The 'Lisbon' economic objective

'make the European Union the most competitive and dynamic knowledge based economy in the world by 2010' by creating a European Research Area

- **Focusing and Integrating Research:**
  - expenditure is centered on major research projects that will be structured so as to have an integrating effect on Europe's research resources
  - The research will be focused on specific themes that are strategically important to Europe's future (thematic priorities)
- **Structuring the European Research Area**
  - activities seek to attack the structural weaknesses that affect European research (common infrastructures, mobility of researchers, science and society…)
- **Strengthening the European Research Area**
  'to stimulate the coherent development of research and innovation in Europe (national programs/policies)

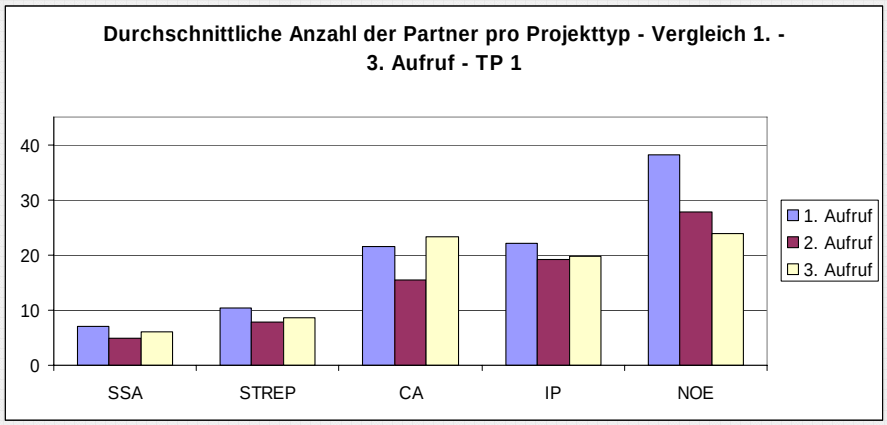
Instruments:

- **Networks of Excellence (NoE)**
- **Integrated Projects (IP)**
- **Specifically Targeted Research Projects (STREP)**
- **Coordinated Actions (CA)**
- **Specific Support Actions (SSA)**
- **SME Support**

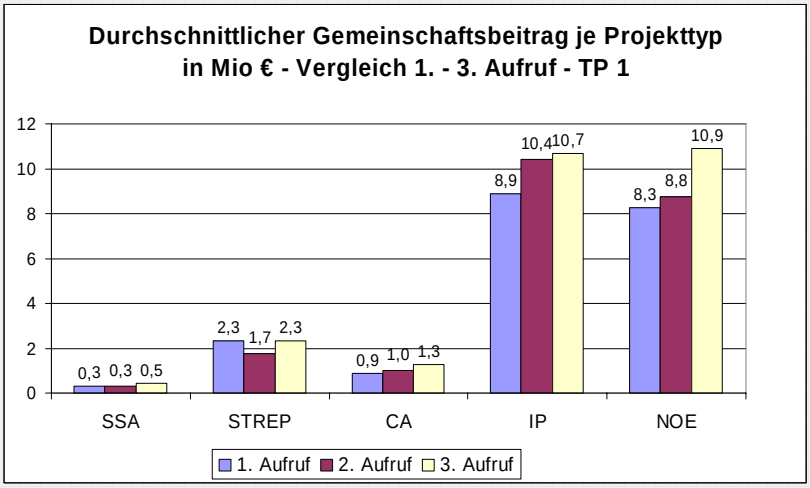
- **Individual Fellowships and Training Activities (Marie-Curie)**

http://www.cordis.lu/fp6/find-doc.htm#instruments

TP 1: Durchschnittszahlen - Partnerzahl / Instrument



TP 1: Durchschnitt - Gemeinschaftsbeitrag / Instrument



Framework Programme 6 (2002-2006)

Integrating and strengthening the European Research Area (ERA)

Thematic areas
Life sciences, genomics and biotechnology for health
Information society technologies
Nanotechnologies and nano-sciences, knowledge-based multifunctional materials and new production processes
Aeronautics and space
Food quality and safety
Sustainable development, global change and ecosystems
Citizens and governance in a knowledge-based society

Cross-cutting activities
Research for policy support
New and emerging science and technology (NEST)
SME activities
International co-operation activities
JRC activities

Strengthening ERA
Co-ordination of research activities
Development of research/innovation policies

Structuring ERA
Research and Innovation
Marie Curie Actions - Human resources and mobility
Research infrastructures
Science and Society

= 17,5 Mrd. Euro

TP 1 Life Science, Genomics and Biotechnology for Health
Programme structure and pathogenomics-relevant areas

i) Advanced Genomics and its applications for health

a) Fundamental knowledge & basic tools for functional genomics in all organisms

- Gene expression and proteomics
- Structural genomics
- Comparative genomics and population genetics
- Bio-informatics
- Multidisciplinary functional genomics approaches to basic biological processes

b) Application of knowledge and technologies in the field of genomics and biotechnology for health

- New, safer, more effective drugs (incl. pharmaco-genomics)
- New diagnostics
- New *in vitro* tests to replace animal experimentation
- New preventive and therapeutic tools (somatic gene and cell therapies; stem cell and immunotherapies, etc.)
- Innovative research in post-genomics with high potential for application

ii) Combating major diseases

a) Application-orientated genomic approaches

- Cardiovascular disease, diabetes and rare diseases
- Resis-tance to antibiotics and other drugs
- Brain and diseases of the nervous system
- Human development and the ageing process

b) Cancer

c) Poverty-related diseases
- HIV / AIDS
- Malaria
- Tuberculosis

Overall aim of TP 1 – to build on the sequencing of the human genome and many other genomes with the result of improving human health and to stimulate industrial and economic activity!

Framework Programme 6, LIFESCIHEALTH
Topics for 4th Call

Gene expression and proteomics
• A systems approach to understanding the regulation of gene transcription – IP

Structural genomics
• Structural genomics interdisciplinary initiative – IP

Comparative genomics and population genetics
• Functional genomics in *Arabidopsis thaliana* - IP
• High throughput phenotyping tools and approaches for large scale functional genomics studies – IP
• Population cohorts for molecular epidemiological studies in European populations – IP

Multidisciplinary functional genomics approaches to basic biological processes
• Functional genomics of autosomal aneuploid syndromes - IP
• The biological role of small regulatory RNAs - IP

• Specific Support Actions (SSAs)

• Co-ordination Actions (CA)

• Tools and technologies for functional genomics – STREP dedicated to SMEs

Framework Programme 6, LIFESCIHEALTH
Topics for 4th Call

New, safer, more effective drugs including pharmacogenomics

- Marker profiling as a new tool for predictive toxicology - IP
- Tools to investigate ADME properties of drugs involving a carrier system – STREP

New diagnostics

- High throughput molecular diagnostics for hereditary diseases - IP
- Innovative methods for diagnosis of nervous system disorders – STREP
- Nanoparticles-based diagnostics – STREP

New in vitro tests to replace animal experimentation

- Predictive *in vitro* testing strategies for human exposure to chemicals - IP
- Workshop on business opportunities for *in vitro* pharmaceutical toxicology – SSA
- Researchers and regulators meet manufacturers of toxicology test methods – SSA

New preventive & therapeutic tools, gene-, cell- & immunotherapies, stem cells

- Tissue engineering approaches to treating children with birth defects - IP
- Hepatitis C vaccine - IP
- Stem Cell Therapy for Stroke Patients – STREP
- Understanding monogenic rare diseases using insight from stem cell lines - STREP
- Methodological research to underpin stem cell banking - STREP
- Use of baculovirus as a vector in gene therapy – STREP towards SME

Framework Programme 6, LIFESCIHEALTH
Topics for 4th Call

Innovative research in post-genomics, which has high potential for application

- Application of post-genomics to xenotransplantation research – IP
- Approaches exploiting aquatic molecular biodiversity for biomedical applications - IP
- Use of cell lines for new bioassays for the identification of therapeutic biomolecules - STREP to SME
- All areas of Area Biotechnology & Applied Genomics– STREP dedicated to SMEs

General (overarching)

- Genetic control of the pathogenesis of diseases based on iron metabolism – STREP

Combating cardiovascular disease, diabetes and rare diseases

- Mapping & functional genomics of susceptibility to coronary artery disease – IP
- Hypertension and cardiovascular disease – NOE
- Prevention of accelerated cardiovascular death in uraemia and end-stage renal disease - STREP
- Functional genomics & regulatory networks in lipid metabolism & their effects on atherogenic vascular disease development – STREP
- Gene-environment interaction on the incidence of type 2 diabetes - IP
- Mol. pathways underlying decreased beta cell mass in diabetes mellitus – STREP

Framework Programme 6, LIFESCIHEALTH
Topics for 4th Call

- Rare inherited neuromuscular disorders: from molecular basis to cutting edge therapies - NOE
- Rare disorders of protein folding – STREP
- Rare diseases of connective tissues affecting bone and/or cartilage – STREP
- Research on CVD with strong SME involvement – STREP towards SME
- Preventive and therapeutic strategies for Type 1 diabetes – STREP towards SME
- Development of in vitro and/or animal models for rare diseases – STREP towards SME

Combating resistance to antibiotics and other drugs

- Antimicrobial resistance in hospital acquired and health care associated infections – IP
- Molecular ecology of antibiotic drug resistance – STREP
- Workshop towards vaccines with impact on control of antibacterial resistance - SSA
- New diagnostic tests for the management & control of antimicrobial resistance – STREP towards SME
- Novel principles for anti-microbial treatment - STREP towards SME

Framework Programme 6, LIFESCIHEALTH
Topics for 4th Call

Studying the brain and combating diseases of the nervous system

- Functional genomics and neurobiology of epilepsy – IP
- Neuroimaging: “Bridging genetics and neural function” – IP
- Cortical information processing – STREP
- **Schizophrenia: from genotype to phenotype – STREP**
- Initiative in neuroinformatics – SSA
- Neuroscience-oriented new technologies – STREP towards SME
- Animal models for neurological and psychiatric diseases – STREP towards SME
- Early markers & new targets for neurodegenerative diseases – STREP towards SME
- Perinatal brain damage: early markers and neuroprotection – STREP towards SME

Studying human development and the ageing process

- Integration of research in development and ageing - NOE
- Attracting researchers to ageing research - SSA
- Understanding the responsiveness of elderly people to vaccination and infectious diseases – STREP to SME

Studying the brain and combating diseases of the nervous system

The objectives are to use genome information to understand better the functioning and dysfunctioning of the brain, in order to gain new insight into mental processes, to combat neurological disorders and diseases, and to improve brain repair

Studying the brain and combating diseases of the nervous system

- Schizophrenia: from genotype to phenotype (STREP)

This project should lead to a better understanding of the molecular etiology and clinical phenotype of schizophrenia by identifying genetic and environmental determinants and their potential interaction in the development, severity and outcome of the disease.

Framework Programme 6, LIFESCIHEALTH
Topics for 4th Call

Studying the brain and combating diseases of the nervous system

- Functional genomics and neurobiology of epilepsy – IP
- Neuroimaging: "Bridging genetics and neural function" – IP
- Cortical information processing – STREP
- Schizophrenia: from genotype to phenotype – STREP
- Initiative in neuroinformatics – SSA
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- Perinatal brain damage: early markers and neuroprotection – STREP towards SME

Studying human development and the ageing process

- **Integration of research in development and ageing - NOE**
- Attracting researchers to ageing research - SSA
- Understanding the responsiveness of elderly people to vaccination and infectious diseases – STREP to SME

Studying human development and the ageing process

Integration of research in development and ageing (NoE)

The aim of the project is to determine the influence of genetic, environmental, and stochastic effects during development on the ageing process. The project should integrate the corresponding research in invertebrate and vertebrate model systems and their application in humans.

Framework Programme 6, LIFESCIHEALTH
Topics for 4th Call

Combating Cancer

- Modulation of apoptosis in cancer prevention and therapy – STREP
- Molecular mechanisms underlying chemotherapy resistance, therapeutic escape, efficacy and toxicity – IP
- Innovative diagnostic approaches and novel therapies of childhood cancers – STREP
- **Palliative care in patients with advanced stages of cancer – STREP**
- Role of chromosomal aberrations and epigenetic mechanisms of leukaemia – STREP
- Identification and validation of biomarkers in molecular cancer epidemiology – STREP
- Exploring the patient's cancer stem cell as a novel therapeutic target – STREP
- Conference on cell differentiation, plasticity and cancer – SSA
- Innovative technological approaches for cancer therapy – STREP towards SMEs
- Small-ligand libraries: improved tools for exploration and prospective anti-tumor therapy - STREP towards SMEs
- Improving resolution of current imaging devices relevant to cancer diagnosis and therapy - STREP towards SMEs

Combating Cancer

Palliative care in patients with advanced stages of cancer – STREP (SME should be involved – translating the knowledge being created by genomics and other fields of basic research into application that improve clinical practice and public health):

Research efforts should focus on palliative care in advanced cancer patients suffering from the consequences of the disease. Collaborative efforts should address the cancer-related symptoms pain, depression or fatigue

Framework Programme 6, LIFESCIHEALTH
Topics for 4th Call

Confronting the major communicable diseases linked to poverty (PRD)

- HIV/AIDS Therapeutic Clinical trials network - NOE
- HIV/AIDS Vaccines/Microbicides Network - NOE
- Rationale Design of Malaria Vaccine - IP
- New approaches for research into host/vector-pathogen interaction for HIV/AIDS, malaria and tuberculosis – STREP
- Undesirable consequences of drugs and vaccines for PRD – STREP
- Integration & coordination of European clinical research on PRD - SSA/CA
- Promotion of PRD research - SSA/CA
- European Network for vaccine development covering the three diseases - SSA/CA
- Improving participation of the private sector in PRD research – SSA /CA

- SME-driven innovations for poverty related diseases – STREP towards SME
- Fast tests for diagnosis of PRD suitable for resource-poor settings – STREP to SME
- Innovative delivery mechanism for treatment & depot therapy in PRD– STREP to SME

Deepening the understanding of ethical issues

- Research will address emerging ethical questions that are not covered by other parts of the Framework programme. The main topics are: emerging questions in nanotechnology; converging technologies (nano-bio-info-cogno); **research to enhance human mental and physical capacities, including new developments in neurosciences**; cloning; privacy and data protection in relation to genetic data and bio-banking; pharmacogentics; questions related to the question of dual-use and bioterrorism; the fusion of human and non-human material, including artificial material. In order to position the European reflections in the global context topics could also be addressed in a comparative or interactive approach by involving partners from other regions of the world (STREP, CA; 6 M€)

International Cooperation (INCO)

Mediterranean Partner Countries
- Health – Trauma and conflict (SSA)

Western Balkan Countries
- Health – Medical and public health interventions on the post-conflict and post-trauma health problems; Community-based interventions as well as research on organization and management of health-care systems within the above context (SSA)

Russia and NIS
- Health Protection – Epidemiological and demographical investigations into the long-term trends of population health as consequences of socio-economic transitions, incl. life-style induced health problems. The research outcomes should be relevant for policy development (SSA)

Marie Curie Activities

- Individual Fellowships
- Chairs
- Excellence Grants

- Training Networks
- Host Fellowships and Transfer of Knowledge
- Training Courses and Conferences

Bottom-up approach!

Unterlagen zur Antragstellung (IV)

Call for Proposals

Work Program (aufrufspezifisch)

Broschüre „FP 6 in brief“ (Übersichtsdokument)

Guide for Proposers (spezifisch für Instrument u. TP)

„Informations-paket“ zur Antragstellung

Guidelines on Proposal Evaluation and Selection Procedures

Guidance Notes for Evaluators (aufrufspezifisch)

Model contract

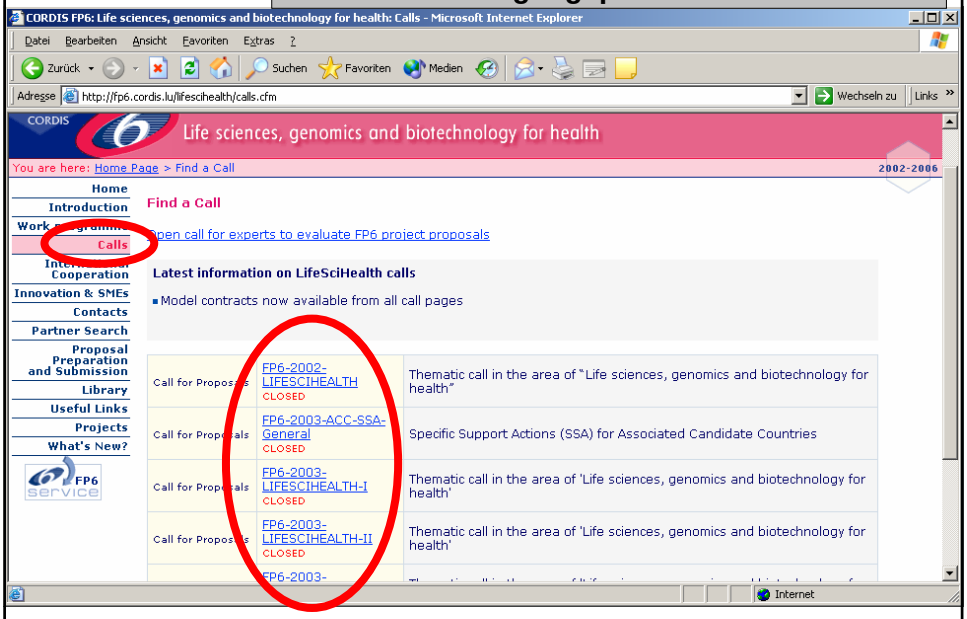
Financial Guidelines

Negotiation Guidelines

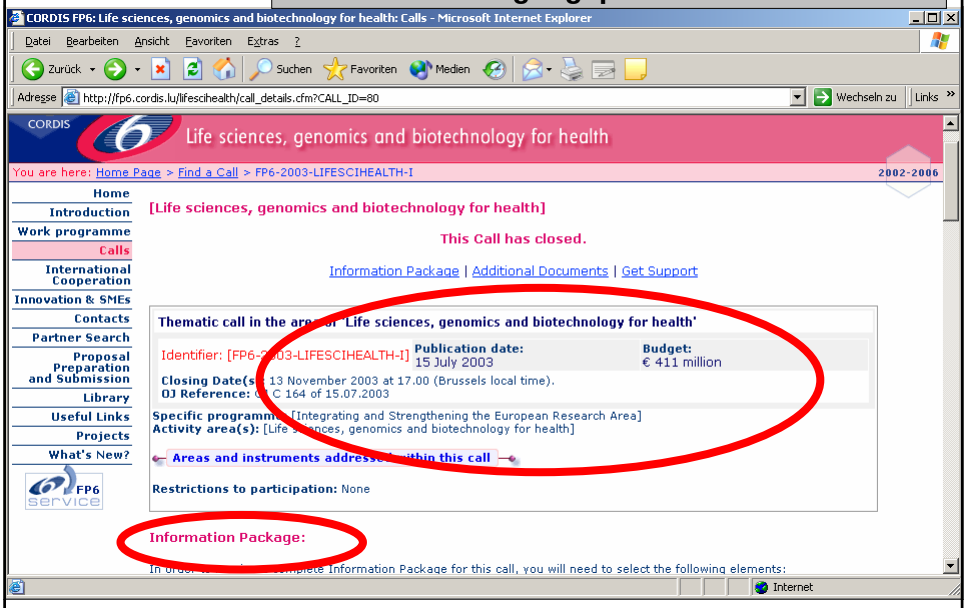
Hintergrundpapiere (instrumentenspezifisch)

Zusätzliche Dokumente

CORDIS als Zugangsportal zu den Aufrufen



CORDIS als Zugangsportal zu den Aufrufen



- **CORDIS – FP 6:** http://fp6.cordis.lu/fp6/home.cfm
- **CORDIS – Open Calls FP 6:** http://fp6.cordis.lu/fp6/calls_open.cfm
- **CORDIS – Call for Experts:** http://www.cordis.lu/experts/fp6_candidature.htm
- **CORDIS – Partner Search:** http://partners-service.cordis.lu/
- **Marie Curie Actions:** http://www.cordis.lu/mariecurie-actions/home.html
- **CORDIS – 7. Rahmenprogramm:** http://www.cordis.lu/fp7/
- **National Contact Point Germany:** http://www.nks-lebenswissenschaften.de/