

The Innovative Medicines Initiative

Future directions: After 10 years of IMI

Actionomy meeting – Bonn – Germany , November , 2018

Pierre Meulien - IMI

IMI 2 budget (2014 – 2020)

EU funding goes to:

Universities
Academic Health Centres
SMEs
HTA bodies
Regulators
Patient groups
etc...



€1.638 bn



€1.425 bn

Other
€213 m

IMI 2 total budget
€3.276 billion

EFPIA companies

receive no funding

contribute to projects 'in kind'

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

EFPIA Partners in Research

ALCEDIAG
ALCEN



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ELLEGAARD ••
GÖTTINGEN MINIPIGS

FUJIFILM
Value from Innovation


GE Healthcare

illumina®


INSTITUT MERIEUX

INTERSYSTEMS

Medtronic

NOKIA


Piramal
knowledge action care

PMB
ALCEN


PsychoGenics

 QUINTILES

 sas

 SomaLogic

VARIAN
medical systems

ZEISS

zoetis

IMI Associated Partners (only those contributing in excess of €1 million)

- Bill and Melinda Gates Foundation
 - The Wellcome Trust
 - The Simon Foundation
 - Autism Speaks
 - JDRF
 - The Helmsley Charitable Trust
 - TB Alliance
-
- Total Associated Partner Contributions to date over €150 million



10 YEARS OF
BREAKTHROUGHS
A HEALTHIER
FUTURE



innovative
medicines
initiative

Funding
challenging
areas

Drug
discovery
€214 201 208

Cancer
€142 051 549

Inflammatory
disorders
€80 494 654

Infectious
diseases
€1 101 524 489

Data and
knowledge
management
€126 007 170

Diabetes/
metabolic
disorder
€242 189 095

Translational
safety
€194 597 376

Brain
disorders
€304 044 515



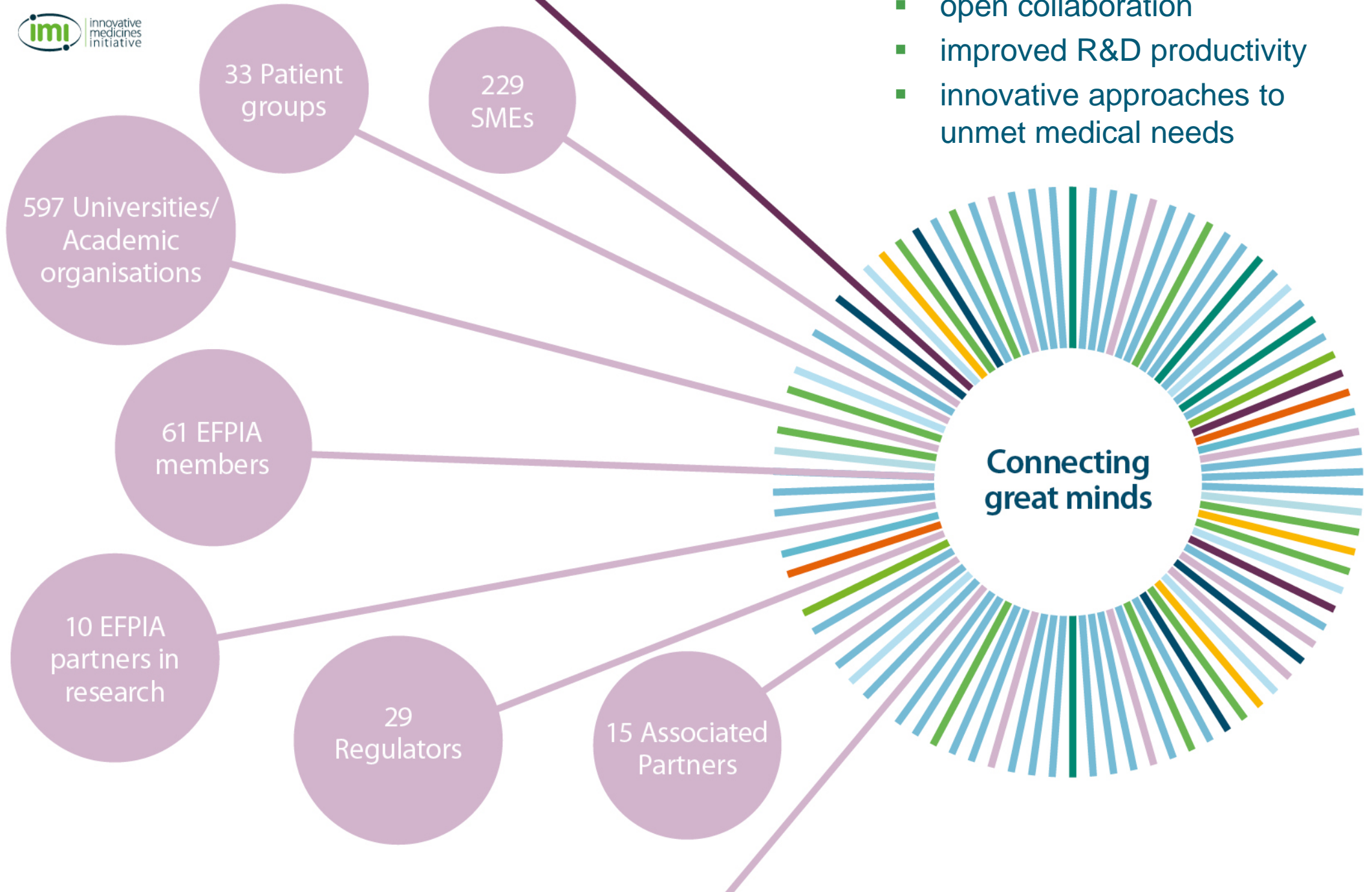
10 YEARS OF
BREAKTHROUGHS
A HEALTHIER
FUTURE



Over 11 500 researchers

working for:

- open collaboration
- improved R&D productivity
- innovative approaches to unmet medical needs



The need for PPPs ?

FORM SHOULD FOLLOW FUNCTION

- IMI is not for everyone
- IMI is not for everything
- But for certain specific things PPPs are probably the only way of making progress

Some areas of achievement and potential future activities

- Technology platforms like ELF, EHR4CR, EMIF,
- Gaps in the ecosystem
 - Paediatric CTN
 - A project on the use of medicines in pregnant women and during the neonatal period
- Market failures like AMR
- Complex but highly relevant public health burdens like dementia or other neurological conditions (pain, autism, epilepsy, depression)
- Areas undergoing technology convergence
 - Big data and remote biosensor technologies
 - Microbiome
 - Advanced therapies
 - Several areas in neuroscience

Trans-Atlantic Autism Alliance

AIMS-2-TRIALS Started in June 2018

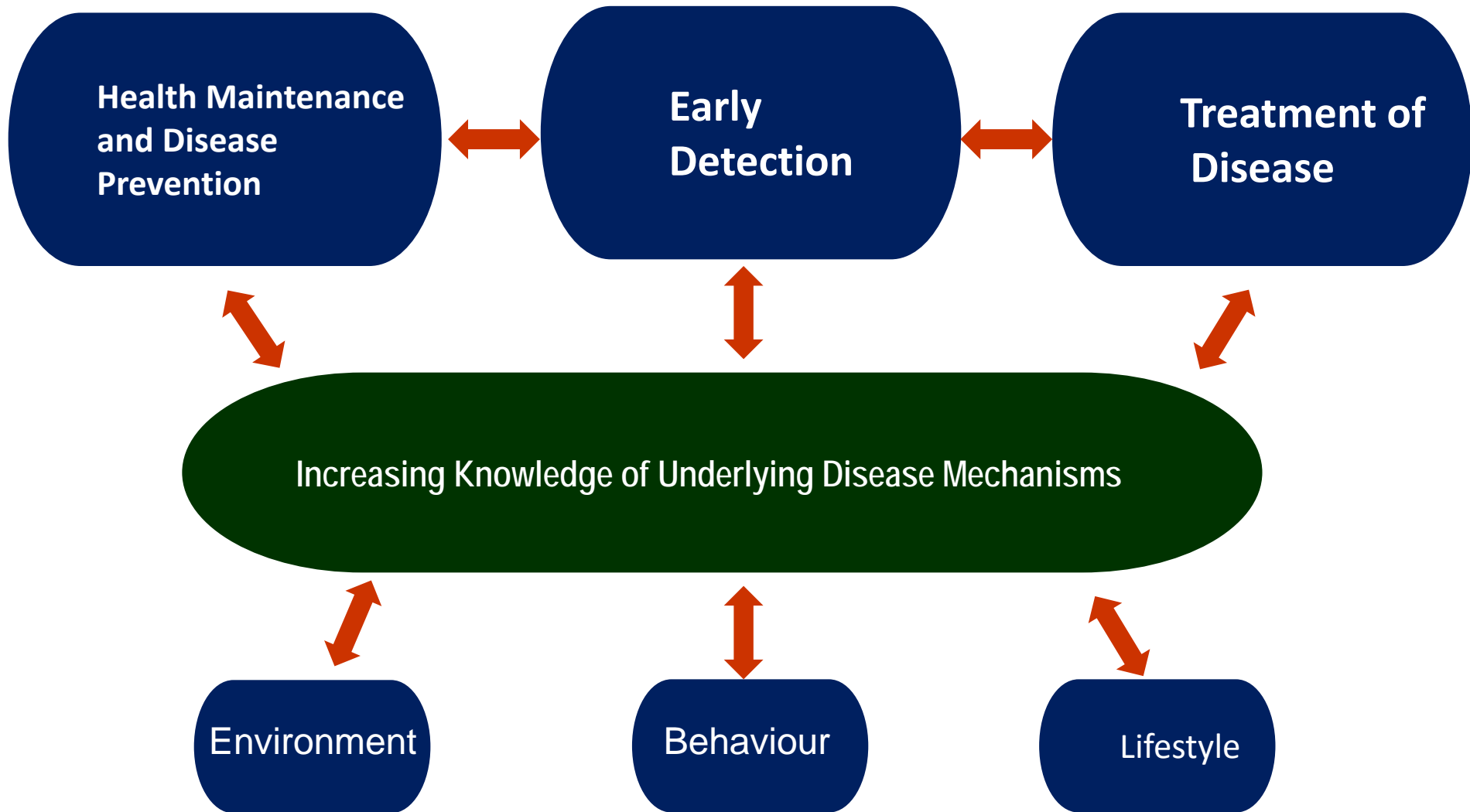
- €110+ million budget
- Roche in Pharma lead but 4 other companies involved
- 37 public partners
- 5 SMEs
- 3 Associated Partners (APs)
- Important role of US based Associated Partners
 - Autism Speaks
 - Simon Foundation

These APs co-designed the topic and contribute over €50 million of in-kind contribution

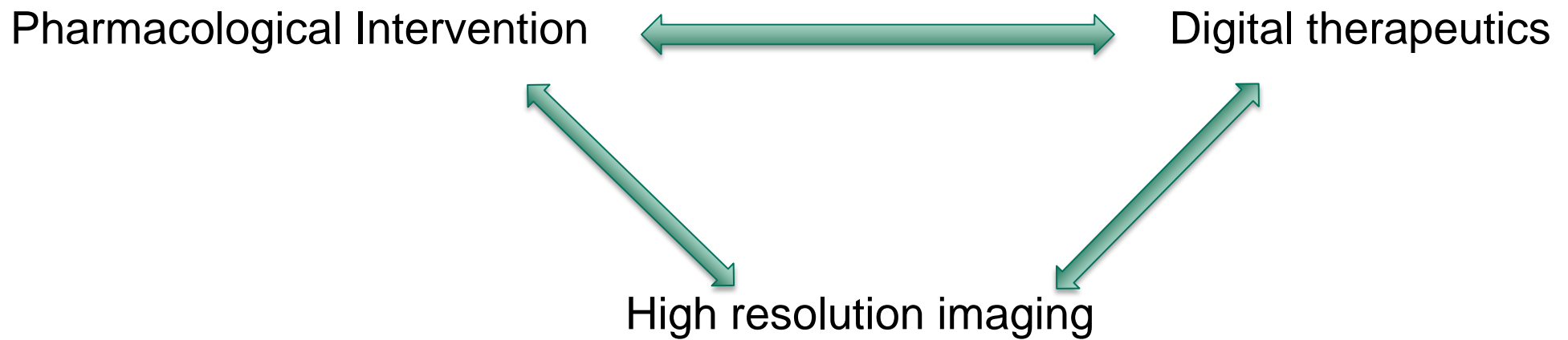
Views on public private partnerships

.....after 10 years

Molecular Medicine Continuum



Technology Convergence





'With growing international competition, Europe needs to act urgently on research and innovation. The proposed €100 billion for the next EU research and innovation programme would be a huge boost.'

Carlos Moedas, Commissioner, 15/05/2018



Horizon Europe implementation

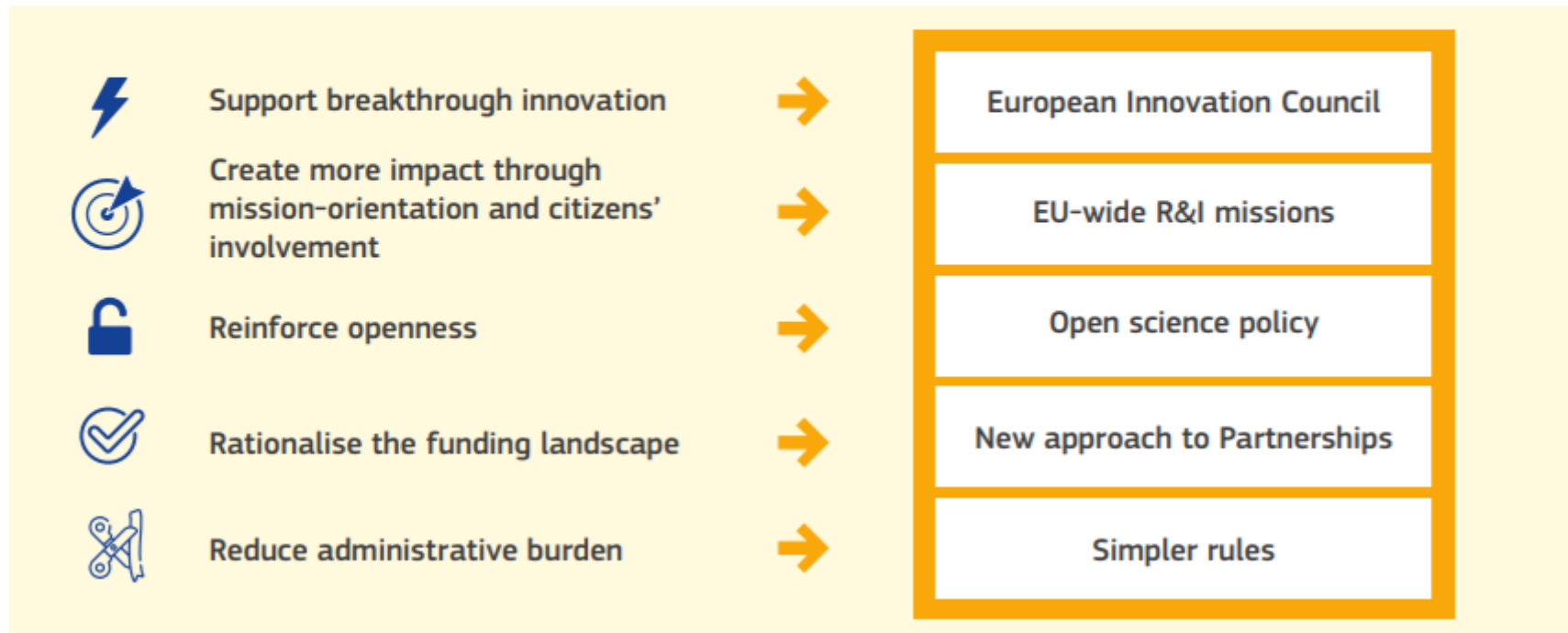
> The new programme will be implemented through three pillars:



Horizon Europe implementation



WHAT'S NEW?



A new generation of European Partnerships: Horizon Europe will streamline the number of partnerships that the EU co-programmes or co-funds with partners like industry, civil society and funding foundations.

European Partnerships

"European Partnerships shall:

- a) Be established in cases where they will more effectively achieve objectives of Horizon Europe than the Union alone;
- b) Adhere to the principles of Union added value, transparency, openness, impact, leverage effect, long-term financial commitment of all the involved parties, flexibility, coherence and complementarity with Union, local, regional national and international initiatives;
- c) Be time limited and include conditions for phasing-out the Programme funding.

Provisions and criteria for their selection, implementation, monitoring, evaluation and phasing-out are set out in Annex III."

(Article 8.2 of the proposal for a Regulation establishing Horizon Europe)

Pillar II

A systemic approach **along the lines of the SDGs** and the **Paris Climate Agreement**

- **System** vs. sector approach
- Engaging **all actors** to **co-design** and **co-create** research and innovation
- **Greater impact** through aligning actions with the rest of the world
- **Integrated clusters** of activity
- Strong support to **industry** and **innovation**
- No separate budgets per **intervention area**



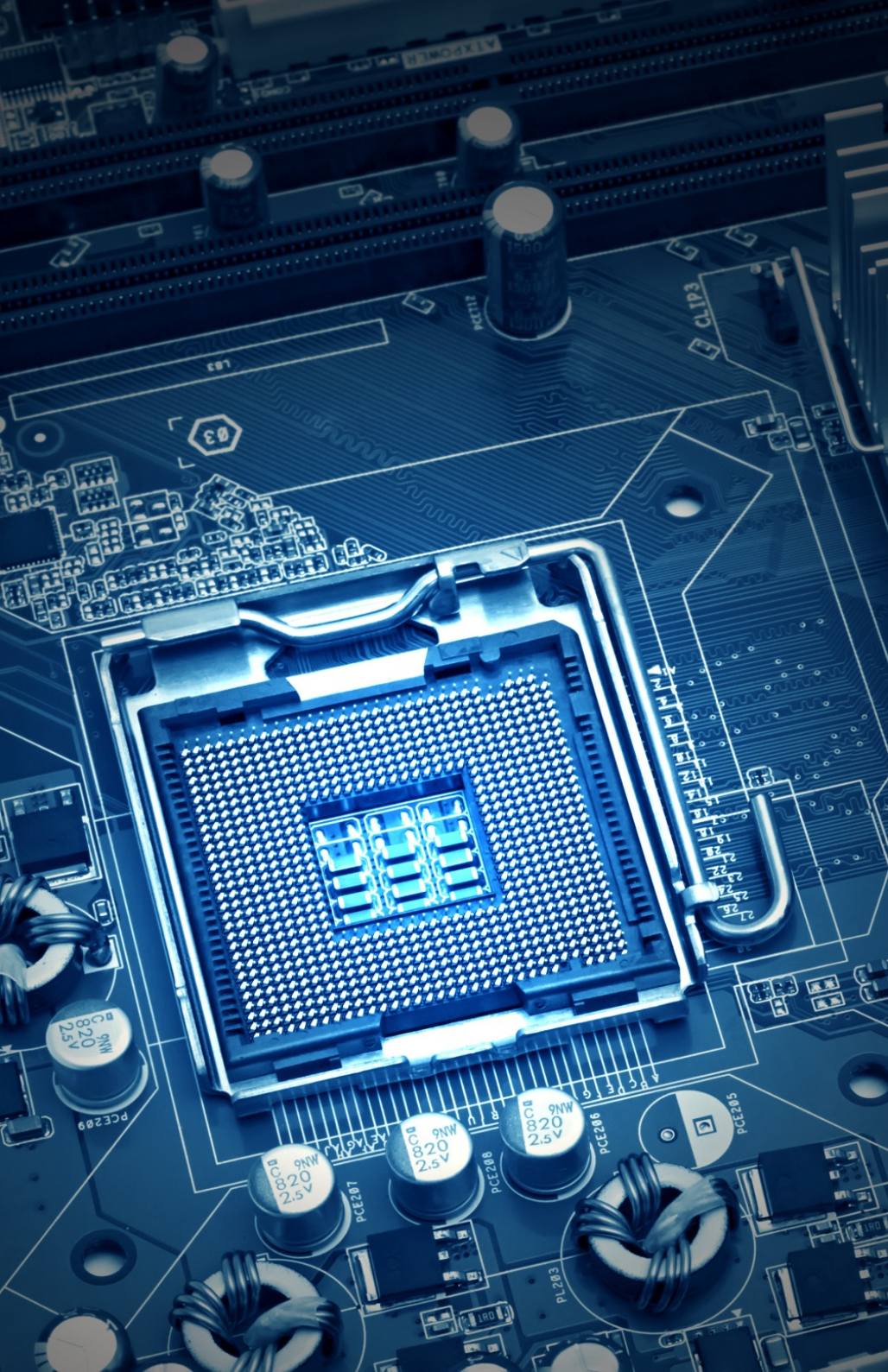
CLUSTER 1: Health

Intervention areas:

1. Health throughout the life course
2. Environmental and Social Health Determinants
3. Non-Communicable and Rare Diseases
4. Infectious Diseases
5. Tools, Technologies and Digital Solutions for Health and Care
6. Health Care Systems

Synergies with existing programmes and infrastructures

And..... broadening partner base, will be key for success



What is ECSEL?
Electronic Components and
Systems for European
Leadership

ECSEL

Joint Undertaking

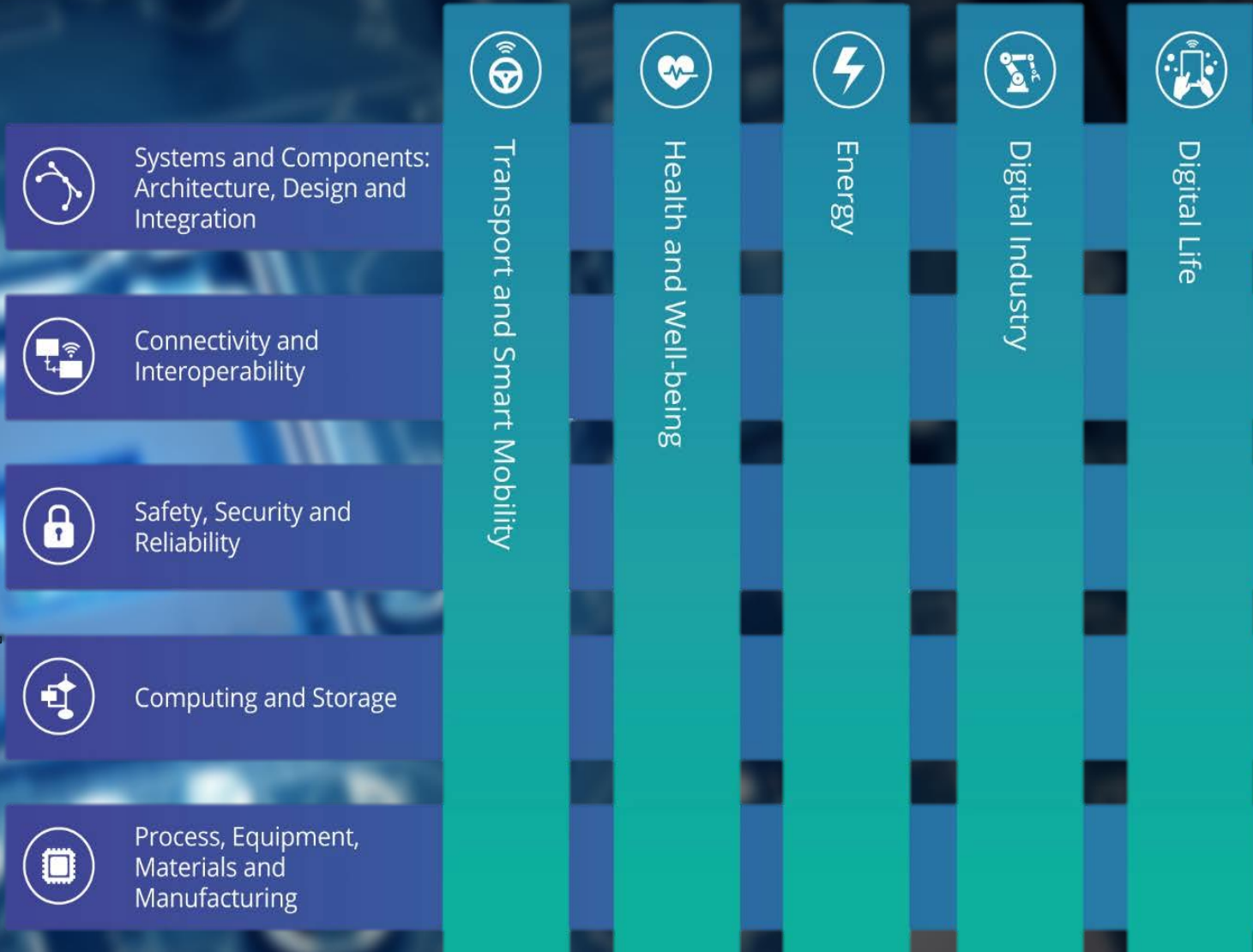
a Public-Private Partnership
Keeping Europe at the Forefront
of Technology Development

Established by the Council Regulation
(EU) No 561/2014

The ECSEL JU Strategy

Key Application Areas

Essential Capabilities



Chapter 2: Health and Well-being



Healthcare in the digital age



Game Changers

- Images will be combined with **other sensor** data to get precise models of a person's health
- Decision support based on combination of **artificial intelligence**, image and sensor data
- Transaction mechanisms for data security and privacy with **Blockchain**
- Cognitive computing and Humanoid **robots**
- **3D Printing** and Computerized Numerical Control machining
- **Battery-free** body worn or implantable medical device
- Nano devices and **New (Bio) materials**.
- Implantable **organs on chip** or implantable organs in package
- Regenerative medicine



BACK TO IMI

IMI 2 – final budget allocation in 2020

- There is opportunity to continue to build new projects
- We have €500 million + of EC funding to allocate over 2019/2020
- We will of course need a similar amount from the private sector and /or Associated Partners in order to launch specific calls

Future Priorities (a personal view)

- Early detection and prevention strategies
- Bring more innovative health economics into mainstream thinking
- Integrate social sciences and humanities into health R&I
- Investing in the application of digital solutions, when it makes sense
- Creating more productive interfaces between health systems and innovation providers – in an integrated manner
- Educating the public so that they can adjust lifestyles and behaviours

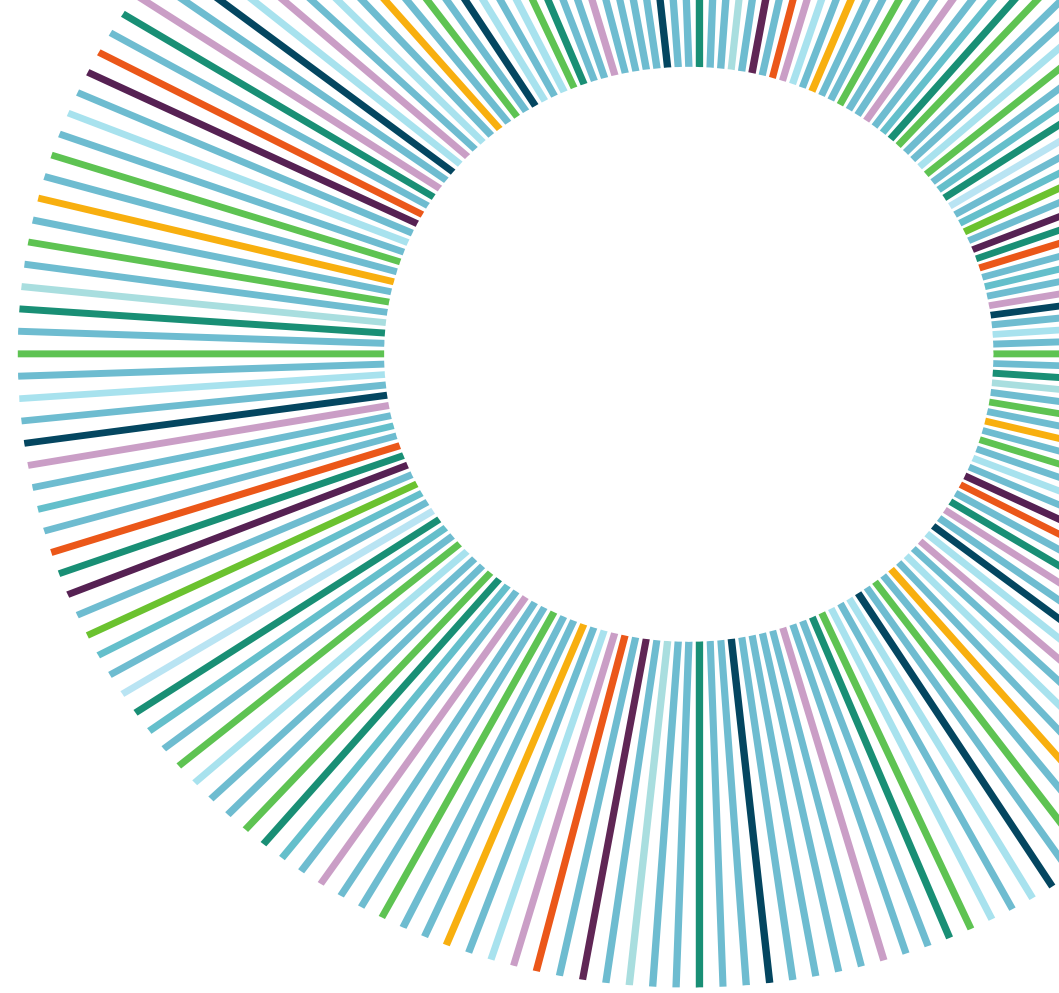
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Thank you!