New perspectives in international RTD Co-operation

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AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA

Drivers of international cooperation

- **Need to access knowledge** produced outside Europe and gain access to new **markets**
- **Need to promote** Europe as an **attractive location** and **partner** for research and innovation
- **Need to join forces** globally to tackle **global challenges**

International cooperation in FP7

- Multiple international cooperation activities
- Examples of progress:
  - EDCTP: with African countries on HIV/AIDS, malaria, tuberculosis
  - ITER: nuclear fusion energy reactor (with Japan, Russia, USA, Korea,…)
  - HFSP: support for basic research, with 13 other countries
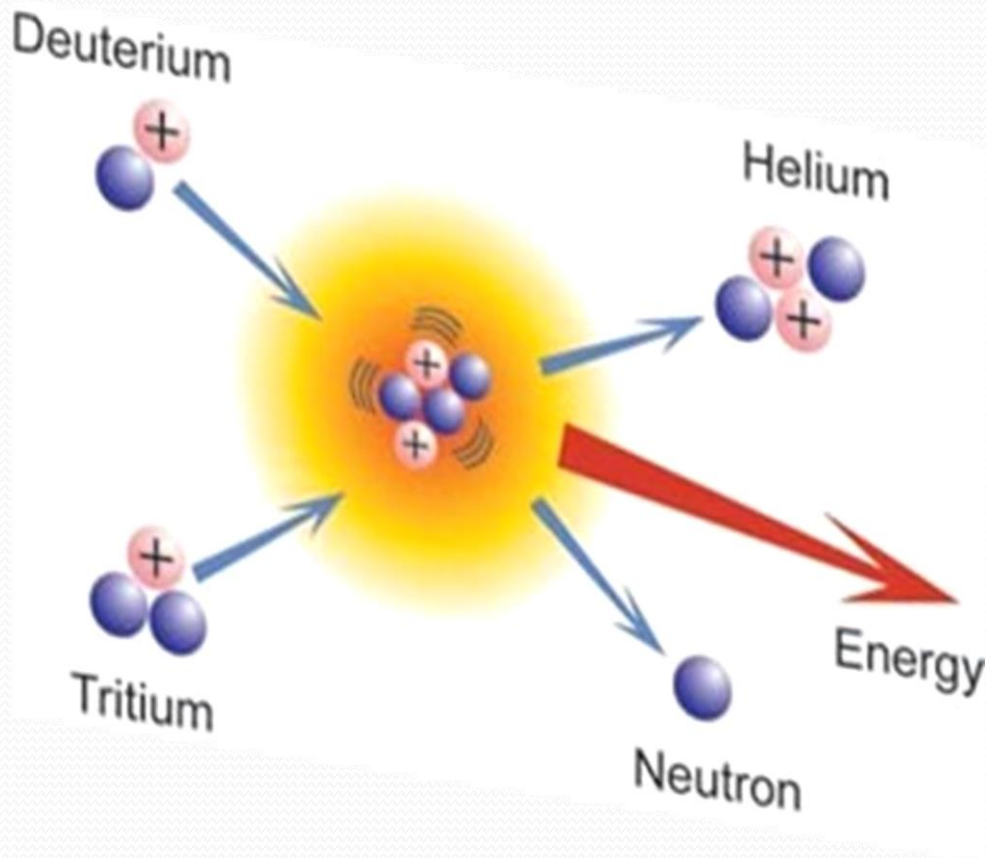- Room for improvement

EDCTP

- The European and Developing Countries Clinical Trials Partnership (EDCTP) is a partnership between 14 Member States, Switzerland, Norway and sub-Saharan African countries aimed at tackling **HIV/AIDS, tuberculosis and malaria**

- By end 2011: approximately EUR 356 million (including co-funding) for 196 projects, over 300 fellowships and 57 clinical trials

- Total EU contribution to EDCTP is 200 mill EUR
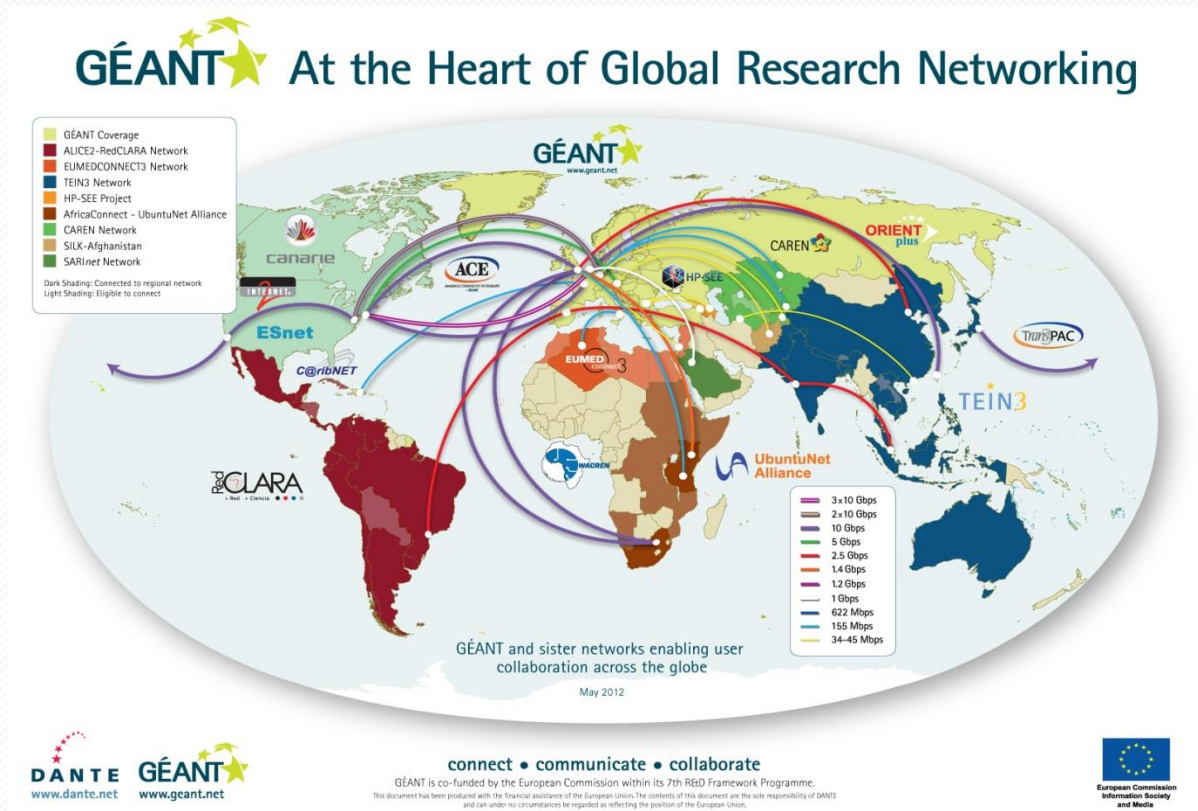
http://www.edctp.org/

ITER: a major international large-scale research project

ITER project (Euratom as host/main contributor, China, India, Japan, Korea, Russia and USA) aims at demonstrating S&T **feasibility of nuclear fusion**. The Broader Approach Agreement (between Euratom and Japan) is in support of ITER and an early realization of the fusion energy.

http://www.iter.org/

GEANT

GÉANT is the hub for research and education networks globally thanks to the funds from the Union (partially through its development cooperation instruments)

Comments

Program based on a top down approach (exceptions): Work Programs, calls for proposals, peer reviews

http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html

- Need to constantly update information
- Need to build international consortia
- Administrative procedures, personnel formation
- Difficulties in the setting up of suitable partnerships; need to set up cooperation networks and strategic support.

How ?

- Access to information
- Original proposals
- Partners search:

      Participation in events,

      International scientific literature

      Exchanges

      Opening up of ongoing projects

Cordis: Partners search, Projects

      http://cordis.europa.eu

Perspectives

- Smart Specialisation Strategy (Structural Funds)
- Parallel and/or Joint calls with Third Countries (SICAs)
- Bottom-up Actions (ERC)
- For E.U. researchers, consolidated links with extra-E.U. partners rises the potential and quality of RTD projects, also concerning development perspectives and the links with industrial applications

Conclusions

- New European coordinated programmes to support RTD international initiatives
- Scientists and researchers should prepare within their fields of specialisation focussing on priority areas and strengthening links for consortia: **permanent information and communication tools.**

SOCIETAL CHALLENGES

The challenges

- **Ageing population**
- **Increased disease burden**
- **Unsustainable and unequal health & care systems**
- **Health & care sector under pressure to reform**

European Commission

Horizon 2020 - Societal Challenge 1

- **Translating science to benefit citizens**

- **Improve health outcomes**

- **Support a competitive health & care sector**

- **Test and demonstrate new health & care models, approaches and tools**

- **Promote healthy and active ageing**

Do also look elsewhere! EU support of health related research & innovation is not limited to Societal Challenge 1

European Commission

A new approach

Challenge-driven

Broad topics

Less prescriptive topic texts

Two-year work programme

Stronger focus on end users
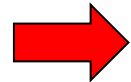
European Commission

1. HEALTH, DEMOGRAPHIC CHANGE AND WELLBEING

Recap: the 'Health, demographic change and wellbeing' challenge

Proposed funding 2014-2020 (million EUR)

Health, demographic change and wellbeing	**7 472**
Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy	3 851
Secure, clean and efficient energy *	5 931
Smart, green and integrated transport	6 339
Climate action, environment, resource efficiency and	3 081

Call 'personalising health and care'
34 topics (15 in 2014, 17 in 2015, 2 open in both years)

Call for 'co-ordination activities'
15 topics (10 in 2014, 5 in 2015)

€ 1,21 billion

Personalising Health and Care

Understanding the call topics: example

PHC 2 – 2015: Understanding diseases: syste[...]

Specific challenge: The development of new [...] improved understanding of the often very co[...] (bio) medicine approaches have the potential to t[...] of a variety of biological and medical research d[...] collaborative approach is required to assemble th[...] biology, medicine, mathematics, computational t[...] medicine approaches.

Scope: Proposals should focus on new avenues [...] phenotypes in multifactorial diseases and/or [...] development/optimisation and/or application of s[...] of biomedical and clinical data to produce or refi[...] computational and mathematical approaches. Th[...] validated in well-phenotyped patient cohorts, tak[...] potential thoroughly investigated.

The Commission considers that proposals reques[...] EUR 4 and 6 million would allow this speci[...] Nonetheless, this does not preclude submission[...] amounts.

Expected impact: This will provide:
- Leverage of existing investments in Eu[...]
- New directions for better disease detecti[...]
- Systems medicine tools and approaches t[...] which represent an improvement over e[...]

Type of action: Research and Innovation action[...]

- **'PHC 2 – 2015'**

- **'Specific challenge'**

- **'Scope'**

- **'Expected impact'**

- **'Type of action'**

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7 Focus Areas

Understanding health, ageing & disease

Effective health promotion, disease prevention, preparedness and screening

Improving diagnosis

Innovative treatments and technologies

Advancing active and healthy ageing

Integrated, sustainable, citizen-centred care

Improving health information, data exploitation and providing an evidence base for health policies and regulation

Unravelling health and disease

- **Determinants, risk factors and pathways of diseases (2014)**

- **Determinants and pathways of healthy and active ageing (2014)**

- **Systems medicine approaches (2015)**

- **Common mechanisms of diseases and potential co-morbidities (2015)**

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From "omics" … to prevention

- **Inter-sector cooperation for environment- and health-based interventions (2015)**

- **Translating -omics into prevention and health promotion (2014)**

- **Evaluating existing screening and prevention programmes (2014)**

- **Control of infectious epidemics through rapid pathogen identification (2014)**

- **Vaccine platforms for TB (2014) and HIV (2015)**

In biomarkers we trust … and in novel diagnostic tools

- **In vitro devices, assays and platforms (2014)**

- **In vivo medical imaging technologies (2015)**

- **Clinical validation of biomarkers (2014, 2015)**

- **SME focus**

Finding the cure ...
and evaluating existing treatments

- **Therapies for non-communicable diseases (2014) and rare diseases (2015)**

- **Tools and technologies for advanced therapies (2015)**

- **Clinical research on regenerative medicine (2014)**

- **Comparing and establishing effectiveness of health interventions in the elderly (2014) and children (2015)**

Adding more life to our years

- **Service robotics within assisted living environments (2014)**

- **Pilot projects on independent living with cognitive impairments (2014)**

- **Early risk detection and intervention (2015)**

- **Promoting mental wellbeing in the ageing population (2015)**

The citizen in the centre

- **New models for prevention oriented health and care systems (2014)**

- **Personalised medicine in health and care systems (2015)**

- **Self-management of health and disease:**

  - citizen engagement for disease management (2014),

  - patient empowerment supported by ICT (2015)

  - based on predictive computer modelling (2015)

- **Public procurement of innovative eHealth services (2015)**

- **ICT systems for integrated care (2015)**

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Big Data for research

- **Digital representation of health data to improve diagnosis and treatment (2015)**

- **Foresight for health policy development and regulation (2014)**

- **Advancing bioinformatics for clinical needs (2014)**

- **Improve predictive human safety testing (2015)**

- **eHealth interoperability (2014)**

Co-ordination activities

Support for European and International Initiatives

- **European Innovation Partnership on Active and Healthy Ageing**

- **Global Alliance for Chronic Diseases (GACD) – Diabetes (2014)**

- **Joint Programming Initiative 'More Years, Better Life's (2014)**

- **Joint Programming Initiative on neurodegenerative diseases (JPND, 2014)**

- **Global Research Collaboration for Infectious Disease Preparedness (2014)**

- **European Reference Networks (2015)**

Completing the European Research Area

- **Joint Programming Initiative on neurodegenerative diseases (JPND, 2014)**

- **Translational cancer research (2014)**

- **Systems medicine for clinical needs (2014)**

- **Rare diseases (2014)**

- **2015: Brain-related disorders, antimicrobial resistance, cardiovascular diseases**

Strategic Initiatives

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RESEARCH

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

IMPLEMENTAZIONE
Work Programmes H2020

▪**STRATEGIC PROGRAMME: A multi-annual approach (3 years) to help applicants plan ahead.**

▪ **WORK PROGRAMMES: 3 Work Programmes (biannual) during the course of H2020 and 1 final Work Programme for the last year to bridge to the next programme after 2020**

H2020 Work Programmes : Multi-annual Programming

2014	2015	2016	2017	2018	2019	2020
Strategic Programme						
Work Programme 1		Strategic Programme				
		Work Programme 2		Strategic Programme		
				Work Programme 3		
						Work Programme 4
Smaller and continuous updates to respond to unexpected developments						
Calls published on basis of WP	Ad hoc financing decision	Calls published on basis of WP	Ad hoc financing decision	Calls published on basis of WP	Ad hoc financing decision	Calls published on basis of WP

Strategic programmes: short documents outligning priorities over 3 years, updated every two years

Work Programmes mirror the strategic programme and are updated over the same 2-year cycle

NETWORKING SUPPORT AND PARTNERS SEARCH

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Fit for Health 2.0

INTERNATIONAL TRAINING FOR
HORIZON 2020 NEWCOMERS
18 FEBRUARY 2014 | BUDAPEST

http://www.fitforhealth.eu/

What are you looking for ?

Bring your research results to the market

Get prepared for Horizon 2020

Join knowledge transfer community

Health Market

Fit for Health 2.0

entente

> Search

Fit for Health 2.0 Supports Industry, SMEs and researchers in Health sector through the entire innovation cycle of their research projects in FP7 and Horizon 2020

Search...

> Upcoming Events

Publish Your Profile

Present your companies or research institutes research field and expertise through filling the proposed profiling form! Your profile will be entered into FFH database.

Publish Your Partner Search

Are you a coordinator of a research consortia preparing a project proposal for an open call in Horizon 2020 funded research in the Health sector and look for SME partners?

Find Your Partners

Search the Fit for Health 2.0 database for expertise profiles of SMEs and research institutes interested in becoming involved in Horizon 2020 research projects.

enterprise europe network

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RINA

CONTACT US, IF :

→ You are health / life science specialist willing to exploit research results

→ You took, take or plan to take part in the EU-funded R&D projects in health and life science

→

You feel difficulties in the R&D results' exploitation pro

→ You have concrete cases to be supported and promoted...

→

Contact: mourenza@apre.it ; buonocore@apre.it APRE

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