# Tampereen yliopisto

## Yrityksen kasvun sparraus -sarja:

## PK-yritystenTKI-aktivointi ja EUhankeohjelmat



## Tampereen Yliopiston yrityspalvelut EU-projekteissa

TkT Mika Saarinen Grant Writer

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# Mika Saarinen

PhD 2002 Technical physics (semiconductors & photonics)

#### Evaluation experience:

- FP7 PEOPLE MSCA-IF Evaluator 2006-2013
- H2020 MSCA-IF Evaluator 2014-2018, Vicechair 2019-2020
- Horizon Europe MSCA-PF Vicechair 2021
- H2020 NMBP Evaluator and Project Reviewer 2016-2021
- H2020 Spreading Excellence and Widening ERA Chairs Evaluator 2019-2021
- Denmark Innovation Fund Evaluator 2015-
- Eureka EuroStars-1 and EuroStars-2 Evaluator 2012-
- INNOWWIDE Evaluator 2019-

#### Companies:

- Nordic Epitaxy, Modulight, EpiCrystals, Soiwa Design, Coherent Visits:
- University of Minnesota, University of California Santa Barbara





# **EU-rahoitusta?**

Mitä?	Mihin?	Miksi?	Miksi juuri nyt?
<ul> <li>Rahoitusta tukemaan yrityksen tuotekehitystä ja kv. kasvua</li> <li>Rahoitusta tukemaan tutkijoiden huippututkimusta ja liikkuvuutta, esim. työskentelyä yrityksissä</li> </ul>	<ul> <li>Uuden tiedon tuottamiseen</li> <li>Uusien palveluiden, tuotteiden, prosessien sekä liiketoimintaidean jalostamiseen</li> </ul>	<ul> <li>Rahoitusta</li> <li>Yhteistyötä, asiakkaita, markkinoita</li> <li>Kasvulle tärkeitä verkostoja</li> <li>Kilpailijat ovat jo siellä!</li> </ul>	<ul> <li>Onnistuminen vaatii työtä, strategista suunnittelua sekä yhteistyö- kumppaneita</li> <li>Uusi puiteohjelma, Horisontti Eurooppa, on alkamassa</li> </ul>

- Yksinkertaistettu raportointi ja hallinnointi, ennakkomaksut





# Support to RIA / IA proposal preparations (TAU coordinator)

- Services offered by TAU Research Services: preaward@tuni.fi
  - Trainings (general & customised)
  - Co-developing your idea and finding suitable funding calls
  - Suggestions on potential partners
  - Commenting your proposal and guidance on budgeting
  - Co-writing your proposal, if project coordinated by TAU
  - Co-financing of external consultants case by case
  - Feedback on your budget, faculty's financial support
- Open Access: oa@tuni.fi
- Data Management: researchdata@tuni.fi
- Administrative project manager, data manager –services, IPR



#### **HORIZON EUROPE** April 2021 – December 2027

- The next EU research & innovation programme, succeeding Horizon 2020
- Budget deal finally reached 95.5 billion euros → 30% increase from H2020
- In comparison to Horizon 2020: "Evolution, not revolution"
- Drafts available for the clusters Not all are confirmed yet (ERC and EIC confirmed).
- Publication of the first calls anticipated by mid-April June 2021
- The first calls will close already in fall 2021



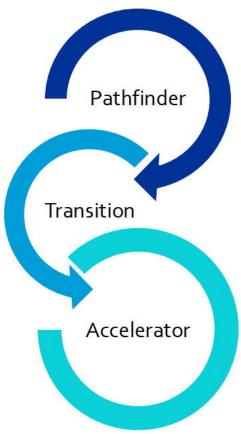
# European Innovation Council, EIC

Support to the full innovation cycle from **research and development** to **rapid scale** up of innovative technologies and companies (mainly startups and SMEs) at international level.

EIC Pilot (2018-2020) Impact Report

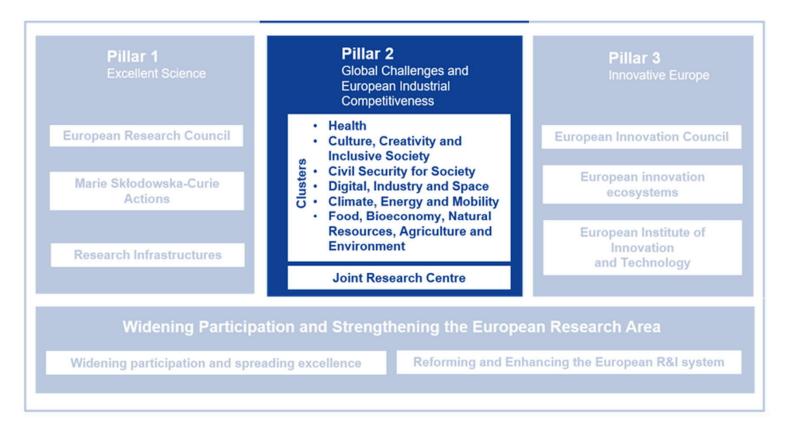
- **Pathfinder** (ex FET Open/Proactive): early stage research of breakthrough technologies by a multidisciplinary/sectorial consortium
- **Transition:** to develop market readiness of most potential research findings open only to Pathfinder or ERC PoC projects
- Accelerator (ex SME Instrument): finalize the deep-tech technology, commercialisation and scale-up by single innovative SMEs

Funding mainly through **bottom-up schemes** – *Open Calls* All instruments also contribute to **thematic priorities**: – *Challenge Calls* 





### Pillar 2: Global challenges and European Industrial Competitiveness





# **Collaborative projects in Pillar 2** – the instruments

- RIA Research and Innovation Action
  - Activities to <u>establish new knowledge</u> or to explore the feasibility of a new or improved technology, product, process, service or solution. Pre-competitive research
  - Activities are expected to achieve TRL 3-5 by the end of the project, budget anywhere 3-**5-8**-10 M€, usually more than 4-5 partners, *TRL4 technology validated in lab*

#### IA Innovation Action

- Activities to produce plans and arrangements or designs for new, altered or improved products, processes or services. Getting innovation closer to the market.
- Activities are expected to achieve TRL 6-8 by the end of the project , budget anywhere 5-8-12-25 M€, usually more than 10 partners and even more than 20 partners might be fine
- TRL7 system prototype demo in operational environment
- CSA Coordination and Support Action
  - Activities that contribute to the objectives of Horizon Europe. This excludes R&I activities, except for 'Widening participation and spreading excellence'. Policy support, project clustering and services to the European Commission, budget anywhere 0,5-1-2-5 M€



## Calls in the six Clusters in 2021-2022 (tentative)

- CL1 Health: RIA 31 calls, IA 1 call, CSA 11 calls
- CL2 Culture & Society: RIA 43 calls, IA 0 calls, CSA 4 calls
- CL3 Civil Security: RIA 23 calls, IA 31 calls, CSA 9 calls
- CL4 Digital, Industry & Space: RIA 99 calls, IA 55 calls, CSA 29 calls
- CL5 Climate, Mobility & Energy: RIA 93 calls, IA 72 calls, CSA 21 calls
- CL6 Food, Bioeconomy: RIA 92 calls, IA 41 calls, CSA 42 calls

Commonly the number of IA calls increase towards the end of the programme to provide funding for advancement of results from RIA-projects to higher TRL



## **Overview of 49 candidate European Partnerships**

Innovative Health Initiative       Key Digital Technologies       Clean Hydrogen       Circular Bio-based Europe       InnoEnergy       Innovative SMEs         Global Health Partnership       Smart Networks & Services       Clean Aviation       Rescuing Biodiversity to Safeguard Life on Earth       Climate       Digital         Transformation of health systems       High Performance Computing       Single European Sky ATM Research 3       Climate Neutral, Sustainable & Productive Blue Economy       Digital       Food         ERA for Health       Al-Data-Robotics       Batteries       Animal Health & Welfare*       Raw Materials         One-Health Anti Microbial Resistance*       Clean steel – low-carbon steelmaking       Zero-emission waterborne transport       Xgrouture of Data*       Cultural and Creative Industries         Pandemic Preparedness* Co-funded or co- programmed       Clean steel – low-carbon steelmaking       Zero-emission road transport       Zero-emission road transport       Safe & Sustainable Food System*       Caltural and Creative Industries         Institutionalised Partnerships (Art 185/7)       Builti4People       Clean Energy Transitions       Calean Energy Transitions       Calean Energy Transitions         Institutionalised Partnerships (Art 185/7)       Diving Urban Transitions       Diving Urban Transitions       Calean Energy Transition	PILLAR II - Global challenges & European industrial competitiveness				PILLAR III - Innovative Europe	
Global Health Partnership Transformation of health systems       Smart Networks & Services       Clean Aviation       Rescuing Biodiversity to Safeguard Life on Earth       Climate         Transformation of health systems       High Performance Computing       Single European Sky ATM Research 3       Climate Neutral, Sustainable & Productive Blue Economy       Digital         Chemicals risk assessment       European Metrology (Art. 185)       Europe's Rail       Water/All       Health         Rare diseases*       Photonics       Batteries       Accelerating Farming Systems Transitions*       Manufacturing         One-Health Anti Microbial Resistance*       Clean steel – low-carbon steelmaking       Zero-emission waterborne transport       Agriculture of Data*       Cultural and Creative Industries         Pandemic Preparedness* Co-funded or co- programmed       Clean Energy Transition       Zero-emission road transport       Safe & Sustainable Food System*       Cultural and Creative Industries         Institutionalised Partnerships (Art 1857)       Clean Energy Transition       Clean Energy Transition       Culture of Data*	CLUSTER 1: Health				EIT	SUPPORT TO INNOVATION ECOSYSTEMS
Services       Services       Services       Safeguard Life on Earth       Digital         Transformation of health systems       High Performance Computing       Single European Sky ATM Research 3       Climate Neutral, Sustainable & Productive Blue Economy       Digital         Chemicals risk assessment       European Metrology (Art. 185)       Europe's Rail       Vater4All       Health         Rare diseases*       Photonics       Batteries       Animal Health & Welfare*       Manufacturing         One-Health Anti Microbial Resistance*       Made in Europe       Zero-emission waterborne transport       Accelerating Farming Systems Transitions*       Urban Mobility         Personalised Medicine*       Clean steel – low-carbon steelmaking       Zero-emission road transport       Safe & Sustainable Food System*       Cultural and Creative Industries         Processes4Planet       Built4People       Safe & Sustainable Food System*       CROSS-PILLARS II AND III         Institutionalised Partnerships (Art 1857)       Driving Urban Transitions       Cultural concerc Cloud	Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe	InnoEnergy	Innovative SMEs
systems       High Performance Computing       ATM Research 3       Climate Neutral, Sustainable & Productive Blue Economy       Food         Chemicals risk assessment       European Metrology (Art. 185)       Europe's Rail       Health         ERA for Health       AI-Data-Robotics       Water4All       Health         Animal Health & Welfrare*       Raw Materials       Manufacturing         One-Health Anti Microbial Resistance*       Made in Europe       Zero-emission waterborne transport       Accelerating Farming Systems Transitions*       Manufacturing         Personalised Medicine*       Clean steel – low-carbon steelmaking       Zero-emission road transport       Zero-emission road transport       Safe & Sustainable Food System*       Safe & Sustainable Food System*       Cultural and Creative industries         Pandemic Preparedness* Co-funded or co- programmed       Global competitive space systems**       Clean Energy Transition       Safe & Sustainable Food System*       Carcoss-PILLARS II AND III         Institutionalised Partnerships (Art 185/7)       Driving Urban Transitions       Driving Urban Transitions       Carcoss API and transport	Global Health Partnership				Climate	
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Al-Data-Robotics       Al-Data-Robotics       Animal Health & Welfare*       Raw Materials         Rare diseases*       Photonics       Batteries       Accelerating Farming Systems Transitions*       Manufacturing         One-Health Anti Microbial Resistance*       Made in Europe       Zero-emission waterborne transport       Accelerating Farming Systems Transitions*       Manufacturing         Personalised Medicine*       Clean steel – low-carbon steelmaking       Zero-emission road transport       Safe & Sustainable Food System*       Cultural and Creative Industries         Pandemic Preparedness* Co-funded or co- programmed       Processes4Planet       Built4People       Safe & Sustainable Food System*       CROSS-PILLARS II AND III         Institutionalised Partnerships (Art 185/7)       Driving Urban Transitions       Libriving Urban Transitions       Libriving Urban Transitions	(Art. 185)		Connected and Automated	Water4All	Health	
Photonics     Photonics     Accelerating Farming Systems Transitions*     Manufacturing       One-Health Anti Microbial Resistance*     Made in Europe     Zero-emission waterborne transport     Accelerating Farming Systems Transitions*     Urban Mobility       Personalised Medicine*     Clean steel – low-carbon steelmaking     Zero-emission road transport     Safe & Sustainable Food System*     Cultural and Creative Industries       Pandemic Preparedness* Co-funded or co- programmed     Processes4Planet     Built4People     Safe & Sustainable Food System*     CROSS-PILLARS II AND III       Institutionalised Partnerships (Art 185/7)     Clean Energy Transition     Driving Urban Transitions     European Open Science Cloud	ERA for Health	AI-Data-Robotics	Mobility (CCAM)	Animal Health & Welfare*	Raw Materials	
One-Health Anti Microbial Resistance*       Made in Europe       Zero-emission waterborne transport       Systems Transitions*       Urban Mobility         Personalised Medicine*       Clean steel – low-carbon steelmaking       Zero-emission road transport       Zero-emission road transport       Agriculture of Data*       Cultural and Creative Industries         Pandemic Preparedness*       Processes4Planet       Built4People       Safe & Sustainable Food System*       CROSS-PILLARS II AND III         Institutionalised Partnerships (Art 185/7)       Driving Urban Transitions       European Open Science Cloud       European Open Science Cloud	Rare diseases*	Photonics	Batteries	Systems Transitions*	Manufacturing	
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Pandemic Preparedness*       System*         Co-funded or co- programmed       Processes4Planet       Built4People         Global competitive space systems**       Clean Energy Transition         Driving Urban Transitions       Driving Urban Transitions	Personalised Medicine*	steelmaking				
programmed     Clean Energy Transition     CROSS-PILLARS II AND III       Global competitive space systems**     Clean Energy Transition     European Open Science Cloud       Institutionalised Partnerships (Art 185/7)     Driving Urban Transitions     European Open Science Cloud						
Institutionalised Partnerships (Art 185/7)	programmed		Built4People		CROSS-PILLARS II AND III	
Institutionalised Partnerships (Art 185/7)			Clean Energy Transition		European Open Science Cloud	
	Driving		Driving Urban Transitions	European Open Science Cloud		oud
Institutionaised partnerships / EIT KICs Co-Programmed Co-Funded * Calls with opening dates in 2023-24 ** Calls with opening dates not before 2022	Institutionaised partnerships / EIT KICs Co-Programmed Co-Funded * Calls with opening dates in 2023-24					Commission



#### Who is eligible for funding?



#### **EU COUNTRIES**

- Member States (MS) including their outermost regions
- The Overseas Countries and Territories (OCTs) linked to the MS.



#### **NON-EU COUNTRIES**

- Countries associated to Horizon Europe (AC)
- Low and middle income countries: See <u>HE</u>
   <u>Programme Guide</u>.
- Other countries when announced in the call or exceptionally if their participation is essential



#### **SPECIFIC CASES**

- Affiliated entities established in countries eligible for funding.
- EU bodies
- International organisations (IO):
  - International European research organisations are eligible for funding.
  - Other IO are not eligible (only exceptionally if participation is essential)
  - IO in a MS or AC are eligible for funding for Training and mobility actions and when announced in the call conditions





# **Eligibility criteria of RIA/IA/CSA**

- RIA and IA
  - at least one independent legal entity established in a Member State, and
  - at least two other independent legal entities each established either in a different Member State or an Associated Country.
- CSA
  - at least one legal entity established in a Member State or associated country.
- Always check the call text! Examples:
  - In order to achieve the expected outcomes, and safeguard the Union's strategic assets, interests, autonomy, or security,
    - namely the security-sensitive nature of the autonomy of European infrastructures against systemic risks and hybrid threats participation is limited to legal entities established in Member States only.
    - namely to increase EU resilience in raw materials supply chains for EU industrial value chains and strategic sectors to enable their green and digital transition and to reduce current EU over-dependence on a few third countries for critical raw materials by diversifying supply and using environmentally friendly technologies, participation is limited to legal entities established in Member States, associated countries, OECD countries, African Union Countries, and Latin America
  - This topic requires the active involvement of at least 2 Border or Coast Guard Authorities and 2 Customs Authorities, from at least 3 different EU Member States or Associated countries.



# **Recommended mapping before you start**

- State-of-the-Art and the EU-projects behind published results and known pilots
  - Who and what was funded by Horizon 2020?
- Winning research teams: oligarchs of the EU system
  Key coordinators
- Scarce resources: companies to win over to your idea
  - All information are public on CORDIS



## **Consortium and stakeholders**

Beneficiaries signing the Grant Agreement with the EU

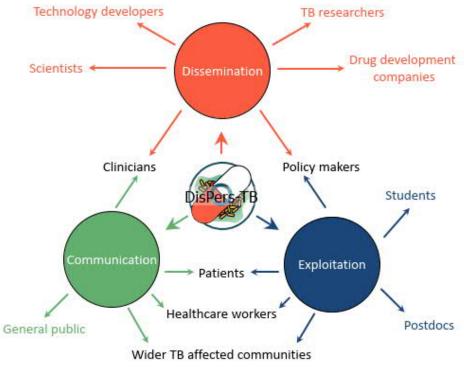
Coordinator and Partners

Parties NOT signing, but listed in the Grant Agreement

- Third Parties (Linked Third Parties)
  - = Associated parties

Parties Not signing, Not having a legal role in the GA

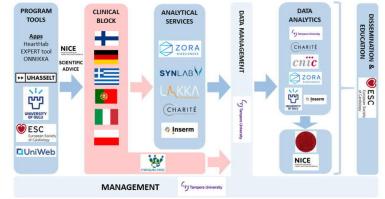
- Subcontractors
- Advisory/Sounding Board, Industry Interest Group/Panel
- Stakeholders, e.g. cities, patient orgnisations
- Proof of Commitment by Letters of Support





# Strategies to form a consortium

- Invite friends You might not invite strangers without any recommendations
- Meet people (online) at Brokerage events
- Think outside the box and analyse successful consortia (CORDIS)
- Analyse the essential competences required to implement your idea
- Analyse the call text "Expected Outcomes" and design "Pathways to Impact" and identify the needed actors and stakeholders interested in the outcomes especially AFTER the project
- Form a value chain from a business perspective (IA)
- Networking, partnerships













# Thank you!

# **Further information and questions:**

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