



EU health research

Inspiring collaboration

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Collaborative research

Real-life solutions based on joint problem-solving



Public-private partnerships

Investing together for next generation medicines and treatments

EU health research



Global co-operation

One world, one team working to solve common health challenges



Public partnerships

Harnessing global expertise to fight poverty-related diseases

- 1. Romania – main features**
- 2. Health, demographic change and wellbeing in Horizon 2020 – 2016/2017 priorities**
 - **Personalised medicine**
 - **European human biomonitoring initiative**
 - **Infectious diseases**
 - **Maternal health**
- 3. Global co-operation**
- 4. Public investment leverages private investment**
- 5. What next? Discussion**



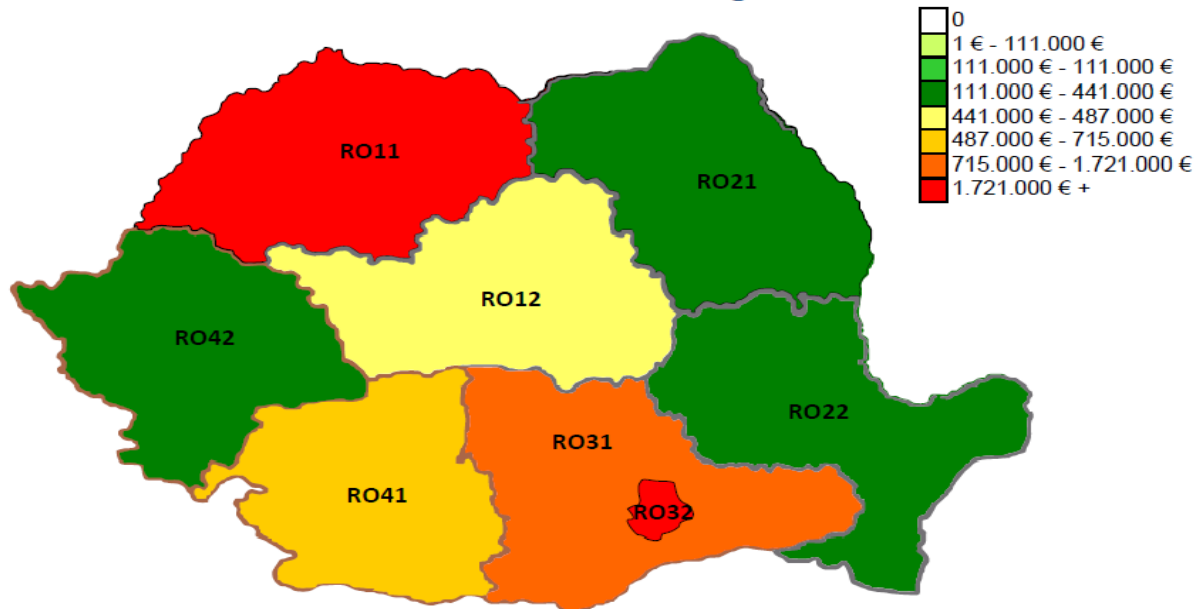
1. Romania – main features





European
Commission

Health and IMI Funding



RO11 - Nord-Vest
RO12 - Centru
RO21 - Nord-Est
RO22 - Sud-Est
RO31 - Sud - Muntenia
RO32 - Bucuresti - Ilfov
RO41 - Sud-Vest Oltenia
RO42 - Vest

EC Contribution :	7.051.397
Total Costs :	9.523.461
Number of projects :	48
Number of participations :	59
Number of organisations :	36
Average amount by participations :	119.515

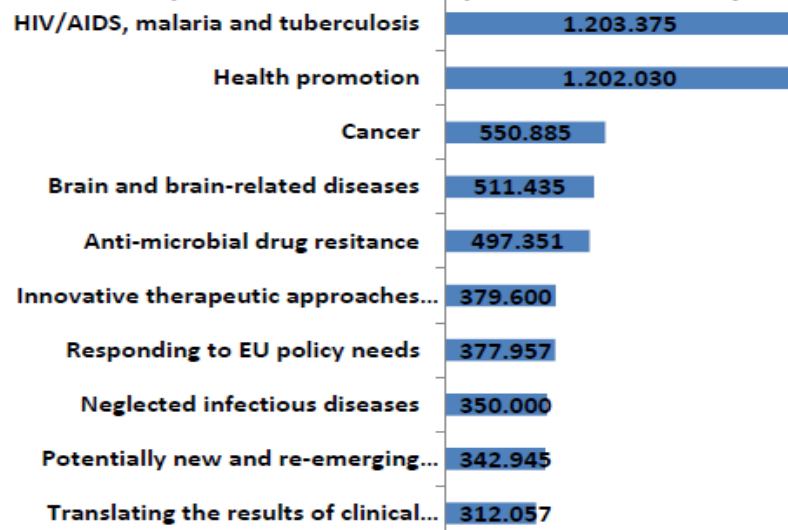


Research &
Innovation

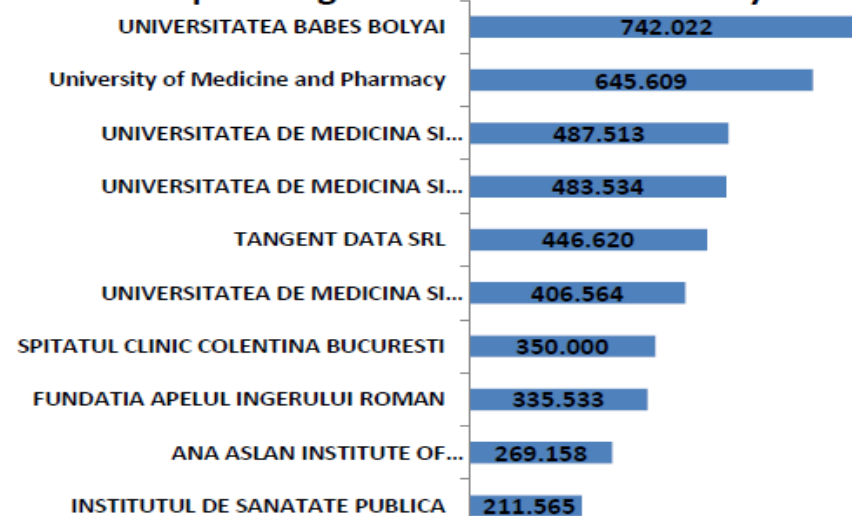


27,8% of total nbr organisations
receiving 62,1% of total contribution

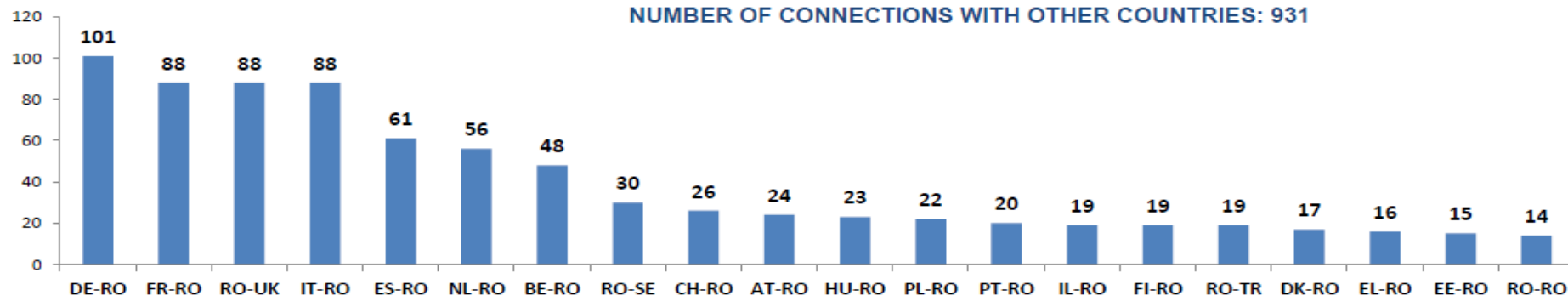
Top 10 funded Call Topics in the country



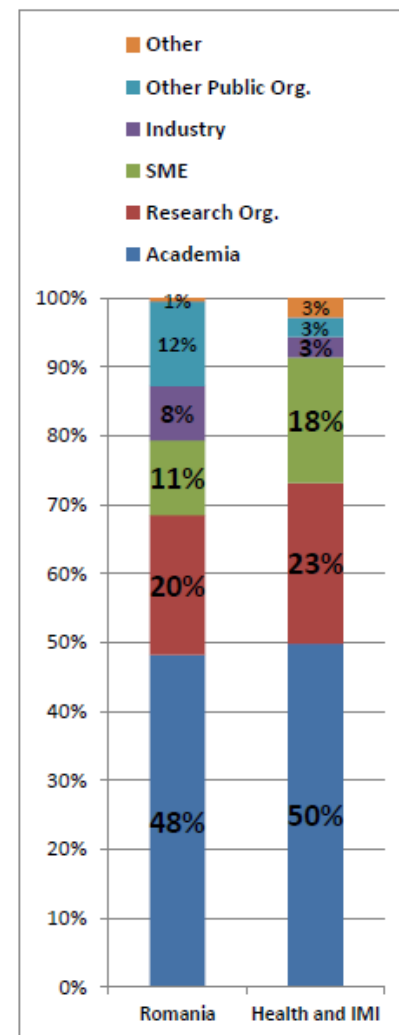
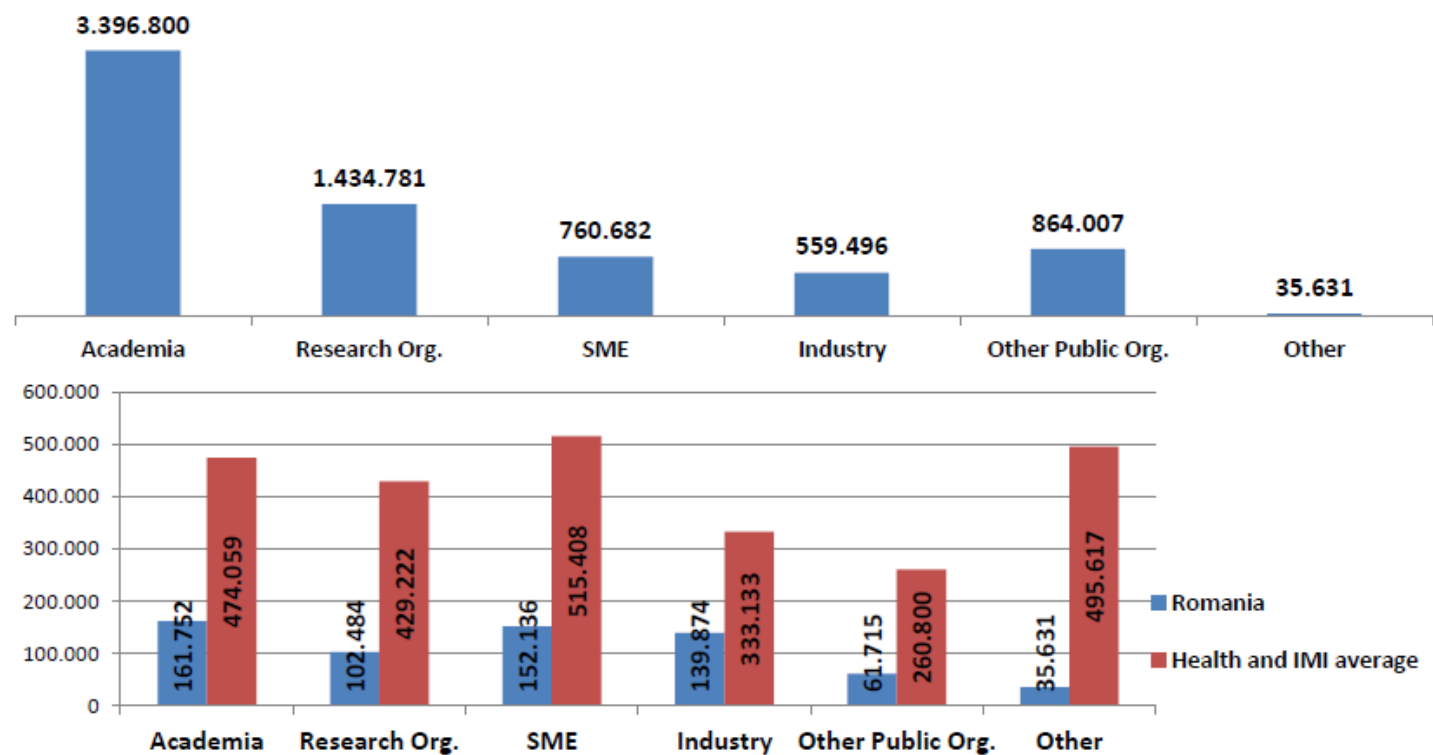
Top 10 Organisations in the country



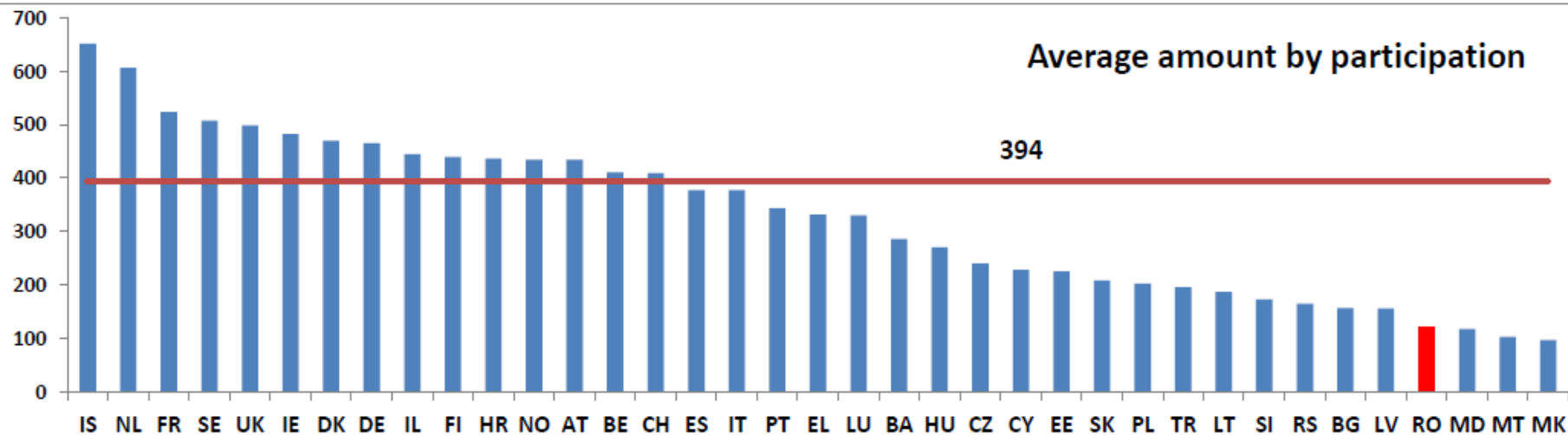
NUMBER OF CONNECTIONS WITH OTHER COUNTRIES: 931



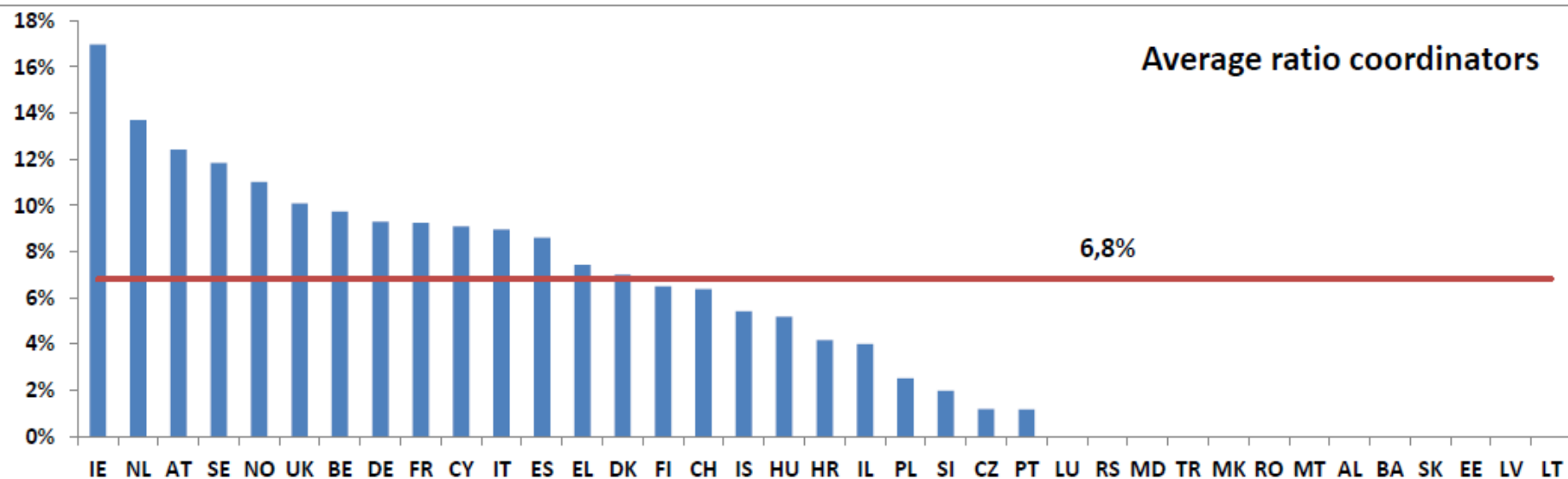
Organisation type	EC Contribution	Romania	Health and IMI	Number	% Nbr	Own contribution	Romania
Academia	3.396.800	48,17%	49,83%	21	35,59%	992.005	161.752
Research Org.	1.434.781	20,35%	23,33%	14	23,73%	421.543	102.484
SME	760.682	10,79%	18,21%	5	8,47%	206.601	152.136
Industry	559.496	7,93%	2,96%	4	6,78%	540.985	139.874
Other Public Org.	864.007	12,25%	2,79%	14	23,73%	310.931	61.715
Other	35.631	0,51%	2,87%	1	1,69%	0	35.631



Average amount by participation

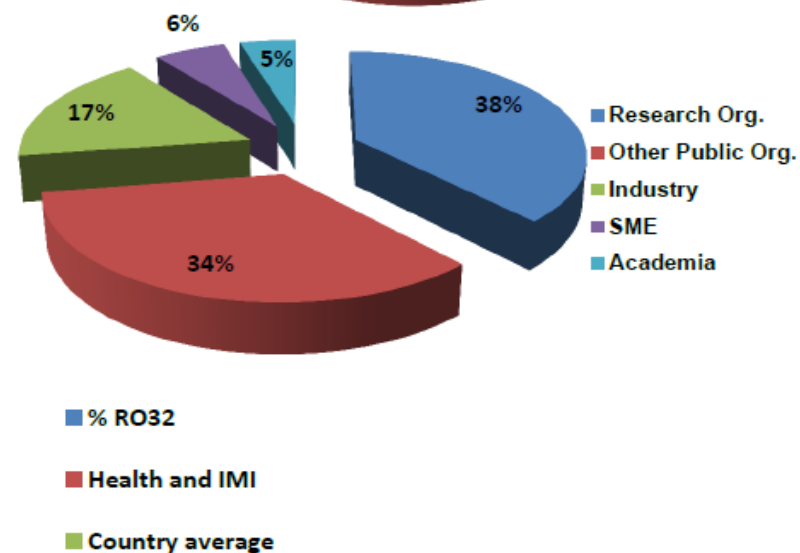
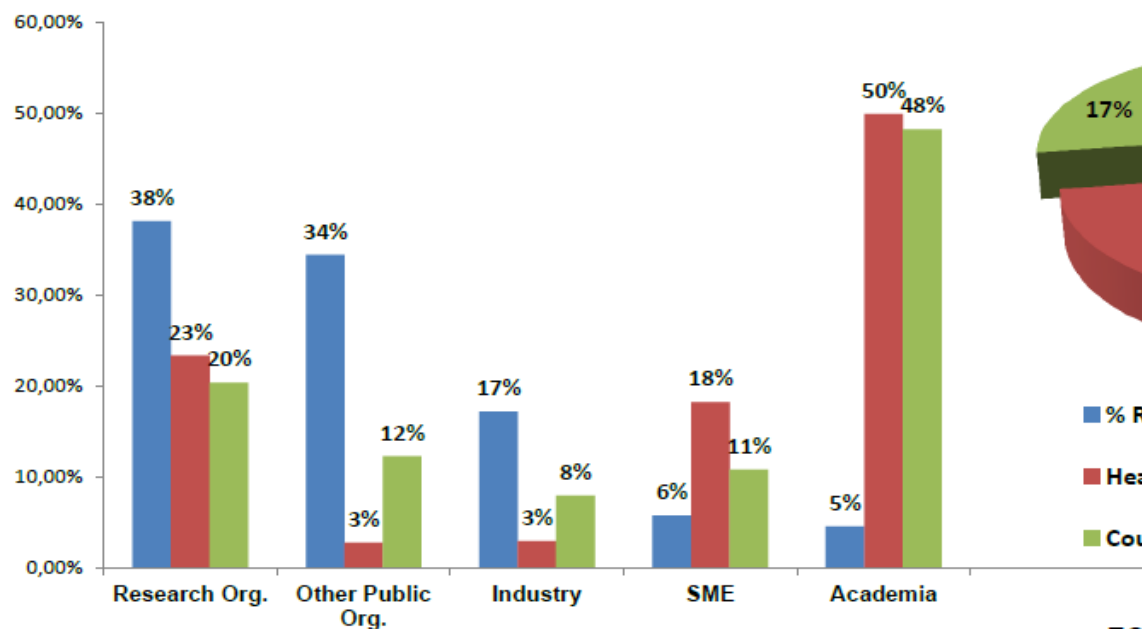
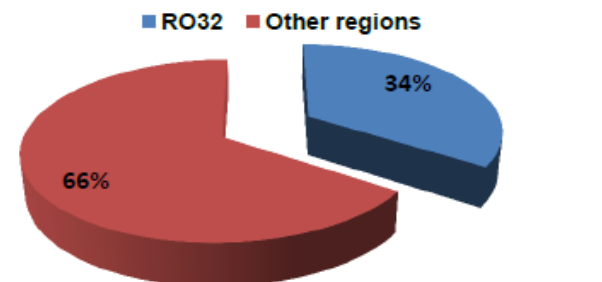


Average ratio coordinators



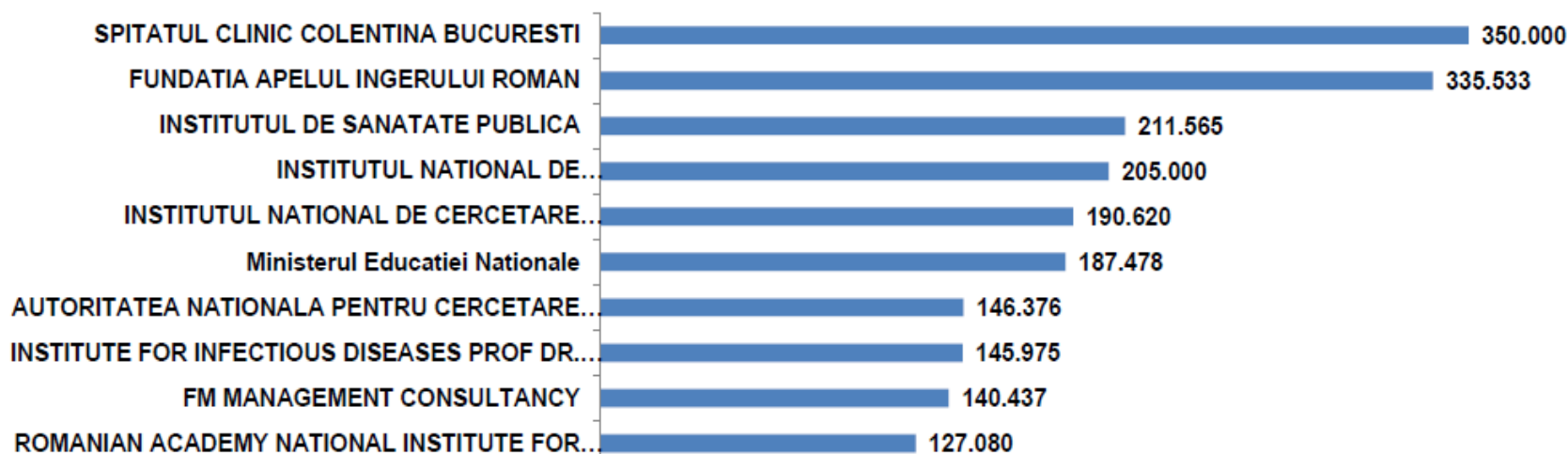
RO32 - Bucuresti - Ilfov

Organisation type	EC	% RO32	Health and	Country	Number	Own
Research Org.	924.611	38,10%	23,33%	20,35%	9	277.561
Other Public Org.	834.037	34,37%	2,79%	12,25%	12	307.289
Industry	416.437	17,16%	2,96%	7,93%	2	411.901
SME	140.437	5,79%	18,21%	10,79%	2	3.559
Academia	111.280	4,59%	49,83%	48,17%	1	13.520



EC Contribution : 2.426.801
 Total Costs : 3.440.631
 Number of projects : 22
 Number of participations : 26
 Average amount by participations : 93.339

TOP 10 ORGANISATIONS IN THE REGION



TOP 10 PROJECTS IN THE REGION

	Project number	Acronym	Call Topic	EC contribution
1	602051	HERACLES	Neglected infectious diseases	350.000
2	260694	EUROCOORD	HIV/AIDS, malaria and tuberculosis	335.533
3	278090	PARCIVAL	Anti-microbial drug resistance	205.000
4	261504	EDENEXT	Potentially new and re-emerging epidemics	190.620
5	202059	PROMARK	Cancer	170.540
6	323209	JPIAMR	Anti-microbial drug resistance	146.376
7	241796	SATURN	Anti-microbial drug resistance	145.975
8	261459	REFINEMENT	Quality, efficiency and solidarity of healthcare systems including transitional health systems	127.080
9	201731	ROWER	Responding to EU policy needs	111.280
10	249697	HIVERA	HIV/AIDS, malaria and tuberculosis	111.000



Latest News

EuroCoord Digest

The first edition of the EuroCoord Digest has been released. This newsletter highlights a selection of studies from across the EuroCoord network.

EuroCoord at CROI 2015

Researchers from across the EuroCoord network presented a total of 14 abstracts at the 2015 Conference on Retroviruses and Opportunistic Infections (CROI), held in Seattle, Washington.

EuroCoord Training Modules

Several e-learning modules have been created as part of the EuroCoord Training and Outreach work package (WP2).

These courses aim to improve research skills, and to provide basic, updated laboratory and clinical training to aid in the management of HIV-infected patients. They include training on HICDEP, CoDe, the course "Practical Approach to GCP", and help in manuscript writing.

The modules can be accessed [here](#).

About EuroCoord

EuroCoord is a Network of Excellence established by several of the biggest HIV cohorts and collaborations within Europe - CASCADE, COHERE, EuroSIDA, and PENTA.

Important Dates

2015

19-22 July
8th IAS Conference on HIV
Pathogenesis, Treatment and
Prevention
Vancouver, Canada ([website](#))

21-24 October
15th European AIDS Conference
Barcelona, Spain ([website](#))

2016

22-25 February
23rd Conference on Retroviruses
and Opportunistic Infections

EC contribution: €2.8



Home

Project

Consortium

Links

Publications

Heracles project



[Heracles interactive map](#)

Cystic Echinococcosis (CE) is a chronic helminthic disease caused by the infection with the larval stage (metacestode) of the tapeworm *Echinococcus granulosus* complex. Human CE is estimated in 2-3 million global cases. Disability-adjusted life years (DALYs) and monetary losses resulting from human CE have been calculated at the global level (assuming substantial under-reporting) as high as **1 million (M) DALYs**, or an annual loss of **US\$ 3 billion** (annual cost for treating human cases and livestock industry compensation).

Data reported from EU countries represent the **tip of the iceberg**. The **invisible portion** includes health, social and economic consequences linked to the people affected by CE. In fact, clinically diagnosed cases represent only a small proportion of the total

ERCE



European
Register of
Cystic
Echinococcosis

News and events

- **HERACLES**
Annual Meeting - Istanbul
(23th - 24th January 2015)
[download the agenda](#)

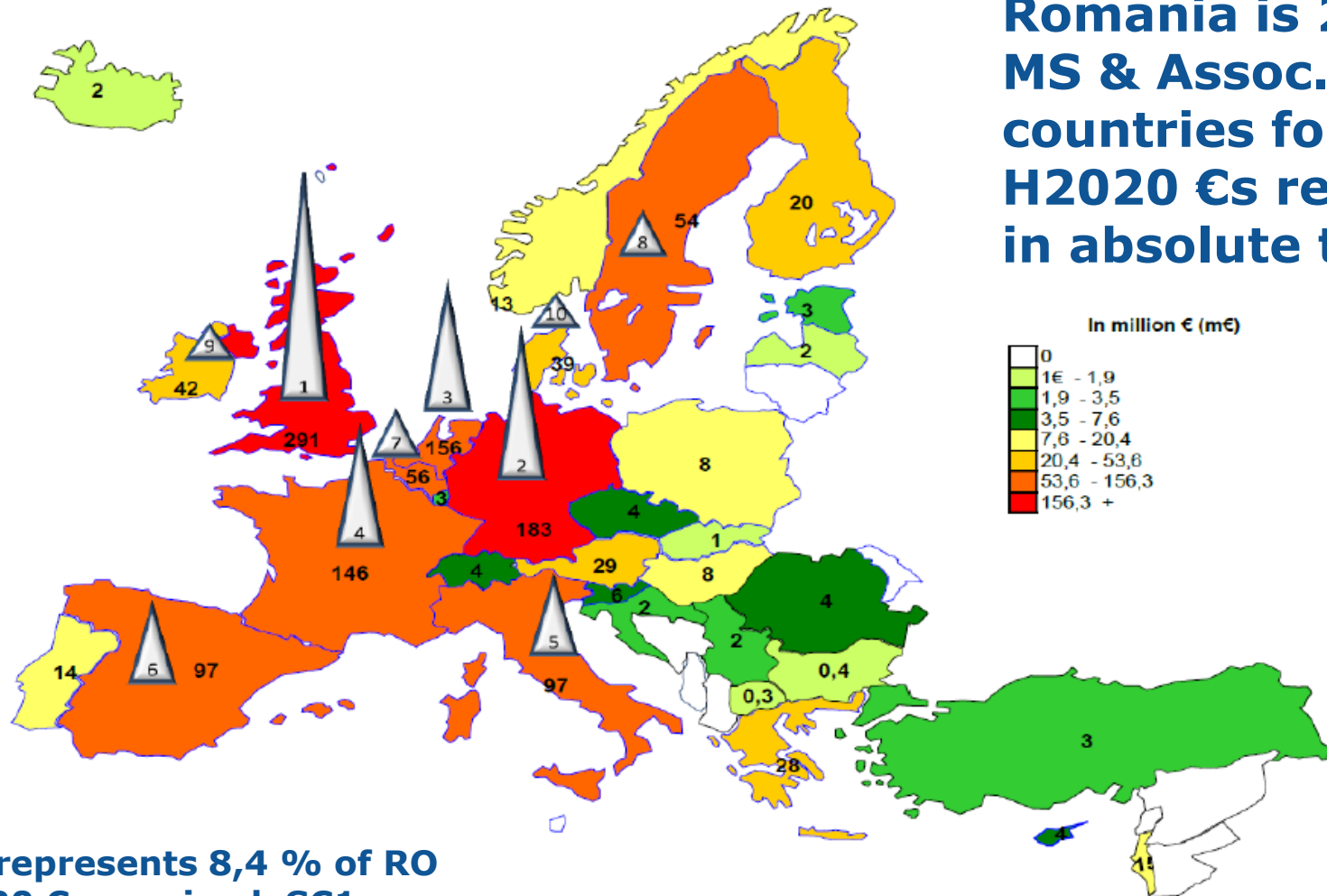
Project details

Project number: **602051**

Project title:
**HERACLES - Human cystic
Echinococcosis ReseArch
in CentraL and Eastern
Societies**

Neglected infectious diseases of Central and Eastern Europe

**Romania is 21/32
MS & Assoc.
countries for
H2020 €s received
in absolute terms**



**SC1 represents 8,4 % of RO
H2020 €s received. SC1
represents 9.7% of H2020.**

Date : 11/09/2015

GLORIA - EU-funded project under Horizon 2020

Comparing the effectiveness and safety of additional low-dose glucocorticoid in treatment strategies for elderly patients with rheumatoid arthritis

Romania is a partner – Universitatea de Medicina si Farmacie Carol Davila, Bucuresti (EUR 203.095) among the other 12 applicants

GLORIA aims to prove that the addition of chronic low dose glucocorticoids (GC) to current antirheumatic therapy is highly cost-effective and safe in elderly patients with rheumatoid arthritis (RA)

a large pragmatic trial: 800 elderly (>65y) RA patients receiving standard of care will be randomized to additionally receive 5 mg prednisolone daily or placebo for 2 years

a novel tool will monitor compliance; it can send personalized reminders to a patient's smart device

EC contribution: €5.9 m



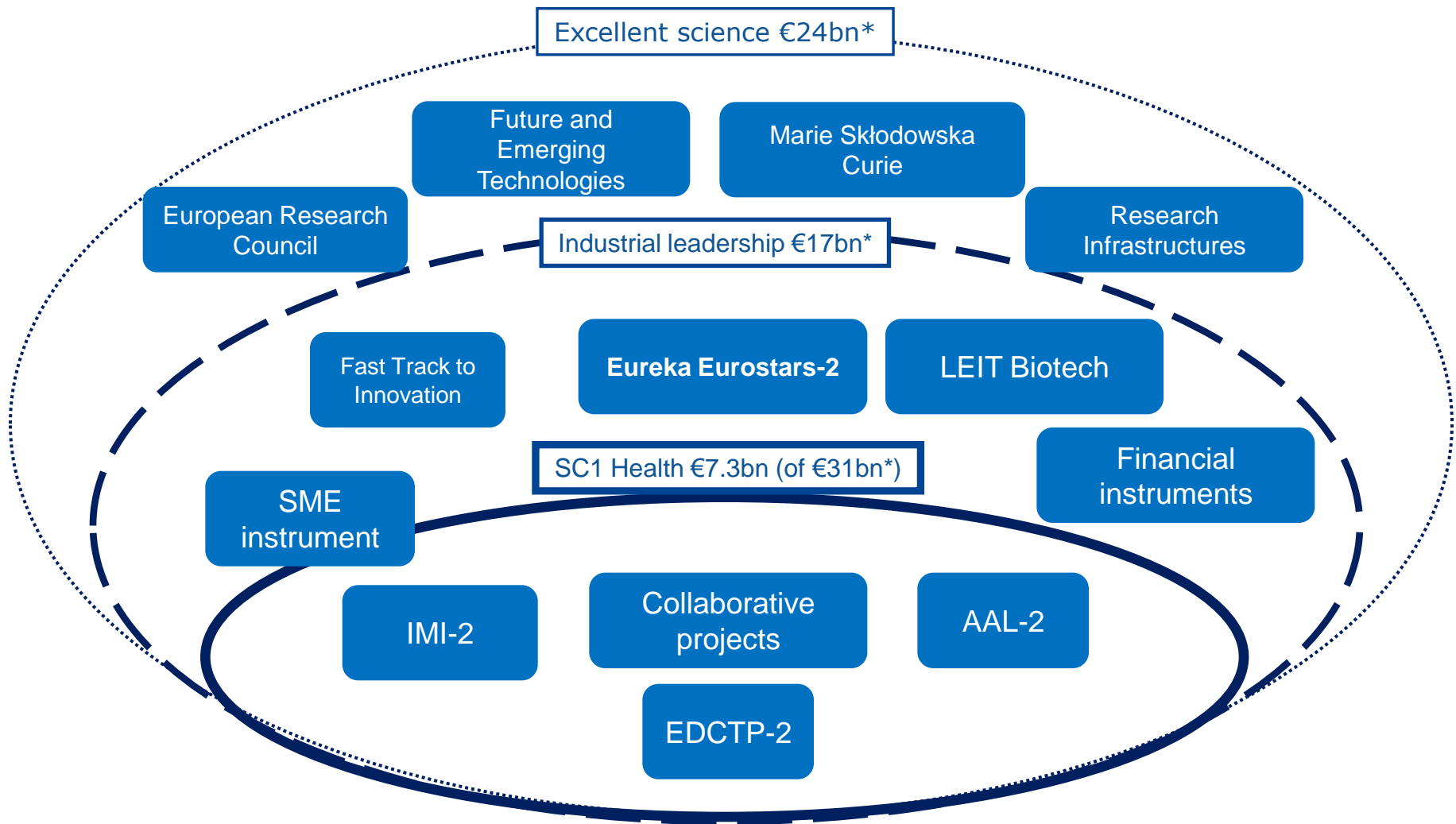
2. Health, demographic change and well-being in Horizon 2020

2016/ 2017 priorities

EVERYWHERE



Health Research in H2020



* Figure to be updated following EFSI investments in 2015

Main research priorities for 2016-2017



Personalised medicine



Promoting healthy ageing



Human biomonitoring



Health ICT



Infectious Diseases

InnovFin



Maternal and child health

The SC1 Work Programme 2016-17 in brief

Call 'Personalised Medicine'

21 topics (34 in 2014-2015): 10 in 2016, 10 in 2017,
1 open in 2016 & 2017

including 'coordination activities'

15 topics (17 in 2014-2015): 12 in 2016, 3 in 2017

**€ 935
million**

SME Instrument : 2 Topics

Other Actions: 12 items

(incl. InnovFin ID & "Birth Day Prize")

Focus Area Digital Security: 1 Topic

Focus Area Internet of Things: 1 Topic

Intended outputs

Evidence based policy making



Medicines for children



Health Technology Assessment



ATMP

and many others...

Taking the lead in new areas of growth



Personalised medicine

Responding to emergencies



INFECTIOUS DISEASES

Ebola drug trials lurch ahead

Changing epidemiology and hints of success alter studies of experimental treatments

By Kai Kupferschmidt and Jon Cohen

Even the researchers whose trial of a po... of the epidemic in September when more than 700 cases were reported in a single week in West Africa.

Knowledge creation and exploitation



SME
SMALL & MEDIUM ENTERPRISES



2. Health, demographic change and well-being in Horizon 2020

Personalised medicine

Enabling Personalised Medicine



over 1 billion EUR!

Implementing Personalised Medicine



over 1.2 billion EUR
in 2014/15!



European Personalised Medicine Consortium



Personalised medicine in SC1 Work Programme 2016-2017 (I)

Understanding health, well-being and diseases

- SC1-PM-01-2016: Multi omics for personalised therapies addressing diseases of the immune system
- SC1-PM-02-2017: New concepts in patient stratification
- SC1-PM-03-2017: Diagnostic characterisation of rare diseases
- SC1-PM-04-2016: Networking and optimising the use of population and patient cohorts at EU level

Treating and managing diseases

- SC1-PM-08-2017: New therapies for rare diseases
- SC1-PM-09-2016: New therapies for chronic diseases
- SC1-PM-10-2017: Comparing the effectiveness of existing healthcare interventions in the adult population
- SC1-PM-11-2016-2017: Clinical research on regenerative medicine

Personalised medicine in SC1 Work Programme 2016-2017 (II)

Preventing diseases

- SC1-PM-07-2017: Promoting mental health and well-being in the young

Methods and data

- SC1-PM-20-2017: Development of new methods and measures for improved economic evaluation and efficiency measures in the health sector

Health care provision and integrated care

- SC1-PM-21-2016: Implementation research for scaling-up of evidence based innovations and good practice in Europe and low- and middle-income countries

Personalised medicine in SC1 Work Programme 2016-2017 (III)

Coordination activities

- SC1-HCO-02-2016: Standardisation of pre-analytical and analytical procedures for *in vitro* diagnostics in personalised medicine
- SC1-HCO-03-2017: Implementing the Strategic Research Agenda on Personalised Medicine
- SC1-HCO-05-2016: Coordinating personalised medicine research
- SC1-HCO-06-2016: Towards an ERA-NET for building sustainable and resilient health system models



2. Health, demographic change and well-being in Horizon 2020

**European human biomonitoring initiative
Infectious diseases
Maternal Health**

European human biomonitoring initiative

Strategic planning & coordination of national initiatives

- Creating a European joint programme for monitoring and scientific assessment of human exposures to chemicals and potential health impacts
- Coordinating HBM initiatives in Europe at national and EU level with special focus on a two way dialogue between policy and science in support of evidence based policy making
- Implementation through a Joint Programme Co-Fund



Preventing diseases

SC1-PM-05-2016: The European Human Biomonitoring Initiative





Infectious diseases



- **Collaborative research** – HIV/AIDS, Malaria and Tuberculosis; Neglected Infectious Diseases (NID); Emerging Epidemics; Antimicrobial drug resistance (AMR)
- **New financial instruments** - InnovFin Infectious Diseases – joint initiative between EC-EIB
- **Inducement prizes** – Horizon 2020 prize for better use of antibiotics
- **Global initiatives** - Global Research Collaboration for Infectious Disease Preparedness (GLOPID-R); Global Tuberculosis Vaccine Partnership (GTBVP)
- **Public-private partnerships** – IMI2
- **Public-public partnerships** – EDCTP2
- **Joint Programming Initiative on AMR** – JPIAMR – ERA-INFECT

Infectious diseases in SC1 WP 16-17 (I)

Understanding health, well-being and diseases

- SC1-PM-02-2017: New concepts in patient stratification
- SC1-PM-04-2016: Networking and optimising the use of population and patient cohorts at EU level

Preventing diseases

- SC1-PM-06-2016: Vaccine development for malaria and/or neglected infectious diseases

Treating and managing diseases

- SC1-PM-09-2016: New therapies for chronic diseases
- SC1-PM-10-2017: Comparing the effectiveness of existing healthcare interventions in the adult population

Coordination activities

- SC1-HCO-04-2016: Towards globalisation of the Joint Programming Initiative on Antimicrobial Resistance

Infectious diseases in SC1 WP 16-17 (II)

Other Actions: InnovFin Infectious Diseases (InnovFin ID) Pilot

A New Financial Instrument for Infectious Diseases R&D:

- Jointly developed by the European Commission and European Investment Bank
- Launched on 15 June 2015 in Riga during 'The First Innovative Enterprise Week'
- Established under InnovFin - EU Finance for Innovators
- Provides loans between EUR 7.5m and EUR 75m to innovative players active in developing vaccines, drugs, medical and diagnostic devices, and research infrastructures for combatting infectious diseases
- 1 project supported so far: Cavid AB – €10m loan - tool to monitor HIV treatment

<http://www.eib.org>





Maternal and child health



- Approximately 300,000 women died from preventable causes related to pregnancy and childbirth in 2013
- Maternal and perinatal conditions are the seventh contributors to the global burden of disease



Other Actions: Horizon Prize on reducing maternal and new-born morbidity and mortality – the Birth Day Prize

- The prize calls for a novel solution to improve the outcome of facility-based deliveries (of a clinical, technological or managerial nature, or a combination of these)
- Developed by European Commission and Bill & Melinda Gates Foundation
- More details and prize launch at the high-level conference "Together for the next generation" on 8 December in Brussels



3. Global cooperation

EDCTP supports clinical trials and related research activities on PRDs, as well as capacity development for clinical trials and related research in sub-Saharan Africa.



EDCTP 2:
~€1.37 Billion
EC: €683 mio + MS
€683 mio

EDCTP2:

- launched in December 2014
- almost €700 million EU co-funding, matching the same Member States contribution
- broader scope: including HIV, TB, malaria, neglected infectious diseases, all clinical phases, diagnostics and delivery optimisation
- longer duration: 10 years

EU health research Global cooperation



<http://ihec-epigenomes.org>



International
Cancer Genome
Consortium
<https://icgc.org/>



GloPID-R

Global Research
Collaboration for Infectious
Disease Preparedness

www.glopid-r.org/



Global Genomic
Medicine Collaborative

http://www.iom.edu/Activities/Research/GenomicBasedResearch/Innovation-Collaboratives/Global_Genomic_Medicine_Collaborative.aspx



4. Public investment leverages – private investment

EU health research Public-Private Partnership



THE INNOVATIVE MEDICINES INITIATIVE

The Innovative Medicines Initiative (IMI) is Europe's largest public-private initiative aiming to speed up the development of better and safer medicines for patients.

IMI supports collaborative research projects and builds networks of industrial and academic experts in order to boost pharmaceutical innovation in Europe.

IMI is a joint undertaking between the European Union and the pharmaceutical industry association EFPIA.



IMI 2: ~€3.2 billion
EC: €1.6b + EFPIA €1.4b + other (€0.2b)

IMI2:

- Covers the entire medical research and innovation value chain
- Strategic Research Agenda is based on the WHO Priority Medicine Report renewed in July 2013
- Involves pharmaceutical industries as well as others (diagnostics, imaging, animal health, ICT, ...)
- Supports world class research and innovation leading to breakthrough vaccines, medicines and treatments

SME instrument

Idea



Phase 1

**Concept &
Feasibility
Assessment**

- Feasibility of concept
- Risk assessment
- IP regime
- Partner search
- Design study

**Lump sum:
~ 50.000 €
~ 6 months**

Phase 2

**Innovation
R&D activities**

- Development, prototype, testing
- Miniaturisation/design
- Clinical trials
- Etc.

**EU funding:
1 to 5 million EUR
12 to 36 months**

Phase 3

Commercialization

- Facilitate access to private finance
- Support via networking, training, knowledge sharing, dissemination

**No
direct
funding**

Market



SME instrument in SC1 work programme 2016-2017



- SMEInst-05-2016-2017 – Supporting innovative SMEs in the healthcare biotechnology sector
- SMEInst-06-2016-2017 – Accelerating market introduction of ICT solutions for Health, Well-Being and Ageing Well

Financial instruments

Horizon 2020:
~€2.8 billion

- **InnovFin Large Projects**
 - Loans from €7.5 m to €300 m; delivered directly by EIB
- **InnovFin MidCap Growth Finance**
 - Loans from €7.5 m to €25 m; delivered directly by EIB
- **InnovFin MidCap Guarantee**
 - Guarantees to financial intermediaries (banks, etc.)
 - Loans from €7.5 m to €25 m; implemented by EIB
- **InnovFin SME Guarantee**
 - Guarantees / counter-guarantees to financial intermediaries
 - Loans from €25,000 to €7.5 m; implemented by EIF
- **InnovFin Advisory**
 - Improve 'bankability' of large projects

Other coordination activities



- SC1-HCO-01-2016: Valorisation of FP7 Health and H2020 SC1 research results



- SC1-HCO-07–2017: Global Alliance for Chronic Diseases (GACD)



- SC1-HCO-08–2017: Actions to bridge the divide in European health research and innovation



5. What is next? Discussion

Calendar for Horizon 2020 Work Programme 2016-2017 (*indicative*)

- 18 September 2015: SC1 Info Day took place in Brussels, 600 participants
- 13 October 2015: adoption & publication of WP 2016-2017
- Call 2016 deadlines (depending on topics): 19 January 2016 – 16 February 2016 and 13 April 2016



HORIZON 2020

**Thank you
for your attention**

Find out more:

www.ec.europa.eu/research/horizon2020

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>