# Horizon 2020 & IVI2 Non-confidential

# FUNDING SINEWORKS



#### **Structure of Horizon 2020**

	I Excellent Science	II Industrial Leadership	III Societal Challenges
1. 2.	European Research Council (ERC): frontier research Future and Emerging Technologies (FET). a) Open 24 bn€	<ol> <li>Leadership in Enabling and Industrial Technologies         <ul> <li>1.1. ICT</li> <li>1.2. nanotechnology</li> <li>1.3. materials</li> <li>1.4. biotechnology</li> </ul> </li> <li>117 bn€</li> </ol>	<ol> <li>Health, demographic change and wellbeing</li> <li>Food security, sustainable agriculture and forestry, marine, maritime and inland water research and bioeconomy</li> <li>Secure, clean and efficient energy</li> <li>30 bn€</li> </ol>
3.	Marie Skłodowska-Curie (MSCA) – actions: training, career development and mobility for researchers	<ul> <li>2. Risk finance: loans &amp; equity funding</li> <li>3. Innovation in SMEs</li> </ul>	<ol> <li>Climate action, resource efficiency and raw materials</li> <li>Europe in a changing world: inclusive, innovative and reflective societies</li> <li>Secure societies – protecting freedom and security of Europe and its citizens</li> </ol>
4.	Research Infrastructures	20% of the budget or pillars II + III to SMEs - SME Instrument(1/3) - Collaborative projects (2/3)	
Also	o: European institute of innov	ation and technology, Science with and widening participation	and for society, Spreading excellence
	IV .	Joint Research Center JRC, excl.	nuclear
		Nuclear research: EURATOM	



#### National Contact Points (NCPs) for H2020 Health



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## **Do I Get Funding Also?**

- ✓ Best expertise for your business case at European level.
- ✓ Solid strategy, growth vision and committed capabilities.
- ✓Company wants to try a <u>risky</u>, <u>radical</u> or <u>disruptive</u> innovation which requires extensive R&D collaboration (typically min. 3 participants from 3 countries) before full commercialization.
- ✓ Big business case scenario is planned in 3-5 or 5-8 yr ahead.
- ✓ If successful the business case could bring <u>dozens or hundreds</u> of millions of turnover for your company and possibly extra turnover in different industries as well.



## Why Should I Care?

- ✓ Leveraged public risk funding (for companies) as <u>70/100 %</u> grants (+25%).
- ✓ Funding for small projects €50k/€2.5M (SME-1&2) and for a small consortium €2-4M. Large projects are typically €5-8M, pilot grades €10-40M.
- ✓ Create direct R&D and selling contacts.
- ✓ Possibility to find, work and develop with the best academic and industry expertise. Get access to (possibly) hard to find Intellectual Property (e.g. patents, data, algorithms).

# HOW TRLS & CALL TYPES





#### Technology Readiness Levels [Academic + Applied Research]

- TRL 1 Basic principles observed.
- TRL 2 Technology concept formulated.
- TRL 3 Experimental proof of concept.
- <!-- Companies' R&D starts from here -->
- TRL 4 Technology validated in lab.
- TRL 5 Technology validated in relevant environment.



#### Technology Readiness Levels [Applied + Industrial R&D&I]

TRL 6 – Technology demonstrated in relevant environment. TRL 7 – System prototype demonstration in operational environment.

- TRL 8 System complete and qualified.
- <!-- Companies' R&D ends here -->

TRL 9 – Actual system proven in operational environment.

# TOP 4 Call Types 4 Companies (=Where The Money Is)

Bottom-up | Commercial Time Horizon <3 yr | <u>70 % grant</u>

- \* SME Instrument I/II: TRL 6-9 (~BF | Tempo/YIC )
- \* Fast Track to Innovation: TRL ~6-9 (~BF | <u>R&D</u>/<u>Co-Innovation</u>)

**Top-down | Commercial Time Horizon ~3-5 yr | <u>70 % grant</u> \* Innovation Action (IA): TRL ~6-8 (~BF | <u>Co-Innovation</u>)** 

#### **Top-down | Commercial Time Horizon ~5-8 yr | <u>100 % grant</u> \* Research and Innovation Action (RIA): TRL ~4-6 (~<u>AoF</u>+<u>VTT</u>)**

## APPENDIX BOTTOM-UP FUNDING



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#### **SME Instrument – Phase I**

<u>Fully-bottom-up</u> innovation support for a SME with funding rate of 70 %. Promotes a radically new idea underpinned by a business plan for rolling out marketable innovation solutions and with ambitions to scale up.

<u>Phase I:</u> A lump sum of  $\leq 50$  k for 6 months.

-> Study R&D, technical feasibility and commercial potential of a ground-breaking, innovative idea and develop it into a credible business plan for scaling it up.



#### **SME Instrument – Phase II**

Phase II: Project funding of €0.5-2.5M for 12-24 months.

-> Develop business concept further into a market-ready product, service or process aligned with your company's growth strategy. Activities could, for example, include trials, prototyping, validation, demonstration and testing in real-world conditions, and market replication. If the activity concerns a primarily technological innovation, a Technology Readiness Level (TRL) of 6 or above is envisaged.

#### Fast Track to Innovation (FTI)

<u>Fully-bottom-up</u> innovation support programme promoting <u>close-</u> <u>to-the-market innovation</u> activities open to <u>industry-driven</u> consortia that can be composed of all types of participants. It can help partners to co-create and test breakthrough products, services or business processes that have the potential to revolutionize existing or create entirely new markets.

- \* 3-5 legal entities | 70 % grant (+25 %) | EUR 3M.
- \* Majority of the funding to industry (E.g. min. 60 % OR industry partners in the same consortium: 2/(3-4) or 3/5.

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# APPENDIX TOP-DOWN FUNDING [MAIN eHEALTH CALLS]





#### **SC1-BHC-13-2019: RIA €12-15M**

Mining big data for early detection of infectious disease threats driven by climate change and other factors. Specific Challenge: The use of next generation sequencing combined with surveillance data, health registries and societal data from informal/non-traditional sources (e.g. social media). Scope: 1. The technology to allow the pooling, access, analysis and sharing of relevant data (incl. including next generation sequencing); 2. The innovative bio-informatics and modelling methodologies that enable risk modelling and mapping; 3. The analytical tools for early warning, monitoring, risk assessment.



#### <u>SC1-DTH-01-2019: RIA €3-5M</u>

Big data and Artificial Intelligence for monitoring health status and quality of life after the cancer treatment.

<u>Specific Challenge</u>: In addition to patient reported outcomes such as functional status, symptoms intensity and frequency, multiple domains of well-being and overall satisfaction with life, the use of big data can bring valuable information for monitoring health status and quality of life after the cancer treatment. <u>Scope</u>: How to better acquire, manage, share, model, process and exploit big data using, if appropriate, high performance computing to effectively monitor health status.



#### <u>SC1-DTH-05-2019: PPI €2-5M</u>

Large scale implementation of digital innovation for health and care in an ageing society.

<u>Specific Challenge</u>: An ageing population is increasing demandside pressures on public health and social care providers across Europe.

<u>Scope</u>: To the Scale-Up Strategy of the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA) and will support the EIP on AHA Reference Sites contribution to the Digital Single Market Strategy.



#### <u>SC1-DTH-09-2019: IA €5-8M</u>

Scaling up the univocal Identification of Medicinal Products. Specific Challenge: Across the European Union, medicinal products display differences in names, variations in strength or their package size.

<u>Scope</u>: Two goals: (i) the cross-border mobility of European patients by offering safer eDispensations across borders, (ii) the implementation of the IDMP (identification of medicinal products) standards in Member States drug databases. This requires creating an EU ePrescription/eDispensing approach to use the future EU SPOR database.



#### <u>SC1-DTH-10-2019-2020:</u> PCP €5-6M

#### **Digital health and care services.**

<u>Specific Challenge</u>: Digital solutions supporting a continuum of care across a range of health and care services can relieve the pressure on governments to provide more cost-effective health and care systems by improving utilisation of healthcare and health outcomes.

<u>Scope</u>: Support the health and care service provider to procure the development, testing and implementation of digital services and communication concepts that can facilitate the transition to integrated care models across health and social services.



#### <u>SC1-DTH-11-2019: IA €4-6M</u>

## Large Scale pilots of personalised & outcome based integrated care.

<u>Specific Challenge</u>: Senior people are statistically at greater risk of cognitive impairment, frailty and multiple chronic health conditions with consequences for independence, quality of life. <u>Scope</u>: Foster the large-scale pilots for deployment of trusted and personalised digital solutions dealing with Integrated Care. Supporting and extending healthy and independent living for older individuals who are facing permanently or temporarily reduced functionality and capabilities.



### <u>SC1-HCC-02-2019: CSA €1,5M</u>

Support for the large scale uptake of open service platforms in the Active and Healthy Ageing domain.

<u>Specific Challenge</u>: The integration of platforms between different domains will introduce new interoperability issues that need to be tackled.

<u>Scope</u>: Proposals should deliver an inventory of the state of the art and analyse the use of open service platforms in the Active and Healthy Ageing domain, covering both open platforms -such as universAAL and FIWARE - and partly-open/proprietary platforms developed by industry.



#### **DT-TDS-01-2019: IA €15-20M**

#### Smart and healthy living at home.

Specific Challenge: The challenge is to foster large-scale deployment of integrated digital solutions which will bring improved quality of life to citizens while demonstrating significant efficiency gains in health and care delivery across Europe. Scope: A mix of advanced ICT ranging from biophotonics to robotics, from artificial intelligence to big data and from IoT to smart wearables can address these challenges. A platform for smart living at home should integrate these technologies in an intelligent manner.

## APPENDIX FORTHCOMING TOP-DOWN CALLS 2019-2020





## **Personalized Medicine**

<u>SC1-BHC-06-2020</u>: Digital diagnostics – developing tools for clinical decisions integrating in vitro and in vivo diagnostics. <u>SC1-HCO-01-2018-2019-2020</u>: Actions in support of the International Consortium for Personalised Medicine. <u>SC1-HCO-03-2020</u>: Improving EU-13 participation in EU-supported health research programmes.

## **Digital Transformation & Trusted Digital Solutions**

<u>SC1-DTH-02-2020</u>: Personalised early risk prediction, prevention and intervention, RIA.

<u>SC1-DTH-04-2020</u>: International cooperation in digital solutions and robotics for independent living.

<u>SC1-DTH-06-2020</u>: Accelerating the uptake of in-silico methods for testing medicines with dermatological use.

SC1-DTH-10-2019-2020: Digital health and care services.

<u>SC1-HCC-06-2020</u>: Support to eHealth Innovation ecosystems in Europe.

## **Digital Transformation & Trusted Digital Solutions**

SC1-HCC-07-2020: Support for European eHealth

Interoperability roadmap deployment.

<u>SC1-HCC-08-2020</u>: Scaling up innovation for active and healthy ageing.

<u>SC1-HCC-09-2020</u>: Supporting deployment of eHealth in developing countries for better health outcomes.

DT-ICT-12-2020: The smart hospital of the future.

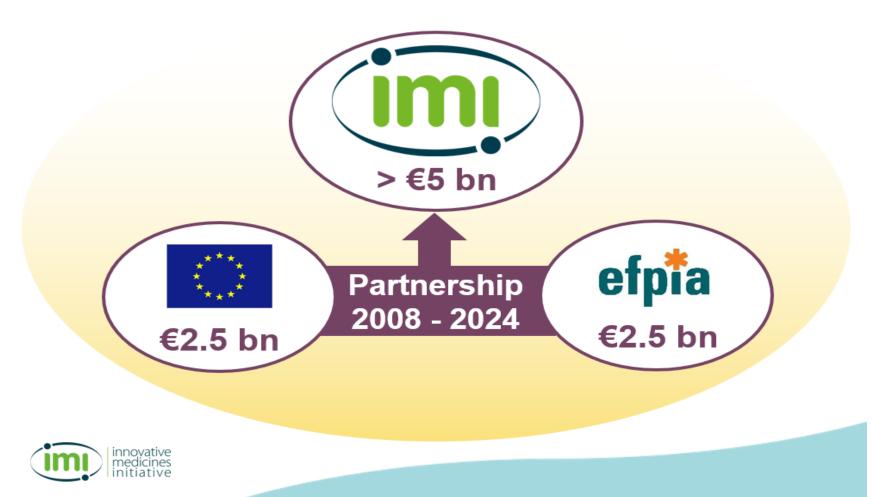
<u>DT-TDS-04-2020</u>: Demonstrating the potential and benefits of a European Digital Health Infrastructure for Personalised Medicine.

## APPENDIX INNOVATIVE MEDICINES INITIATIVE (IMI)





## **EU Partnership for Health**



## About Next IMI2 Call

- ✓IMI2 Call 17 webinars available on 23–31 Jan 2019: <u>https://www.imi.europa.eu/news-events/events/imi2-call-17-webinars</u>
- ✓ Optimising future obesity treatment.
- ✓Open access chemogenomics library and chemical probes for the druggable genome.
- ✓Intelligent prediction and identification of environmental risks posed by human medicinal products.

## **Long-term Future Topics**

✓ Indicative information of future calls (i.e. from IMI2 – Call 18 onwards):
 https://www.imi.europa.eu/apply\_funding/future\_topics

https://www.imi.europa.eu/apply-funding/future-topics

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## WORLD IDEAS

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#### QUESTIONS WELCOME

## THANKS!