relevant socio-economic and/or environmental determinants for health. They could address any sector or policy area relevant to achieve a lasting health improvement.

Expected Impact:

- More robust evidence for policy making
- Improved population, physical and/or mental health in urban areas of the EU
- Reduced health inequalities in urban areas



Decoding the role of the environment, including climate change, for health and well-being

Total Budget: 35 M€



Contribution per project: 4 – 5 M€



Opening date: 4 July 2019



Deadline 1st stage: 24 September 2019



Deadline 2nd stage: 7 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: SC1-BHC-36-2020

Name: Micro- and nano-plastics in our environment: Understanding exposures and impacts on human health

Scope:

- Proposals should use innovative approaches to provide policy relevant scientific data in support of improved human health hazard and risk assessment of micro- and/or nano-plastics.
- The following research priorities concerning plastics can be considered:
 - Environmental/food/water sources and transmission to humans.
 - Methods for identification and quantification in foods, environmental media and tissues.
 - Exposure levels of humans for biomonitoring.
 - Analytical methods for detection.
 - Microbial colonization/vectors for pathogens.
 - Plastics as condensation nuclei for airborne particulate matter and chemicals harmful to health.
 - Toxicology and uptake of additives/adsorbed contaminants.
 - Fate of plastics in the gastro-intestinal or respiratory tracts and secondary organs.
 - Immune responses.



Total Budget: 25 M€



Contribution per project: 4 – 6 M€



Opening date: 4 July 2019



Deadline: 7 April 2020



Type of Action: Research and Innovation (RIA)

Oportunidades de financiación en Salud, Bioinformática y Nanomedicina

Fuente: Comisión Europea



Call Identifier: [SC1-DTH-12-2020](#)

Name: Use of Real-World Data to advance research on the management of complex chronic conditions

Scope:

- The topic will support clinical research integrating Real World Data from clinical practice or from patient's daily life and linking them with data collected with a research purpose if relevant.
- The focus will be on the use of real world data, either newly acquired or from existing sources (such as data from clinical professional societies/associations, cohorts, registers, biobanks or collected through genome research initiatives) to improve the clinical management of adults with complex chronic conditions. The use of new technologies for data analytics and interpretation such as artificial intelligence and computer modelling are encouraged.



Total Budget: 41 M€



Contribution per project: 4 – 6 M€



Opening date: 4 July 2019



Deadline: 7 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: [SC1-DTH-13-2020](#)

Name: Implementation research for scaling up and transfer of innovative solutions involving digital tools for people-centred care

Scope:

- Health system transition to people-centered care requires empowering citizens and integration of services.
- Integrated care principles allow care for patients to be better coordinated, and jointly planned by the health and social care professionals across relevant preventive and curative services.
- Proposals should study the scaling-up or transferability of an innovative solution involving digital tools, i.e. the conditions under which it can be implemented in other health systems and whether it can have the same intended effect.



Total Budget: 20 M€



Contribution per project: 3 – 4 M€



Opening date: 4 July 2019



Deadline 1st stage: 24 September 2019



Deadline 2nd stage: 7 April 2020



Type of Action: Research and Innovation (RIA)

Oportunidades de financiación en Salud, Bioinformática y Nanomedicina

Fuente: Comisión Europea





(II) Digital transformation in health and care (Topics DTH)

H2020



Call Identifier: SC1-DTH-02-2020

Name: Personalized early risk prediction, prevention and intervention based on Artificial Intelligence and Big Data technologies

Scope:

- Personalized early risk prediction models, estimating the probability that a specific event occurs in a given individual over a predefined time, can enable earlier and better intervention.
- Proposals should build on results of projects and the state of the art in ICT for early risk prediction and introduce innovative ICT solutions through data / data analytics.
- Also should build on the use of already existing and/or new data generated by individuals, health professionals and other service providers (IoT enabled devices, wearables, mobile devices, data source networks or data lakes), with a view to developing personalized early risk prediction, prevention and intervention approaches that meet the needs of individuals while providing them with adequate information to support informed decision making.



Total Budget: 32 M€



Contribution per project: 4 – 6 M€



Opening date: 19 November 2019



Deadline: 22 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: SC1-DTH-04-2020

Name: International cooperation in smart living environments for ageing people

Scope:

- Proposals should develop and validate new solutions leading to smart living environments for ageing people, supporting independent active and healthy lifestyles.
- Also should provide personalized advice, guidance and follow-up for key age and health related issues in daily life which impact the person's ability to remain active, healthy and independent.
- They should be based on trans-disciplinary research, involving behavioral, sociological, psychological, medical and other relevant disciplines, including gender and cultural aspects.
- The proposed R&I actions should address either a collaboration with Japan or with Canada.



Total Budget: 8 M€



Contribution per project: 4 M€



Opening date: 19 November 2019



Deadline: 22 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: [SC1-DTH-06-2020](#)

Name: Accelerating the uptake of computer simulations for testing medicines and medical devices

Scope:

- Proposals will develop innovative scientific and technological computer modelling solutions for testing medicines and/or medical devices.
- Proposed computer modelling solutions will be the result of a multidisciplinary effort (e.g. within the fields of computational modelling, chemo/bio-informatics, systems biology, pharmacology, -omics (genomics, epigenomics, metabolomics), tissue mechanics, biology, pharmaceuticals, medicine, physiology, toxicology, social science aspects such as gender) and must also explore and inform of the reasons for failure should the drug or medical device be found not efficient or safe and will suggest improvements.



Total Budget: 32 M€



Contribution per project: 6 – 8 M€



Opening date: 19 November 2019



Deadline: 22 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: SC1-DTH-14-2020

Name: Pre-commercial Procurement for Digital Health and Care Solutions

Scope:

- Proposals should be oriented to support the health and care service provider to procure the development of digital services that can facilitate the transition to integrated care models across health and social services and country-specific cross-institutional set-ups, including decentralized procurement environments and collaboration across institutions.
- The procurers, hospital clusters, care services providers and other parts of the regional ecosystems should share knowledge, test results and needs to better coordinate the primary and community care, and stimulate local responsibility for care services, monitoring and rehabilitation.
- The service innovation should facilitate the early adoption and transferability of successful solutions addressing the innovation gap.



Total Budget: 10 M€



Contribution per project: 5 – 6 M€



Opening date: 19 November 2019



Deadline: 22 April 2020



Type of Action: Pre-Commercial Procurement



Topics en esquema Acciones de Coordinación y Apoyo (CSAs)



Mio. €



Nº



Mio. €



Contributions to the Call on Digital transformation in Health and Care

<u>SC1-HCC-10-2020</u> : Towards a Health research and innovation Cloud: Capitalising on data sharing initiatives in health research	2-3	1-2	3	04.07.2019	07.04.2020
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Contributions to the Call on Digital transformation in Health and Care

<u>SC1-HCC-06-2020</u> : Coordination and Support to better data and secure cross-border digital infrastructures building on European capacities for genomics and personalized medicine	Up to 4	1-2	4	09.07.2019	13.11.2020
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SC1-HCC-07-2020: Support for European eHealth Interoperability roadmap for deployment	Up to 3	1-2	2	19.11.2019	22.04.2020
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SC1-HCC-08-2020: Scaling up innovation for active and healthy ageing	1.5-2	1-2	2	19.11.2019	22.04.2020
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SC1-HCC-09-2020: Supporting deployment of eHealth in low and lower middle income countries in Africa for better health outcomes	1.5-2	1-2	2	19.11.2019	22.04.2020
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(III) Trusted digital solutions and cybersecurity in health and care (Topics TDS)

H2020



Call Identifier: DT-TDS-04-2020

Name: AI for Genomics and Personalized Medicine

Scope:

- Proposals should demonstrate the potential and benefits of AI technologies for advancing research and personalized medicine through the linking of relevant genomics data and repositories, according to adequate organizational, regulatory, security, ethical and technical requirements.
- Proposals should develop and test AI solutions for linking genomics repositories across the EU, including banks of “-omics” and health related data, biobanks and other registries, with the view of supporting clinical research and decision making.

Expected Impact:

- Effectiveness of AI technologies for genomics and personalized medicine.
- Promoting the sharing of data and infrastructure for personalized medicine through a European network on genomics.



Total Budget: 35 M€



Contribution per project: up to 10 M€



Opening date: 19 November 2019



Deadline: 22 April 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: DT-TDS-05-2020

Name: AI for Health Imaging

Scope:

- This action should contribute to testing and developing AI tools and analytics focused on the prevention, prediction and treatment of the most common forms of cancer while providing solutions to securely share health images across Europe.
- Proposals should contribute enabling the development, testing and validation of AI-based health imaging solutions to improve diagnosis, disease prediction and follow-up of the most common forms of cancer.

Expected Impact:

- Contributing towards the creation of a EU-wide repository of health images dedicated to the most common forms of cancer, enabling experimentation of AI-based solutions to get a more precise and personalized management of cancer.



Total Budget: 35 M€



Contribution per project: 8 – 10 M€



Opening date: 9 July 2019



Deadline: 13 November 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: DT-ICT-12-2020

Name: AI for the smart hospital of the future

Scope:

- Device 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.
- Proposals may address any aspect of health facility operations across their range of functions, such as diagnostics, treatments, logistical aspects, etc.

Expected Impact (a.o.):

- Emergence of European-led AI based pilots for the smart hospital of the future, enabled by open system platforms
- Demonstration of effectiveness, in use, of AI based technologies, such as smart robots, in a range of healthcare tasks
- Engagement of healthcare policy makers, investors, stakeholders and through the pilot.



Total Budget: 40 M€



Contribution per project: 7 – 10 M€



Opening date: 19 November 2019



Deadline: 22 April 2020



Type of Action: Innovation Action (IA)



Call Identifier: BIOTEC-07-2020

Name: Multi-omics for genotype-phenotype associations (RIA)

Scope:

- Proposals submitted to this topic will work on the integration of different 'omics datasets and different data types towards the definitive goal of fully understanding the causal relations between the genome of an organism and its phenotype, i.e. how biological systems respond to variations in their genetic make-up or in their external environment.

Proposals should also:

- Focus on systems biology solutions and will develop methods that integrate 'omics datasets and use data collected in several experiments. A description of the datasets available for the given application should be included together with clarification of the potential use of big data analytics, machine learning or artificial intelligence in order to analyse available data sets.
- Take into consideration the study of interactions between different data types; the combination of data from multiple time points and different individual entities;
- Tackle the challenges posed by data quality. The outcomes should allow for replication and validation, expanding the capacity to generate biological knowledge.
- Involve at least two case studies for the application in one or two industrial sectors where biotechnology can provide added value, excluding healthcare.



Total Budget: 56 M€



Contribution per project: 6 – 8 M€



Opening date: 3 July 2019



Deadline 1st stage: 12 December 2019



Deadline 2nd stage: 14 May 2020



Type of Action: Research and Innovation (RIA)



Call Identifier: NMBP-21-2020

Name: Biological scaffolds for tissue regeneration and repair (RIA)

Scope:

- Research activities on functional biomaterials for regenerative medicine should show their advanced properties and their eventual field of application. These may include association with pluripotent stem cells, biostimulators, microfluidic devices, cellularised and/or biomimetic scaffolds, biological agents and appropriate disease models etc.

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.



Total Budget: 17 M€



Contribution per project: 4 – 6 M€



Opening date: 3 July 2019



Deadline 1st stage: 12 December 2019



Deadline 2nd stage: 14 May 2020



Type of Action: Research and Innovation (RIA)

Activities should start at TRL 3 and achieve TRL 5 at the end of the project



Call Identifier: DT-NMBP-23-2020

Name: Next generation organ-on-chip (RIA-LS)

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 such as: cell culturing (including multi-tissue or multi-organ arrangements), micro-fluidics, micro/nano-sensors, imaging, actuators, 3D bio-printing, modelling and simulation, bioinformatics;
- Demonstrator applications involving modelling, diagnosis and therapy of human disease(s) of high and yet unmet medical need. The new devices should permit the simulation of body system processes under adverse conditions and in particular in disease states, healing and regeneration under mechanical stress and electrical stimulation, or immune responses, taking into account sex and gender differences, when relevant;
- 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.



Total Budget: 18 M€



Contribution per project: 4 – 6 M€



Opening date: 3 July 2019



Deadline 1st stage: 12 December 2019



Deadline 2nd stage: 14 May 2020



Type of Action: Research and Innovation action Lump Sum

Activities should start at TRL 3 and achieve TRL 5 at the end of the project



La Iniciativa de Medicamentos Innovadores 2 (IMI2)



Accelerating
research and
development



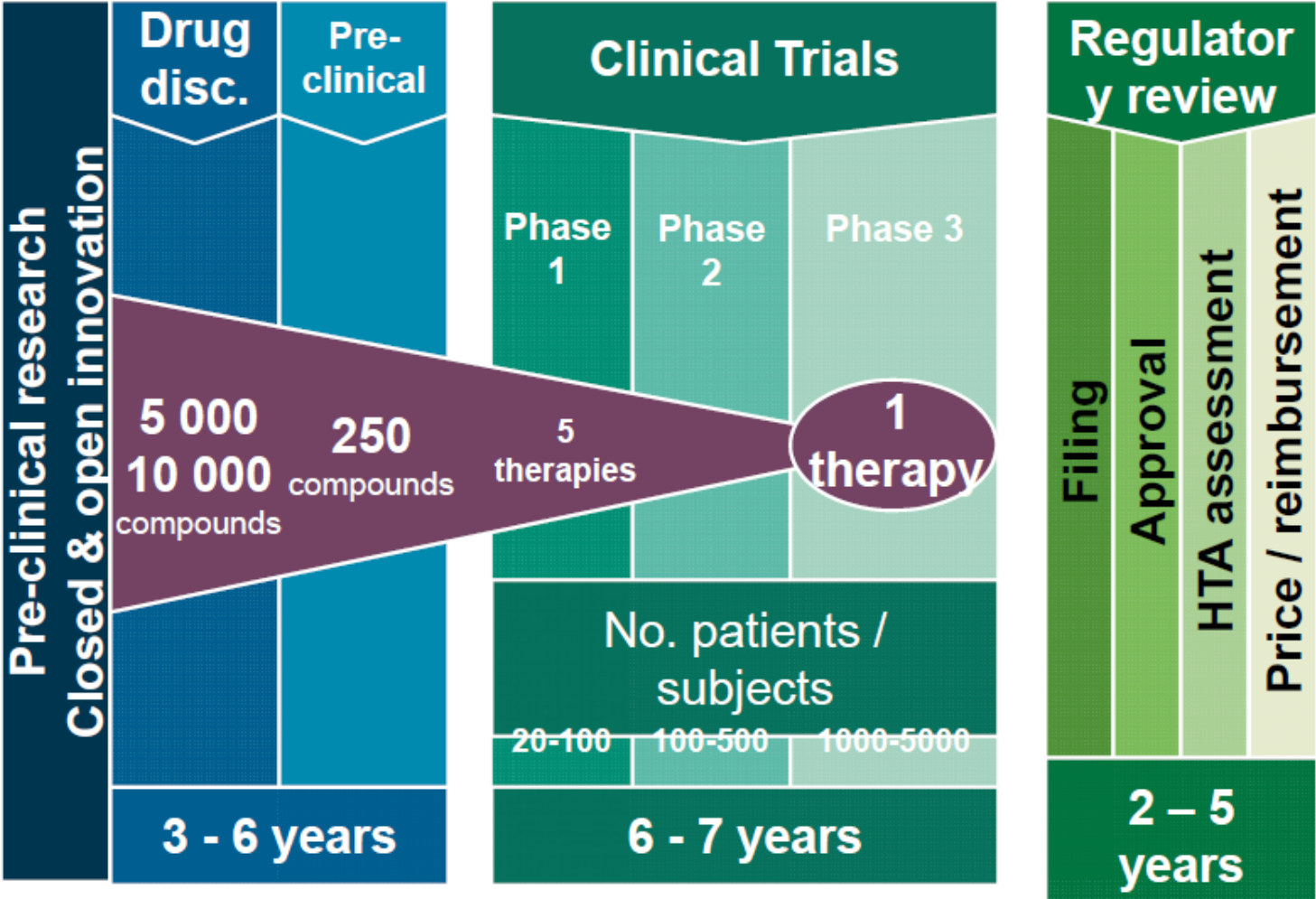
Speeding up patient
access to innovative
treatments



Improving patient
outcomes and safety
of medicines

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

Challenges in medicine development



Pharmacovigilance
Real world evidence



Conceptos clave

- **Non-competitive collaborative research**
- **Competitive Calls for proposals**
- **Open collaboration in public-private consortia**
- **Data sharing, dissemination of results...**
- **Industry contribution is in kind**



Presupuesto IMI 2 (2014 – 2024)

EU funding goes to:

Universities
SMEs
Mid-sized companies
Patient groups
etc...



€1.638 bn



€1.425 bn

EFPIA companies

receive no funding
contribute to projects 'in kind'

Other
€213 m

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

IMI 2 total budget
€3.276 billion



Topics convocatoria 18^a

1. Central repository of digital pathology slides to support the development of artificial intelligence tools
2. Health Outcomes Observatories – empower patients with tools to measure their outcomes in a standardised manner creating transparency of health outcomes
3. Improving patient access, understanding and adherence to healthcare information: an integrated digital health information project
4. Establishing international standards in the analysis of patient reported outcomes and health-related quality of life data in cancer clinical trials
5. Accelerating research & development for advanced therapy medicinal products
6. Supporting the development of chimeric antigen receptor T cells

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Stage 1 deadline: 26 September 2019



Stage 2 deadline: 26 March 2020



Potential future IMI Call topics

Neurodegeneration and other neuroscience priorities

- Digital transformation of clinical trial endpoints in pain
- Placebo effect in pain
- Psychiatric ratings using intermediate stratified markers -2 (PRISM-2)

Immunology

- Psoriatic arthritis

Infection control including vaccines

- New topic(s) under the AMR accelerator platform

Translational safety

- Dosing in specific populations

Big data, digital health, clinical trials and regulatory research

- ROADMAP 2: need and opportunity for public-private collaborative research to continue the RoadMap efforts

Facilitating the translation of advanced therapies to patients in Europe

- ATMP Patient Registries Outcomes Data and Evidence
- Innovative Manufacturing of Advanced Therapeutic Medicinal Products, ATMPs

Other enablers of research topics



Resumen de oportunidades de financiación de la I+i en Salud



Oportunidades de financiación en Salud, Bioinformática y Nanomedicina

Fuente: Comisión Europea/rojyjnegro



¡Muchas gracias por su atención!



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