

Las convocatorias 2018-2019-2020 del Reto Social 1 'Salud, cambio demográfico y bienestar'

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Experto Nacional en el Comité de Programa Reto Social 1

Oficina de Proyectos Europeos

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

Pilar 3 de HORIZON 2020 - Retos Sociales

III. Prioridad «Retos de la sociedad»		29.679
1. Salud, cambio demográfico y bienestar		7.472
2. Seguridad alimentaria, agricultura y silvicultura sostenibles, investigación marina, marítima y de aguas interiores y Bioeconomía		3.851
3. Energía segura, limpia y eficiente		5.931
4. Transporte inteligente, ecológico e integrado		6.339
5. Acción por el clima, medio ambiente, eficiencia de los recursos y materias primas		3.081
6. Europa en un mundo cambiante – Sociedades inclusivas, innovadoras y reflexivas		1.309
7. Sociedades seguras – Proteger la libertad y la seguridad de Europa y de sus ciudadanos		1.695

Reto Social 1 “Salud, Cambio Demográfico y Bienestar”



Better Health for all

- 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
- la **medicina personalizada**

La carga de las **enfermedades crónicas e infecciosas**

Mejoras en el desarrollo de fármacos

SCI-BHC-01-2019: Understanding causative mechanisms in co- and multimorbidities

Specific Challenge: The increasing number of individuals with co-and multimorbidities poses an urgent need to improve management of patients with multiple co-existing diseases. A better understanding of their causative mechanisms is needed to develop early diagnosis, efficient prevention and monitoring, and better treatments adapted to co- and multimorbid patients throughout their life course. Furthermore, there are many different etiological models of comorbid conditions (e.g., direct causation model or a consequence of treatment). In this context, capturing and measuring patient's complexity in the context of co- and multimorbidities is crucial for adequate management of these conditions and requires innovative approaches.

Scope: Proposals should identify and validate causative mechanisms (e.g. molecular, genetic, correlative, drug-drug interaction) combining mental and physical disorders through the integration of basic, pre-clinical and/or clinical research⁹. Applicants should prove the relevance of the identified mechanisms for co-morbid development. Where pertinent, development of biomarkers and other technologies for diagnosis and monitoring of comorbid conditions in patients is encouraged. A purposeful exploitation of existing data, biobanks, registries and cohorts is expected¹⁰, but does not exclude generation of new data. Sex and gender aspects, age, socio-economic, lifestyle and behavioural factors and any other non-health related individual attributes should be taken into consideration. SME participation is strongly encouraged.

The Commission considers that proposals requesting a contribution from the EU of between EUR 4 and 6 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact:

- New directions for clinical research to improve prevention, diagnosis, prognosis, therapy development, and management of co- and multimorbidities.
- Whenever relevant identified biomarkers for more accurate and earlier diagnosis, prognosis as well as monitoring of patients' condition.

Type of Action: Research and Innovation action

⁹ Clinical trials are excluded

¹⁰ Including any national, EU or international resource or infrastructure if appropriate.

Fuente: 3er
borrador
(julio 2017)

Hacia las convocatorias de SC1 2018-2019-2020

Estructura del texto de la convocatoria

Area 1. Better health and care, economic growth and sustainable health systems

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

Area 2. Digital transformation in health and care

Area 3. Trusted digital solutions and cybersecurity in health and care

Otras acciones: premios (en conv. 2020); Instrumento PYME y FTI aparte



Áreas específicas objetivo

- Mecanismos moleculares en co-morbilidad,
- Terapias combinadas,
- Microbioma,
- Medicina regenerativa,
- Enfermedades infecciosas,
- Enfermedades crónicas,
- Exposoma,
- Disruptores endocrinos,
- Salud mental,
- Cuidados paliativos,
- *Big data* en salud, innovación digital en salud,
- Investigación 'in silico',
- Sistemas de almacenamiento de datos salud en la nube,
- Atención integrada,
- Protección de datos y ciberseguridad,
- Historia electrónica, estandarización e interoperabilidad de datos y sistemas en salud,
- Soluciones digitales y robótica como apoyo en el envejecimiento

New: contribute to the Health Research and Innovation Cloud, one of the thematic clouds of the European Open Science Cloud.

Call – Better Health and care, economic growth and sustainable health systems

1.1. Personalised Medicine (I)

- SC1-BHC-01-2019: Understanding causative mechanisms in co- and multimorbidities combining mental and physical disorders – (4-6 M€/proyecto; 12-17 proyectos – total 70 M€)
- SC1-BHC-02-2019: Systems approaches for the discovery of combinatorial therapies (4-6 M€/proyecto; 8-12 proyectos – total 50 M€)
- SC1-BHC-03-2018: Exploiting research outcomes and application potential of the human microbiome for personalised prediction and prevention of disease (10-15 M€/proyecto 3-5 Proyectos – total 50 M€)
- SC1-BHC-04-2018: Rare Disease European Joint Programme Co-Fund (50 M€/Proyecto; 1 Proyecto – total 50 M€)

1.1. Personalised Medicine (II)

- SC1-BHC-05-2018: International flagship collaboration with Canada for human data storage, integration and sharing to enable personalised medicine approaches (4-6 M€/proyecto; 6-10 proyectos – total 40 M€)
- SC1-HCO-01-2018-2019-2020: Actions in support of the International Consortium for Personalised Medicine (1,5-2M€; 3 proyectos – total 8 M€ - 1 proyecto/año)
- SC1-HCO-02-2018: Data integration and data-driven in-silico models for enabling personalised medicine - a European standardization framework (1,5-2 M€; 1 proyecto – total 2 M€)
- SC1-HCO-04-2018: ERA-NET to support the Joint Programming in Neurodegenerative Diseases strategic plan (JPND) (4-5 M€; 1 proyecto – total 5 M€)

1.2. Innovative health and care industry

- SC1-BHC-07-2019: Regenerative medicine: from new insights to new applications (6-8M€; 6-8 proyectos – total 50 M€)
- SC1-BHC-09-2018: Innovation platforms for advanced therapies of the future (12-15M€; 4-5 proyectos – total 50 M€)
- SC1-BHC-10-2019: Innovation Procurement: Next generation sequencing (NGS) for routine diagnosis (9-11 M€; 3-4 proyectos – total 40 M€)
- SC1-HCO-05-2018: Strengthening regulatory sciences and supporting regulatory scientific advice (1,5-2M€; 1 Proyecto – total 2 M€)

1.3 Infectious diseases and improving global health (I)

- SC1-BHC-13-2019: Mining big data for early detection of infectious disease threats driven by climate change and other factors (12-15 M€; 2-3 proyectos – total 30 M€)
- SC1-BHC-14-2019: Stratified host-directed approaches to improve prevention and/or cure of infectious diseases (6-10 M€; 10-16 proyectos – total 95 M€)
- SC1-BHC-15-2018: New anti-infective agents for prevention and/or treatment of neglected infectious diseases (NID) (5-10 M€; 5-10 proyectos – total 52 M€) (lump sum pilot)

1.3 Infectious diseases and improving global health (II)

- SC1-BHC-16-2018: Global Alliance for Chronic Diseases (GACD) - Scaling-up of evidence-based health interventions at population level for the prevention, detection, and management of hypertension and/or diabetes (2-4 M€; 5-10 proyectos – total 20 M€)
- SC1-BHC-18-2019: EU-CELAC collaboration for research on non-communicable diseases (2 - 4M€; 6-12 proyectos – total 25 M€)
- SC1-BHC-19-2019: Implementation research for maternal and child health (2-4M€; 6-12 proyectos – total 25 M€)

1.3 Infectious diseases and improving global health (III)

- SC1-BHC-21-2018: Research on HIV, tuberculosis and/or hepatitis C in patients with mono-, co-infections or comorbidities in the context of the collaboration between the European Union and the Russian Federation (2-4 M€; 2-5 proyectos – total 10 M€)
- SC1-HCO-06-2018: Establishment of an International Network of Research Centres addressing governance challenges in the research response to infectious threats (2-3 M€; 1 proyecto – total 3 M€)

1.3 Infectious diseases and improving global health (IV)

- SC1-HCO-08-2018: Creation of a European wide sustainable clinical research network for infectious diseases (2-3M€; 1 proyecto – total 3 M€)
- SC1-HCO-09-2018: Building international efforts on population and patient cohorts (1-2 M€; 1 proyecto – total 2 M€)
- SC1-HCO-10-2018: Coordinating European brain research and developing global initiatives (1-2 M€; 1 proyecto – total 2 M€)
- SC1-HCO-11-2018: Strategic collaboration in health and care research and innovation between EU and China (0,8-1 M€; 1 proyecto – total 1 M€)

1.4 Innovative health and care systems - Integration of care (I)

- SC1-BHC-22-2019: Mental health in the workplace (2-4 M€; 7-15 proyectos – total 30 M€)
- SC1-BHC-23-2018: Novel patient-centred approaches for survivorship, palliation and end-of-life care (3-4 M€; 11-14 proyectos – total 44 M€)
- SC1-BHC-25-2019: Demonstration pilots for implementation of personalised medicine in health care (18 - 20 M€; 3 proyectos – total 60 M€)
- SC1-BHC-26-2018: HTA research to support evidence-based healthcare (5-10 M€; 1-2 proyectos – total 10 M€)
- SC1-HCO-12-2018: Innovation in health care – a CSA towards using pre-commercial procurement and public procurement of innovative solutions in health care systems (1,5-2 M€; 1 proyecto – total 2 M€)

1.5 Decoding the role of the environment for health and well-being

- SC1-BHC-27-2018: New testing and screening methods to identify endocrine disrupting chemicals (4-6 M€; 8-12 proyectos – total 52 M€)
- SC1-BHC-28-2019: The Human Exposome Project: a toolbox for assessing and addressing the impact of environment on health (8-12M€; 4-6 proyectos – total 50 M€)
- SC1-HCO-13-2018: Setting the priorities for a European environment and health research agenda (2-3 M€; 1 proyecto – total 3 M€)

Call – Digital transformation in Health and Care (I)

- SC1-DTH-01-2019: Big data and Artificial Intelligence for monitoring health status and quality of life after the cancer treatment (3-5 M€; 5-7 proyectos – total 35 M€)
- SC1-DTH-03-2018: Adaptive smart working and living environments supporting active and healthy ageing (3-4 M€; 6-8 proyectos – total 25 M€)
- SC1-DTH-05-2019: Large scale implementation of digital innovation for health and care in an ageing society (2-5 M€; 2-5 proyectos – total 10 M€)
- SC1-DTH-07-2018: Exploiting the full potential of in-silico medicine research for personalised diagnostics and therapies in cloud-based environments (10-15 M€; 2-3 proyectos – total 35 M€)

Call – Digital transformation in Health and Care (II)

- SC1-DTH-08-2018: Prototyping a cloud-based standardised Personal Health Record/Electronic Health Record for Europe (6–10 M€; 3-5 proyectos – total 30 M€)
- SC1-DTH-09-2019: Scaling up the univocal identification of Medicinal Products (5-8 M€; 2-4 proyectos – total 19 M€)
- SC1-DTH-10-2019-2020: Digital health and care services (5-6 M€; 3-4 proyectos – total 22 M€)
- SC1-DTH-11-2019: Large Scale pilots of personalised & outcome based integrated care (4-6 M€; 3-5 proyectos – total 20 M€)
- SC1-HCC-01-2018: Supporting investment in smart living environments for ageing well through certification (1 M €; 1 proyecto – total 1 M€)

Call – Digital transformation in Health and Care (III)

- SC1-HCC-02-2019: Support for the large scale uptake of open service platforms in the Active and Healthy Ageing domain (1,5 M€; 1 proyecto – total 1,5 M€)
- SC1-HCC-03-2018: Support to further development of international cooperation in digital transformation of health and care (2 M€; 1 proyecto – total 2 M€)
- SC1-HCC-04-2018: Digital health and care services – support for policy, strategy and (early) adoption (3 M€; 1 proyecto – total 3 M€)
- SC1-HCC-05-2018: Support to a Digital Health and Care Innovation initiative in the context of Digital Single Market strategy (4 M€; 1 proyecto – total 4 M€)

Call – Trusted Digital Solutions and Cybersecurity in Health and Care

- DT-TDS-01-2019: Smart and healthy living at home (15-20 M€; 3-4 proyectos – total 60 M€)
- SU-TDS-02-2018: Toolkit for assessing and reducing cyber risks in hospitals and care centres to protect privacy/data/infrastructures (3-5 M€; 7-12 proyectos – total 35 M€)
- SU-TDS-03-2018: Raising awareness and developing training schemes on cybersecurity in hospitals (1 M€; 1 proyecto – total 1 M€)



Tabla de fechas (I)

Conv.	Nº de topic	Apertura	Fecha de cierre
Convocatoria BHC			
2018	SC1-BHC-3 / 4 / 5 / 9 / 16 / 18 / 21 / 23 / 26 / 27		18.04.2018
	SC1-HCO-2 / 4 / 5 / 6 / 9 / 10 / 11 / 12 / 13	07.11.2017	
	SC1-BHC-15		Etapa 1 06.02.2018 Etapa 2 04.09.2018
2019	SC1-BHC-7 / 10 / 13 / 28 SC1-HCO-1 / 2	26.07.2018	16.04.2019
	SC1-BHC-1 / 2 / 14 / 19 / 22 - 25		Etapa 1 02/10/2018 Etapa 2 16.04.2019



Tabla de fechas (II)

Conv.	Nº de topic	Apertura	Fecha de cierre
Convocatoria DTH			
2018	SC1-DTH-3 / 7 / 8 / SC1-HCC-1 / 3 / 4 / 5	07.11.2017	24.04.2018
2019	SC1-DTH-1 / 5 / 9 / 11 SC1-HCC-2	16.10.2018	24.04.2019
2018	SC1-DTH-10	26.07.2018	14.11.2018



Tabla de fechas (III)

Conv.	Nº de topic	Apertura	Fecha de cierre
Convocatoria TDS			
2018	SC1-SU-TDS- 02/03	07.11.2017	24.04.2018
2019	DT-TDS-01	26.07.2018	14.11.2018

Avance convocatorias 2020

Se prevé la continuación, en principio, de las convocatorias:

- Better Health and care, economic growth and sustainable health systems
 - Priority 1.1 Personalised medicine
 - Priority 1.2 Innovative health and care industry
 - Priority 1.3 Infectious diseases and improving global health
 - Priority 1.4 Innovative health and care systems – Integration of care
 - Priority 1.5 Decoding the role of the environment for health and well-being
- Digital Transformation in Health and Care
- Trusted digital solutions and Cybersecurity in Health and Care
- Other Actions for 2020

Prioridad 1.1. Personalised Medicine

- SC1-BHC-06-2020: Digital diagnostics – developing tools for clinical decisions integrating in vitro and in vivo diagnostics
- SC1-HCO-01-2018-2019-2020: Actions in support of the International Consortium for Personalised Medicine
- SC1-HCO-03-2020: Improving EU-13 participation in EU-supported health research programmes
- SC1-HCO-14-2020: ERA-NET Place holder 2

Priority 1.2 Innovative health and care industry

- SC1-BHC-08-2020: New therapies for Non Communicable Diseases
- SC1-BHC-11-2020: New, animal-free regulatory test methods for human safety testing at the horizon of 2030
- SC1-BHC-12-2020: Boosting the translation of results of health research into validated, innovative applications

Priority 1.3 Infectious diseases and improving global health

- SC1-BHC-17-2020: Global Alliance for Chronic Diseases (GACD) 2
- SC1-BHC-20-2020: Using pre-commercial procurements and public procurement of innovative solutions in health care systems to: - reduce the risk of hospital-acquired infections and/or - improve integrated care
- SC1-HCO-07-2020: ERA-NET Place holder 1

Priority 1.4 Innovative health and care systems – Integration of care

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

Priority 1.5 Decoding the role of the environment for health and well-being

- SC1-BHC-29-2020: Environment, climate change and health – novel mitigating measures for improving population health

Call – Digital Transformation and Care

- SC1-DTH-02-2020: Personalised early risk prediction, prevention and intervention, RIA
- SC1-DTH-04-2020: International cooperation in digital solutions and robotics for independent living
- SC1-DTH-06-2020: Accelerating the uptake of *in-silico* methods for testing medicines with dermatological use and cosmetic products

Call – Digital Transformation in Health and Care

- SC1-DTH-10-2019-2020: eHealth and care services
- SC1-HCC-06-2020: Support to eHealth Innovation ecosystems in Europe
- SC1-HCC-07-2020: Support for European eHealth Interoperability roadmap deployment
- SC1-HCC-08-2020: Scaling up innovation for active and healthy ageing
- SC1-HCC-09-2020: Supporting deployment of eHealth in developing countries for better health outcomes

Call – Trusted digital solutions and Cybersecurity in Health and Care

DT-ICT-13-2020 The smart hospital of the future

Presupuestos Totales *

- **Convocatoria SC1 2018:** 621,19 M€
- **Convocatoria SC1 2019:** 686,38 M€
- **Convocatoria SC1 2020:** 697,72 M€

*: pueden verse modificados

Criterios de evaluación

Excellence

Clarity and pertinence of the objectives

Soundness of the concept, including trans-disciplinary considerations, where relevant

Extent that proposed work is ambitious, has innovation potential, and is beyond the state of the art (e.g. ground-breaking objectives, novel concepts and approaches)

Credibility of the proposed approach

Impact

The expected impacts listed in the work programme under the relevant topic

Enhancing innovation capacity and integration of new knowledge

Strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global markets; and, where relevant, by delivering such innovations to the markets

Any other environmental and socially important impacts (not already covered above)

Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project, and to manage research data where relevant

Implementation

Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources

Complementarity of the participants within the consortium (when relevant)

Appropriateness of the management structures and procedures, including risk and innovation management

La participación de los EEUU en propuestas al SC1 (hasta convocatorias 2017)

In recognition of the opening of the US National Institutes of Health's programmes to European researchers, any legal entity established in the United States of America is eligible to receive European Union funding to support its participation

La inclusión de aspectos SSH –Social Sciences & Humanities

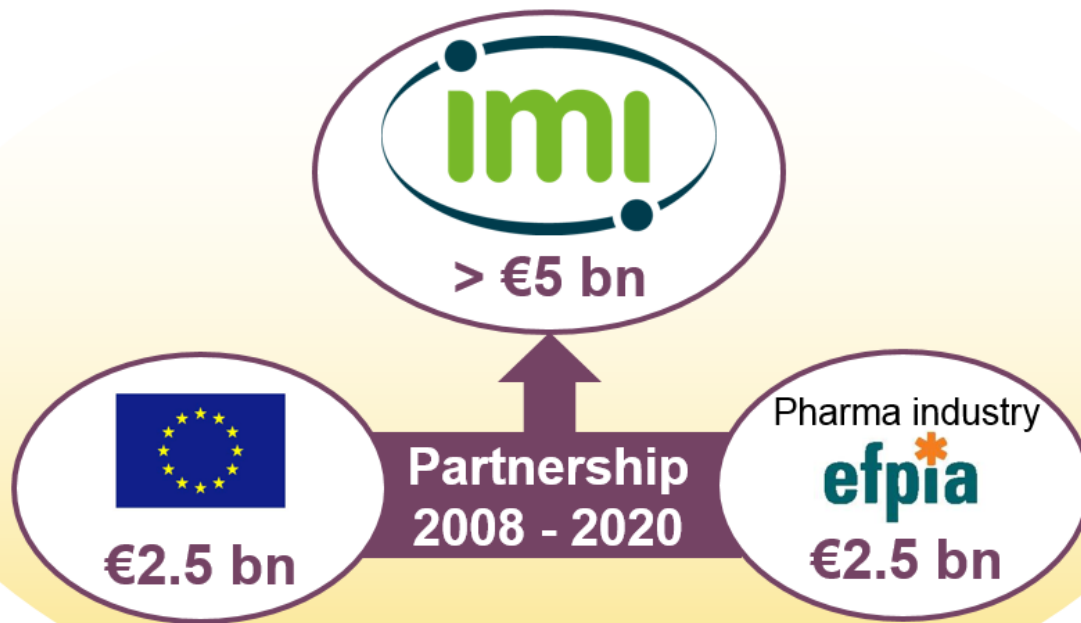
Proposals must take account of the social, economic, political, legal, behavioural, institutional, historical and/or cultural dimensions of a given issue, as appropriate and required by the description. A proposal without a sufficient contribution/ integration of SSH research and competences will receive a low evaluation score.

Financiación de proyectos en otros programas de H2020

- NMBP-21-2018: Custom-made biological scaffolds for specific tissue regeneration and repair
- NMBP-22-2018: Osteo-articular tissues regeneration
- DT-NMBP-23-2020: Next generation organ-on-chip (RIA)
- SFS-04-2019/2020 Integrated health approaches and alternatives towards pesticide use
 - A. [2019]: Integration of plant protection in a Global Health approach
 - B. [2020] Biocidal and plant protection products
- SFS-16-2018 Towards more healthy and sustainable food



La Iniciativa de Medicamentos Innovadores 2



EU contribution from FP7 / H2020

Pharma contribution 'in kind'



Fuente: IMI

La 8ª convocatoria de IMI2

<http://www.imi.europa.eu/content/imi-2-call-8>

1. Ebola and other filoviral haemorrhagic fevers (Ebola+) programme: future outbreaks

Call Identifier	H2020-JTI-IMI2-2015-08-single-stage
Type of action	Research and Innovation Actions
Publication date	18 December 2015
Submission start date	18 December 2015
Submission deadlines (cut-off dates)	16 March 2016 – 17:00:00 Brussels time 15 September 2016 – 17:00:00 Brussels time 16 March 2017 – 17:00:00 Brussels time 14 September 2017 – 17:00:00 Brussels time 15 March 2018 – 17:00:00 Brussels time
Indicative budget	
From the IMI2 JU	a maximum of EUR 70 000 000



Abiertas la 11ª y 12ª convocatorias de IMI2

Los presupuestos indicados son totales

1. Development and validation of technology enabled, quantitative and sensitive measures of functional decline in people with early stage Alzheimer's disease (RADAR-AD) (Ppto. aprox. 10 M€; duración: 3 años)
 2. 'FAIRification' of IMI and EFPIA data (Ppto. aprox. 7,5 M€; duración 3 años)
 3. Development of sensitive and validated clinical endpoints in primary Sjögren's syndrome (pSS) (Ppto. aprox. 16 M€; duración 6 años)
 4. European Health Data Network (EHDN) (Ppto. aprox. 28 M€; duración 5 años)
 5. Analysing the infectious disease burden and the use of vaccines to improve healthy years in aging populations (Ppto. aprox. 11 M€; duración 5 años)
 6. Discovery and characterization of blood-brain barrier targets and transport mechanisms for brain delivery of therapeutics to treat neurodegenerative & metabolic diseases (Ppto. aprox. 18 M€; duración 5 años)
 7. European Screening Centre: unique library for attractive biology (ESCuLab) (Ppto. aprox. 36,5 M€; duración 5 años)
- **Convocatoria 11:** Exploitation of IMI project results (Ppto. 5 M€; duración 2 años)

<http://www.imi.europa.eu/content/overview-imis-calls-how-participate>

Hacia la 13ª convocatoria de IMI

- Assessment of the uniqueness of diabetic cardiomyopathy relative to other forms of heart failure using unbiased pheno-mapping approaches
- Genome-environment interactions in inflammatory skin disease
- The value of diagnostics to combat antimicrobial resistance by optimising antibiotic use
- Mitochondrial dysfunction in neurodegeneration
- Support and coordination action for the projects of the neurodegeneration area of the innovative medicines initiative
- A sustainable European induced pluripotent stem cell platform
- Linking digital assessment of mobility to clinical endpoints to drive regulatory acceptance and clinical practice
- Human tumour microenvironment immunoprofiling
- CONCEPTION – continuum of evidence from pregnancy exposures, reproductive toxicology and breastfeeding to improve outcomes now
- Improving the preclinical prediction of adverse effects of pharmaceuticals on the nervous system
- Translational safety biomarker pipeline (TRANSBIOLINE): enabling development and implementation of novel safety biomarkers in clinical trials and diagnosis of disease
- Federated and privacy-preserving machine learning in support of drug discovery
- Pilot programme on a clinical compound bank for repurposing

This programme includes the following topics:

- Cardiovascular diseases and diabetes
- Respiratory diseases
- Neurodegenerative diseases
- Rare/orphan diseases

8 de noviembre de 2017

CONFERENCIA H2020

Instituto de Salud Carlos III
Avda. Monforte de Lemos 5, Madrid

- Análisis de oportunidades de investigación en salud en el Programa Horizonte 2020, 2018-2020, para ayudar a los agentes del entorno del Sistema Nacional de Salud a establecer estrategias de participación exitosas.
- En la jornada se tratarán también aspectos y servicios de apoyo existentes para facilitar y mejorar la calidad de los proyectos de investigación

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Información sobre convocatorias en: <http://eu-isciii.es>

