FP7 opportunities for ageing research

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12th February 2007
**Seventh Framework Programme**

*7 years from 2007 to 2013*

- **Cooperation - collaborative research**: €32 bn
- **Ideas - European Research Council**: €7.5 bn
- **People - Marie Curie schemes**: €4.7 bn
- **Capacities**: €4.2 bn
- **Joint Research Centres**: €1.7 bn
Cooperation - collaborative research

- 10 specific Themes
- Emphasis placed on *impacts*
- Themes are organised around *activities* then *topics*
  - Applicants target a particular topic
- For every topic, the type of *funding scheme* to use is indicated
- The maximum EC contribution is given
Cooperation - collaborative research

Collaborative projects

Research projects aimed at developing new knowledge, new technology, product demonstration activities or common resources for research.

Networks of excellence

Funding schemes

promote durable integration of key competences to support research activities in strategic areas

Coordination and supporting actions

coordination and networking, studies, info/com, etc. as well as ERA-NET and specific international cooperation activities.
Cooperation - collaborative research

1. Health
   - €6 bn

2. Food, Agriculture & Fisheries, and Biotechnology
   - €1.93 bn

3. Information and Communication Technologies
   - €9.1 bn

4. Nanosciences, Nanotechnologies, Materials and new Production Technologies
   - €3.5 bn

5. Energy
   - €2.3 bn

6. Environment (including Climate Change)
   - €1.9 bn

7. Transport (including Aeronautics)
   - €4.18 bn

8. Socio-economic Sciences and the Humanities
   - €0.61 bn

9. Security
   - €1.43 bn

10. Space Research
    - €1.35 bn
Cooperation - collaborative research

1. Health

...to improve the health of European citizens and increasing the competitiveness of European health-related industries and businesses.

- Biotechnology, generic tools and technologies for human health
- Translating research for human health
- Optimising the delivery of health care to European citizens

Horizontal issues:
Child Health and *Health of the ageing population*

‘Whenever appropriate, the projects funded under this Theme should take into consideration the research aspects related to prevention, diagnostics and treatment of age-related diseases and the impact on quality of life of older people.’
Cooperation - collaborative research

1. Health

Biotechnology, generic tools and technologies for human health

High-throughput research
Modern biology (including fundamental genomics) to enhance data generation, standardisation, acquisition & analysis

Detection and diagnosis and monitoring
Tools and technologies for biomedical research; prediction, diagnosis, monitoring and prognosis of diseases; therapeutic interventions.

Innovative therapeutic approaches and interventions
Immunotherapy and vaccines; Gene and cell therapy; Stem cell/tissue engineering/regenerative medicine; transplantation; implants and prothetics

Predictive suitability, safety and efficacy of therapies
Develop and validate parameters, tools, methods and standards (mainly through IMI) and alternatives to animal testing; biomedicine.
Cooperation - collaborative research

1. Health

Translating research for human health

Integrating biological data and processes
Large scale data gathering to understand genes function and gene products;
Systems biology

Brain and related diseases, human development and ageing

Transnational research in major infectious diseases
Anti-microbial drug resistance; HIV/AIDS, malaria and tuberculosis;
Emerging epidemics; neglected infectious diseases

Translational research in other major diseases
Cancer; Cardiovascular disease; Diabetes and obesity; Rare diseases;
Other chronic diseases
Cooperation - collaborative research

1. Health

Optimising the delivery of health care to European citizens

Developing new research methods and generating the necessary scientific basis to underpin informed policy decisions on health systems and more effective and efficient evidence-based strategies of health promotion, disease prevention, diagnosis and therapy.

- Translating clinical research into clinical practice including better use of medicines, and appropriate use of behavioural and organizational interventions and health therapies and technologies
  
  Patient safety, better use of medicines, benchmarking, pharmacovigilance, etc.

- Quality, efficiency and solidarity of Health care systems including transitional health systems
  
  Organisational and financial aspects, health systems, etc.

- Enhanced health promotion and disease prevention
  
  Providing evidence of best public health measures – life styles, interventions, special focus on mental health, etc.
Cooperation - collaborative research

1. Health

Specific topics for Health of the ageing population:

2.2.2-1: Novel approaches to reconstitute normal immune function at old age (A)
2.2.2-3: Biomarkers of ageing (A)
2.2.2-4: Increasing the participation of elderly in clinical trials (A)
2.4.5-8: Impairment of touch and proprioception at old age (A)
2.4.5-10: Understanding and combating age-related muscle weakness (B)
2.4.5-11: Translational research aiming for a treatment of urinary incontinence (B)
3.2-2: Health systems and long term care of the elderly (B)
3.2-6: Health outcome measures and population ageing (B)
3.4-5: A road-map for ageing research (B)
Seventh Research Framework Programme (FP7)

Latest News
Finns boost research links with China
[Date: 2007-02-07]
Research and development work with China is important because China is investing more and more in science and technology," commented Jari Hermonen of Tekes Shanghai. [read more]

Forthcoming Events
- FP7 energy and transport information days Brussels, Belgium
  [Event Date: 2007-02-13]
- Mobile Guru Summum information day Brussels, Belgium
  [Event Date: 2007-02-13]
[read more]

What's next
"People" calls expected to be published next

Health

Objective

The objective of health research under FP7 is to improve the health of European citizens and boost the competitiveness of health-related industries and businesses, while addressing global health issues such as anti-microbial resistance, HIV/AIDS, malaria, tuberculosis and emerging pandemics.

Why is it important?

- Promoting good health
- Preventing and treating major diseases
- Delivering health care
- Increasing the competitiveness of health care biotechnology and medical technology sectors where ORMs are main actors
- Developing norms and standards for advanced therapies
- Enhancing international efforts to combat global health problems
- Addressing rare diseases

What will be funded?

Emphasis will be given to the following activities:

- Biotechnology, generic tools and technologies for human health: producing knowledge that will be applied in the area of health and medicine;
- Translating research for human health: making sure that basic discoveries have practical benefits and improve the quality of life;
- Optimising the delivery of health care to European citizens: ensuring that the results of biomedical research will ultimately reach the citizens.

Budget

The EU Member States have earmarked a total of €6 billion for funding health over the duration of FP7.

"The following information is provisional. To be confirmed with the publication of the FP7 Work Programme in December 2006."

Last updated on: 2009-12-12
Documents can be downloaded or sent to you by email. For the latter option, please insert your email address in the box provided.

N.B. This call for proposals relates to the provisional cooperation work programme adopted by Commission Decision C(2006)5839 of 21 December 2006. This provisional work programme is subject to formal confirmation following the entry into force of the 7th Framework Programme and the Specific Programme and is correspondingly subject to possible changes. This confirmation will be published in the Official Journal.

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Other sections include:
- Call File
- Work Programme - General information
- Work Programme - General announcements
- FP7 factsheets
- Guide for Applicants (Collaborative projects - CP)
- Guide for Applicants (Coordination and Support Actions - CSA)
FP7 Cooperation Work Programme: Health

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FP7 Cooperation Work Programme: Health

normal development and function as well as under disease conditions. Funding scheme: Collaborative projects (Small or medium-scale focused research projects).

Topics for second call, deadline 18 September 2007:
- HEALTH 2007-2.2.1-7: Restorative approaches for therapy of neurodegenerative diseases. Research should focus on basic mechanisms of brain plasticity and brain repair in neurodegenerative diseases and translate this knowledge into new neuropsychological or restorative therapeutic approaches. Funding scheme: Collaborative projects (Small or medium-scale focused research projects with maximum EC contribution of € 6,000,000/project).
- HEALTH 2007-2.2.1-8: From mood disorders to experimental models. Research should focus on the pathophysiology of mood disorders, including animal models, and aim at introducing experimental medicine models at the interface between Phase I and Phase II clinical trials. Projects on anxiety disorders are excluded. Funding scheme: Collaborative project (Large-scale integrating project).
- HEALTH 2007-2.2.1-9: Neuroprodrome mechanisms of vision and related diseases. Research should focus on neural mechanisms of vision from receptor cell level to cortical visual centres. Physiological as well as pathophysiological neuronal mechanisms should be addressed in visual pathways. Funding scheme: Collaborative projects (Small or medium-scale focused research projects).

Topics for Specific International Cooperation Actions (NSC A), deadline 18 September 2007:
- HEALTH 2007-2.2.1-10: Childhood and adolescent mental disorders. The research should be aimed at investigating paediatric mental disorders that have a high prevalence in countries of Central and Eastern Europe. The projects should use population genetics/genechip approaches and include bioinformatics/bioinformatics to increase knowledge of the patterns of disease prevalence and develop possible diagnostic and therapeutic strategies as well as address prevention. Specific International Cooperation Actions: Target regions: Eastern Europe and Central Asia and Western Balkans. Funding scheme: Collaborative projects (Small or medium-scale focused research projects).

2.2.2. Human development and ageing

The objective is to use a variety of methodologies and tools to better understand the process of life-long development and healthy ageing. The focus will be on the study of human and model systems, including interactions with factors such as environment, genetics, behavior, and gender.

Expected impact: Joint, multidisciplinary European research in this area will integrate and mobilise excellence, contributing to the understanding of the process of human development and ageing, creating a significant impact on healthy life expectancy, cost savings in the health care sector, improved quality of life and strengthening competitiveness of European health and biotechnology industry.

Topics for the first call, deadline 19 April 2007:
- HEALTH 2007-2.2.1-4: Novel approaches to reconstitute normal immune function at all ages. Research should apply a multidisciplinary approach to determine the underlying mechanisms of dysregulation of the immune system during ageing and should aim to restore immune function. Funding scheme: Collaborative project (Large-scale integrating project).

2.2.3. Translational research in major infectious diseases: to confront major threats to public health

- 2.2.3.1. Anti-microbial drug resistance in emerging fungal pathogens

The strategic objective of this area is to confront the increasing emergence and spread of antimicrobial drug-resistant pathogens in Europe and the rest of the world and to adopt a multidisciplinary approach through the development of effective infection prevention and control strategies. Focus will be on combining basic research in molecular mechanisms of resistance, mammalian ecology and host-pathogen interactions with clinical research towards new interventions.

Expected impact: Reinforced research integration of European excellence in the field of antimicrobial drug resistance will be targeted towards a set of clearly defined objectives with the following expected impact: Identification of novel targets and lead compounds will pave the way towards new and urgently needed antibiotics. Knowledge generated by studying host-pathogen interactions in bacterial infections will facilitate identification of new targets for drugs and vaccines. An integrated research platform for the development and clinical evaluation of new point-of-care diagnostic and susceptibility tests will accelerate the implementation of cost-effective tests as the clinical setting in support of optimised prescription of anti-infective drugs. Increased understanding of the epidemiology of new highly virulent multi-drug resistant strains of
Cooperation - collaborative research

2. Food, Agriculture and Fisheries, and Biotechnology

- Sustainable production and management of biological resources from land, forest and aquatic environments
- Fork to farm: Food, health and well being
- Life Sciences and Biotechnology for sustainable non-food products and processes
Cooperation - collaborative research

2. Food, Agriculture and Fisheries, and Biotechnology

Fork to farm: Food, health and well being

Nutrition

Understanding beneficial and harmful dietary factors as well as the specific needs and habits of population groups as a major controllable factor in the development and reduction of occurrence of diet-related diseases and disorders including obesity and allergies.

Example: 2-2-02: Impact of diet on ageing

The objective of this topic is to address nutritional issues that affect the ageing process in the hope of improving the health and quality of life of the ageing population. Specific issues/needs linked to the degree of dependency (nursing homes, patients at home) and increasing malnutrition will be addressed. Inadequate dietary patterns leading to pathologies in the elderly will be further studied. Existing epidemiological data from different population groups (elderly with different diets) will be compared and new data will be provided in view of developing European dietary recommendation and nutritional policies for the elderly.
Cooperation - collaborative research

3. Information and Communication Technologies

...to improve the competitiveness of European industry and enable Europe to master and shape the future developments of ICT so that the demands of its society and economy are met.

- Pervasive and Trusted Network and Service Infrastructures
- Cognitive Systems, Interaction, Robotics
- Components, systems, engineering
- Digital Libraries and Content

- Towards sustainable and personalised healthcare
- ICT for Mobility, Environmental Sustainability and Energy Efficiency
- ICT for Independent Living and Inclusion
'Europe is facing the challenge of delivering quality healthcare to all its citizens, at affordable cost. Prolonged medical care for the ageing society, the costs of managing chronic diseases, and the increasing demand by citizens for best quality healthcare are major factors.'

Support for interdisciplinary research aiming at ‘Continuous and more personalised care solutions, addressing the informed and responsible participation of patients and their informal carers in care processes and responding to the needs of elderly people.’

**Personal Health Systems for Monitoring and Point-of-Care diagnostics**

- **Personalised Monitoring:** Innovative systems and services aimed at health status monitoring for persons at risk or with chronic health conditions, including those associated with ageing (chronic disease management; preventive monitoring)
- **Point of Care diagnostics:** Systems for multi-analyte screening applications at primary care level.
Cooperation - collaborative research

3. Information and Communication Technologies

ICT for Independent Living and Inclusion

‘ICT offers important means to address the problems associated to the ageing population such as the associated rise of number of people with high disability rates, fewer family carers, and a smaller productive workforce. For many people, in particular for groups at risk of exclusion, e.g. the growing part of the population that is over 60, the complexity and lack of accessibility and usability of ICT is a major barrier.’

ICT and Ageing
- Advanced prototypes of systemic solutions for independent living and active ageing
- Open systems reference architectures, standards and platforms enabling systems and services for independent living, smart workplaces and mobility.
- RTD roadmaps and socio-economic research
- Standards setting, and strategic international cooperation with US, Japan
To promote sustainable management of the natural and human environment and its resources by advancing our knowledge on the interactions between the biosphere, ecosystems and human activities, and developing new technologies, tools and services, in order to address in an integrated way global environmental issues.

- Climate change, pollution and risks
- Sustainable management of resources
- Environmental technologies
- Earth observation and assessment tools
Cooperation - collaborative research

6. Environment (including Climate Change)

Climate change, pollution and risks

Environment and Health

*Topic 6.1.2.2.2. European cohort on air pollution*

The aim will be to increase our knowledge on especially long-term health effects caused by air pollution from different sources and to develop more reliable biomarkers of exposure and effect, usable in regulatory settings and biomonitoring. *Particular vulnerable groups (children, elderly etc)*, genetic susceptibilities including gender and socio-economic factors should be taken into account. Combined exposures (air pollution, noise, chemicals etc) should be considered and exposure models validated. Harmonised study protocols should be developed. Links to other international research initiatives are encouraged.

Expected impact: New and improved epidemiological and risk assessment data (e.g., validated biomarkers) that regulators can use, made available in the public domain. Policy support for the implementation of the Thematic Strategy on Air Pollution, Thematic Strategy on Urban Environment and the Environment and Health Action Plan.
Cooperation - collaborative research

7. Transport (including Aeronautics)

To develop integrated, safer, “greener” and “smarter” pan-European transport systems for the benefit of all citizens and society

Aeronautics and air transport

Sustainable Surface Transport

EU global satellite navigation system (Galileo)
7. Transport (including Aeronautics)

**Sustainable Surface Transport**

**ACTIVITY: 7.2.3 ENSURING SUSTAINABLE URBAN MOBILITY**

*AREA: 7.2.3.1 New transport and mobility concepts: SST.2007.3.1.1 New mobility concepts for passengers ensuring accessibility for all*

*AREA: 7.2.3.2 High quality public Transport: SST.2007.3.2.1 European Bus Systems of the Future*

**ACTIVITY: 7.2.4. IMPROVING SAFETY AND SECURITY**

*AREA: 7.2.4.1 Integrated safety and security for surface transport systems*

  - SST.2007.4.1.2 Human physical and behavioural components (bio-mechanics with special attention to users’ diversities (age, gender, size, disabilities)

*AREA: 7.2.4.2 Policy support: impact of societal trends on road safety (i.e. ageing population)*

**ACTIVITY: 7.2.5. STRENGTHENING COMPETITIVENESS**

  - SST.2007.5.2.1 Meeting Customers’ Expectations for Rail Travel (covering factors including affluence and ageing)

**7.3. HORIZONTAL ACTIVITIES**

  - TPT.2007.3. Transport contribution to improve competitiveness of European tourism (typology of travellers: age, gender, and cultures)
Cooperation - collaborative research

8. Socio-economic Sciences and the Humanities

Generating an in-depth, shared understanding of complex and interrelated socio-economic challenges Europe is confronted with, such as growth, employment and competitiveness, social cohesion and sustainability, quality of life, education, cultural issues and global interdependence.

- Growth, employment and competitiveness in a knowledge society
- Combining economic, social and environmental objectives in a European perspective
- Major trends in society and their implications
- Europe in the World
- The Citizen in the European Union
- Socio-economic and scientific indicators
- Foresight activities
- Strategic Activities
‘Demographic changes are widely recognised as one of the major challenges for Europe. They include population ageing, low birth rates and immigration flows.’

Area 8.3.1. Demographic changes: 8.3.1.1 The impact of demographic changes in Europe

The objective is to analyse the socio-political, economic and cultural dimensions and impact of demographic ageing in Europe and its implications for policies on a local, regional, and European level. Europe is currently facing many challenges related to the demographic developments combining increasing life expectancy with low birth rates. Research in this area should address the impact of these developments on a number of key issues, in particular growth, employment and competitiveness, as well as, for example, the contribution and employability of older workers, the capacity of the economy to innovate and develop under the conditions of an ageing society, intergenerational solidarity, lifelong learning, the potential social and economic contribution of active ageing, the sustainability of pension and health systems, and care and social integration of the elderly. Comparisons with countries outside Europe should be included if relevant, and gender aspects could be incorporated.
Cooperation - collaborative research

Deadlines

Health
- Call 2007-A: closing date 19 April 07

Food, Agriculture and Fisheries, and Biotechnology
- Call 2007-1: closing date 2 May 07

ICT
- Call 2007-1: closing date 8 May 07

Environment
- Call 2007-1: closing date 2 May 07

Transport
- various references: closing date 3 May 07

Socio-economic Sciences and the Humanities
- Call 2007-1: closing date 10 May or 29 Nov 07
Ideas - European Research Council

- Excellence
- All fields of research
- No need for partners
Ideas - European Research Council

Frontier Research

Basic research at and beyond the frontiers of current understanding. Intrinsically risky. Absence of disciplinary boundaries.

Investigator driven, in any field of research

Two funding schemes

Starting Independent Researcher Grant scheme (ERC Starting Grant): deadline: 25 April 07!
Advanced Investigator Grant scheme (ERC Advanced Grant)
People - Marie Curie schemes

- Research training
- Any stage of career
- Bottom-up any field of research
- Transnational mobility
People - Marie Curie schemes

- Marie Curie Networks - Initial training
- Postdoctoral fellowships
  - Intra-European
  - International Outgoing
  - International Incoming
- European reintegration grant
- International integration grant
- Industry-Academia Pathways and partnerships
- Specific Actions
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Taking part: some basics?

For every Themes and programme, there is a *work programme*, which is revised on a regular (annual) basis.

FP7 is implemented mainly through calls for proposals with either a fixed or open closing date.

Most proposals require a multi-national partnership/consortium (not ERC and some MC activities)

Proposals are submitted electronically

Reduced number of criteria - One/two stage evaluation
Peer-review evaluation (this is not a political process!)

A grant agreement (or contract) is signed. A consortium Agreement is recommended, if not obligatory.

Intellectual property: IP is owned by those generating it. Possibility to ring-fence/protect background IP.
### Evaluation criteria applicable to Collaborative project proposals

#### S/T QUALITY - “Scientific and/or technological excellence (relevant to the topics addressed by the call)”
- Soundness of concept, and quality of objectives
- Progress beyond the state-of-the-art
- Quality and effectiveness of the S/T methodology and associated work plan

#### IMPLEMENTATION - “Quality and efficiency of implementation and management”
- Appropriateness of the management structure and procedures
- Quality and relevant experience of the individual participants
- Quality of the consortium as a whole (including complementarity, balance)
- Appropriateness of the allocation and justification of the resources to be committed (budget, staff, equipment)

#### IMPACT - “Potential impact through the development, dissemination and use of project results”
- Contribution, at the European and/or international level, to the expected impacts listed in the work programme under the relevant topic/activity
- Appropriateness of measures for the dissemination and/or exploitation of project results, and management of intellectual property.
The finances in FP7

The European Commission contributes towards the costs of the activities
(reimbursement/lump sum/flat rate)

Reimbursement rates

Research and technological activities – 50%-75% of total eligible costs
Demonstration activities – 50% of total eligible costs
Other activities e.g. management (no 7% cap) – 100% of total eligible costs
Coordination and support actions – 100% of total eligible costs

> (if appropriate) 60% flat rate for indirect costs (calculated on all direct costs)
> For CSAs, 7% flat rate for indirect costs (calculated on all direct costs)

ERC: Frontier research actions – 100% direct costs (plus 20% flat rate indirect costs)
Marie Curie actions – 100% (plus flat rate indirect costs, usually 10%)

No Cost Model

Permanent staff can be charged to FP7 projects