

Horizon2020

SC1 – Health, Demographic change and Wellbeing - Opportunità per l'area "Salute (2018-2020)"



Bruno MOURENZA

Horizon 2020

Punto di Contatto Nazionale SC1



Horizon 2020 European Union funding for Research & Innovation







H2020/ The Three Pillars











Struttura del programma H2020

Excellent Science



Frontier research by the best individual teams



 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

 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



Spreading Excellence and Widening Participation

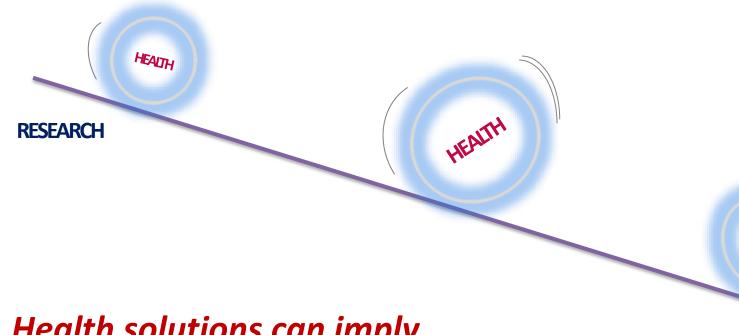
Science with and for society







Health in H2020



Health solutions can imply different phases of research and innovation

INNOVATION







STRUCTURE OF THE PROGRAMME: WHERE HEALTH could fit?





GROUP of **Researchers/actors** doing collaborative multidisciplinary research **INDIVIDUAL RESEARCHER**

doing High risk/frontier Research

ONE or more

SME developing **SME Instrument** solutions close to market

HEALTH

INDIVIDUAL RESEARCHER

ERC

targeting dev. of MSCA research career and training

FET









GROUP of researchers/actors

doing research on Key enabling

Technologies

NMP-b

ICT

Materials

GROUP of

researchers/actors

doing basic/visionary but feasible research on technological aspects















2° PILLAR

INDUSTRIAL LEADERSHIP







Connections to Health in Pillar II

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
 - Fostering all forms of innovation in all types of SMEs



Materials
for Materials
health



Nano Nanofor technology health

APRE



HEALTH

Red Biotech

Biotech



www.apre.it

RINA 👄



3° PILLAR

SOCIETAL CHALLENGES





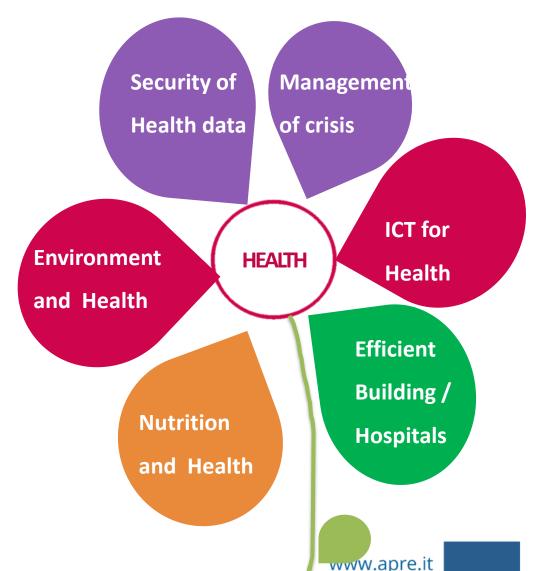




HEALTH implications in Societal Challenges

Societal Challenges

- Health, demographic change and wellbeing
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- Inclusive, innovative and reflective societies
- Security society









SC1. HEALTH, **DEMOGRAPHIC** CHANGE **AND** WELLBEING









Nuova struttura del WP SC 1 2018-2020

Call 1. Better health and care, economic growth and sustainable health systems (RTD)

- 1.1 Personalised medicine
- 1.2 Innovative health and care industry
- 1.3 Infectious diseases and improving global health
- 1.4 Innovative health and care systems Integration of care
- 1.5 Decoding the role of the environment for health and well-being

Call 2. Digital Transformation in Health and Care (CNECT)

Call 3. Trusted digital solutions and cybersecurity in health and care (CNECT)

Other actions (including prizes)

2020: Calls 1. and 2. and Other actions - only titles, no text

Work Programme SC1 – 2018-2020:

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



Call 1 - Better Health and care, economic growth and sustainable health systems

aims to achieve:

- ☐ Develop <u>sustainable health and care systems and growth opportunities</u> for the health and care related industries;
- ☐ Health and care systems and services more accessible, responsive and efficient

The scope of the call may range from prevention, diagnosis, stratified approaches, predictive toxicology, novel and repurposed therapeutic approaches, including medical technologies and advanced therapies, cohorts and registries-based research, integration of care and systemic digital solutions for health and ageing well





Call 2 - Digital transformation in Health and Care

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- □ transformation of health and care services to more digitised, person-centred and community-based care models.
- ☐ Maximize the potential of the <u>digital economy</u> in the health and care sectors
- 2 relevant priorities to the EC and to the <u>European Cloud Initiative</u> and the <u>European Free Flow of Data Initiative</u>

The call will address eHealth, mobile health (mHealth) and Information and Communication Technologies (ICT) for Active and Healthy Ageing.







Call 3 - Trusted digital solutions and Cybersecurity in Health and Care

aims to achieve:
☐ <u>Cybersecurity</u> to assure data privacy, security and protection of health and care infrastructures.
☐ contribute to the following Focus Areas from WP ICT 2018-20: 'Digitising and
transforming European industry and services' and 'Boosting the effectiveness of the
Security Union'.

It addresses the need for 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 such as medical records, registries, social platforms and other environmental, physiological and behavioural data, including data from large scale pilots on smart living environments.







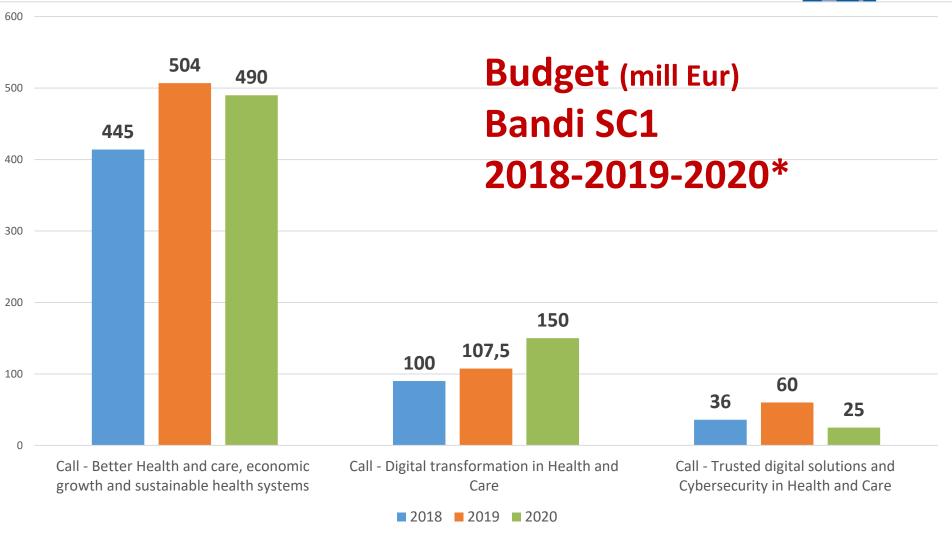
Tempi di pubblicazione, le scadenze, l'uso del single o doppio stage?

➤ Previsti bandi SINGLE STAGE e DOPPIO STAGE*

Call	2018		2019		2020
	Opening	Deadline	Opening	Deadline	
1 Better Health and care, economic growth and sustainable	7 Nov 2017	6 Feb 2018* 4 Sett 2018*	26 Jul 2018	2 Oct 2018* 16 Apr 2019*	To be defined
health systems DG RTD		18 Apr 2018		16 Apr 2019	
2 Digital typesformation in Hoolth	7 Nov 2017	24 Apr 2010	26 Jul 2018	14 Nov 2018	
2 Digital transformation in Health and Care DG Connect	7 Nov 2017	24 Apr 2018	16 Oct 2018	24 Apr 2019	
3 Trusted digital solutions and Cybersecurity in Health and Care DG Connect	7 Nov 2017	24 Apr 2018	26 Jul 2018	14 Nov 2018	







The contribution to Focus Areas will be EUR 186.50 million for 'Digitisation' and EUR 71 million for 'Security Union'.

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www.apre.it

*Other Actions excluded

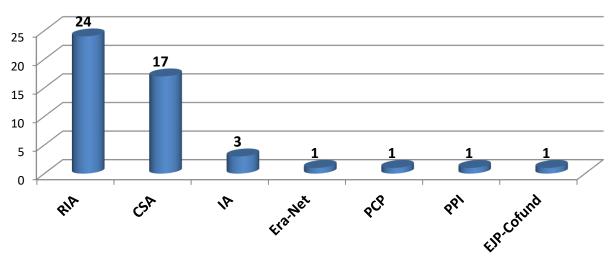
Quali sono Gli strumenti utilizzati (RIA, IA, PCP, Eranets...?)?

Ci sono progetti di grandi, medie, piccole dimensioni?

Ci sono evidenti aree di interesse sulla cooperazione extra UE (USA, ASIA, ..AFRICA..ecc?

- 48 topics (2018-2019) + 21 nel 2020 senza considerare *Other actions*. (9 +7)
- Presenti RIA, IA, CSA, PCP, PPI, Era-Net, EJP

No. of topics vs Funding scheme



- Presenti progetti di <u>piccoli e grandi dimensioni</u> (da 1,5 3, 6, 10, a 50 mill. Eur)
- Cooperazione internazionale maggiormente implementata attraverso Joint Calls (CELAC, Russia, China, Canada) e in aree di rilevante interesse per EU:
 - human data on personalized medicine approaches with <u>Canada</u>
 - non-communicable diseases CELAC
 - HIV, tuberculosis and/or hepatitis C with <u>Russia</u>
 - Strategic collaboration on healthcare R&I with China







Strategic Initiatives around HEALTH



Innovative Medicines Initiative 2
www.imi.europa.eu



European Innovation Partnership on Active and Healthy Ageing

https://webgate.ec.europa.eu/eipaha



Active and Assisted Living 2

www.aal-europe.eu



European & Developing Countries Clinical Trials Partnership (EDCTP2)

www.edctp.org











IMI 2 budget







Partnership 2014 - 2024 efpia + other Companies* €1.638 bn

EFPIA = European Federation of Pharmaceutical Industries and Association



^{*} Imaging, Diagnostics, IT for health etc.



Strategic Research Agenda

- Antimicrobial resistance
- Osteoarthritis
- Cardiovascular diseases
- Diabetes/Metabolic disorders
- Neurodegenerative diseases
- Psychiatric diseases
- Respiratory diseases
- Immune-mediated diseases
- Ageing-associated diseases
- Cancer
- Rare/Orphan Diseases
- Vaccines









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



New! At least three legal entities

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









IMI 2 – Call 8 includes the following topic:

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

The indicative budget for the entire period of 2 years is €70 million.

Deadlines

The Call will remain open for two years, with the following cut-off dates:

- 16 March 2016
- 15 September 2016
- 16 March 2017
- 14 September 2017
- 15 March 2018





Topics for IMI Call 13 – Deadline 28th February

http://www.imi.europa.eu/apply-funding/open-calls/imi2-call-13

- Topic 1: <u>Assessment of the uniqueness of diabetic cardiomyopathy relative to other forms of heart failure</u> using unbiased pheno-mapping approaches
- Topic 2: Genome-Environment Interactions in Inflammatory Skin Disease
- Topic 3: The value of diagnostics to combat antimicrobial resistance by optimising antibiotic use
- Topic 4: Mitochondrial Dysfunction in Neurodegeneration
- Topic 5: Support and coordination action for the projects in the neurodegeneration area of the Innovative

Medicines Initiative

- Topic 6: A sustainable European induced pluripotent stem cell platform
- Topic 7: <u>Linking digital assessment of mobility to clinical endpoints to support regulatory acceptance and</u> clinical practice
- Topic 8: <u>Human tumour microenvironment immunoprofiling</u>
- Topic 9: ConcePTION Continuum of Evidence from Pregnancy Exposures, Reproductive Toxicology and

Breastfeeding to Improve Outcomes Now

- Topic 10: Improving the preclinical prediction of adverse effects of pharmaceuticals on the nervous system
- Topic 11: Translational Safety Biomarker Pipeline (TransBioLine): Enabling development and implementation
- of novel safety biomarkers in clinical trials and diagnosis of disease
- Topic 12: Pilot programme on a Clinical Compound Bank for Repurposing: Cardiovascular diseases and

diabetes

- Topic 13: Pilot programme on a Clinical Compound Bank for Repurposing: Respiratory diseases
- Topic 14: Pilot programme on a Clinical Compound Bank for Repurposing: Neurodegenerative diseases
- Topic 15: Pilot programme on a Clinical Compound Bank for Repurposing: Rare/orphan diseases

Interested in applying? Read our <u>tips for applicants</u> and <u>advice on finding project partners</u> www.apre.it



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- Follow us on Twitter@IMI_JU
- Join our LinkedIn group bit.ly/LinkedInIMI
- E-mail us infodesk@imi.europa.eu







EU Joint Programme – Neurodegenerative Disease Research





Implementation Plan

A first-phase JPND Implementation Plan has been agreed for the *period of 2012-2014*. The plan has these major action areas:

Annual Calls for Proposals

Action Groups to determine research needs and opportunities

Action Groups to promote engagement, commitment and partnerships

Annual Calls for Proposals

JPND intends to launch Calls for proposals each year to address high priority areas in neurodegenerative disease research. Over the period of 2012-2014, it is anticipated that JPND will launch calls to address each of the following priority areas:

In general: <u>Minimum 3 and maximum of 6</u> research groups (principal investigators) <u>from at least 3 different countries</u> of the funding organizations participating in this call

http://www.neurodegenerationresearch.eu/initiatives/annual-calls-for-proposals/open-calls/







JPND Call for Proposals:

"Multinational research projects on Health and Social Care for Neurodegenerative Diseases"

http://www.neurodegenerationresearch.eu/initiatives/annual-calls-for-proposals/open-calls/health-and-social-care-2018/

Submission deadline for pre-proposals:

March 6, 2018, 23:59h C.E.T.

For further information, please visit us on the web

http://www.jpnd.eu/





Ultimo bando pubblicato 2018

Deadline della pre-proposal 6 marzo 2018

"Multinational research projects on Health and Social Care for Neurodegenerative Diseases"

Sulle aree:

- Care pathways and services using the potential of patient involvement
- Factors influencing progression and prognosis of disease
- Outcome measures for patients and their informal careers
- Palliative care of patients
- Cost-effectiveness and affordability of interventions including ethical concerns

http://www.neurodegenerationresearch.eu/wp-content/uploads/2018/01/JPND-HSC-Call-Text-2018.pdf

Per l'Italia: solo IRCCS ammessi.





Active & Healthy Ageing

A European Innovation Partnership

Active elderly Healthy Ageng Services win active ageing PonAHA Systems added European possess Partnership social added European possess Partnership social possess property innovation people social possess posses possess possess possess possess possess posses posses possess poss



RINA 😝



I settori d'intervento prioritari sono stati individuati nel <u>piano strategico di attuazione</u> e nel <u>piano operativo</u>, adottati nel 2011 dal <u>gruppo direttivo</u> incaricato dell'avvio e dell'attuazione della partnership.

Per realizzare il piano tutti i soggetti interessati hanno iniziato a collaborare nell'ambito di gruppi d'azione.

- ✓ Action Group A1: Prescription and adherence action at regional level.
- ✓ Action Group A2: Personalized health management: Falls prevention.
- ✓ Action Group A3: Prevention of functional decline and frailty.
- ✓ Action Group B3: Integrated care for chronic diseases, including remote monitoring at regional level.
- ✓ Action Group C2: Interoperable independent living solutions.
- ✓ Action Group D4: Age **friendly buildings, cities and environments**.

Stakeholders wishing to get involved in the advancing of Specific Actions have formed **Action Groups** through the "Invitation for Commitment" application process.

In each Action Group, stakeholders <u>commit to running a number of activities, contributing</u> <u>towards the headline target, starting with the creation and implementation of an Action Plan</u>.





E-Rare-3	ERA-NET rare disease research implementing IRDiRC objectives	AGENCE NATIONALE DE LA RECHERCHE	FR
ERACoSysMed	ERACoSysMed - Collaboration on systems medicine funding to promote the implementation of systems biology approaches in clinical research and medical practice	FORSCHUNGSZENTRUM JUELICH GMBH	DE
JPco-fuND	ERA-NET for establishing synergies between the Joint Programming on Neurodegenerative Diseases Research and Horizon 2020	INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM)	FR
TRANSCAN-2	ERA-NET: Aligning national/regional translational cancer research programmes and activities	MINISTERO DELLA SALUTE	ΙΤ
ERA-CVD	ERA-NET on cardiovascular diseases to implement joint transnational research projects and set up international cooperations	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE
JPI-EC-AMR	ERA-NET for establishing synergies between the Joint Programming Initiative on Antimicrobial Resistance Research and Horizon 2020	VETENSKAPSRADET - SWEDISH RESEARCH COUNCIL	SE
NEURON Cofund	ERA NET NEURON in the area of brain-related diseases and disorders of the nervous system	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE

Bandi SC1 - 2014-2015-2016-2017

No. topics	Budget Mill. EUR	Proposte presentate	* * *	Proposte finanziate	Tasso di successo	*** * * * _{**} *
62	2939,3	3373		343	10%	

Partecipazione	
Parteuva/June	



No. Partecipanti italiani in proposte presentate	No. Partecipanti italiani finanziati	Tasso di successo partecipanti Italiani	
3716	369	9,9%	

Coordinamento



	No. Coordinamenti italiani finanziati	Tasso di successo coordinatori Italiani	
459 (13% del totale EU)	26	5,6%	



http://www.apre.it/media/459686/apre panoramica partecipazione h2020.pdf



Grazie per l'attenzione

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Health NCP

