

Management Sciences

Excellence Independence

Research Cutting-edge

Member Organisations

Medical Sciences Synergy

Polar Policy

Europe and Environmental Sciences

Strategy Nuclear Physics

Humanities Marine

Social Science Space

Radio Astronomy Frequencies

Physical and Engineering Science

Ethical Awareness

The European Science Foundation (ESF) was established in 1974 to create a common European platform for cross-border cooperation in all aspects of scientific research.

With its emphasis on a multidisciplinary and pan-European approach, the Foundation provides the leadership necessary to open new frontiers in European science.

Its activities include providing science policy advice (Science Strategy); stimulating cooperation between researchers and organisations to explore new directions (Science Synergy); and the administration of externally funded programmes (Science Management). These take place in the following areas: Physical and engineering sciences; Medical sciences; Life, earth and environmental sciences; Humanities; Social sciences; Polar; Marine; Space; Radio astronomy frequencies; Nuclear physics.

Headquartered in Strasbourg with offices in Brussels, the ESF's membership comprises 78 national funding agencies, research performing agencies and academies from 30 European countries.

The Foundation's independence allows the ESF to objectively represent the priorities of all these members.

European Medical Research Councils

The mission of the European Medical Research Councils (EMRC) is to promote innovative medical research and its clinical application towards improved human health. EMRC offers authoritative strategic advice for science policy making, research management, ethics, and better health services. In its activities, EMRC serves as a voice of its Member Organisations and the European scientific community. EMRC disseminates knowledge and promotes the socio-economic value of medical research to the general public and the decision makers.

EMRC Strategy

The 2007 White Paper from The European Medical Research Councils 'Present Status and Future Strategy for Medical Research in Europe' aims to strengthen and improve European medical research, which in turn will result in better healthcare and improved human welfare. The EMRC has an important role in the future development of medical research in Europe and it invites debate and action to bring its proposals to fruition.

Recommendations for strengthening medical research in Europe:

- Implementation of best practice for funding and performing medical research
- Strengthened collaboration via EMRC and its Membership Organisations
- Revision of EC Directives related to medical research
- Implementation of equal opportunities
- Doubling of public funding of medical research in Europe within the next 10 years



Events

Nanomedicine

The Forward Look 'Nanomedicine' identified a need for truly interdisciplinary pan-European training to facilitate the rapid and safe development of novel nanotechnology-based tools having the potential to improve the diagnosis and treatment of disease. The 1st Summer School in Nanomedicine took place 10-15 June 2007 in Cardiff University (UK).

Cell Signalling and Differentiation in Regenerative Medicine

EuroSTELLS co-sponsored the recent Spring School on Regenerative Medicine held on 14-25 May 2007 in Oslo (NO), which consisted of a symposium on 'Cell Signaling and Artificial Differentiation in Regenerative Medicine', and a practical course on 'Culture and Transplantation of Neural Stem Cells'.

The International Regulation of New Medical Technology

'Learning from international experience with the regulation of new medical technology' was the theme of the 2nd ESF-IfW Conference on the Global Health Economy that took place on 7-10 May 2007 in Salza (DE).

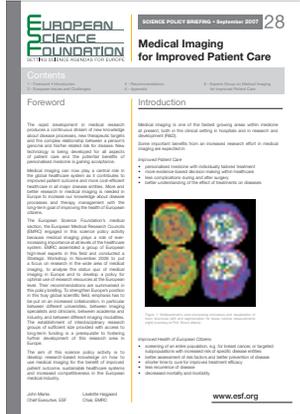
EURYI 2007

- Awardees in Biomedical Sciences
- Dr. Sonia Garel (France)
 - Dr. Rufin VanRullen (France)
 - Dr. Maciej Wojtkowski (Poland)

Publications

Medical Imaging for Improved Patient Care

Medical imaging plays a role of ever increasing importance at all levels of the healthcare system. EMRC engaged in a Science Policy Briefing to strengthen Europe's position in this truly global scientific field.



Highlights

EuroSTELLS

In the future, stem cell-based therapies may help repair damage tissue. Before then, it is necessary to decipher the epigenetic signals that give stem cells their unique ability to self-renew and transform into different cell types.

- www.esf.org/eurostell

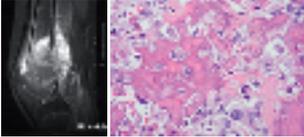
Launch of the Forward Look on 'Investigator Driven Clinical Trials'

Pan-European collaboration is important for many clinical trials and essential for trials that are investigating treatments for rare diseases. EMRC is launching a review of how best to implement clinical trials that are initiated by investigators. This forward look will draw upon the experiences of the two trials that are underway in the ECT programme.

Pan-European Clinical Trials (ECT)

EMRC is coordinating two trials in rare diseases currently in the recruitment phase.

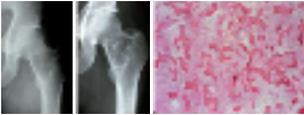
Euramos



'Osteosarcoma of the left knee visualized by Magnetic Resonance Imaging (MRI), and histological section'.

Courtesy Prof. S. Bielack

Profidy



Fibrous dysplasia of the femur before and after a 4-years bisphosphonates treatment, and histological section.

Courtesy Prof. P. Orcel and Dr. A. Quillard

- www.esf.org/ect

EMRC Chair: Professor Liselotte Hojgaard
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www.esf.org/emrc

Humanities

Research supported by the Standing Committee for the Humanities (SCH) explores the origins and products of the human capacity for creativity and communication and perceptions and interpretations of the world around us.

Currently, activities cover the fields of Anthropology, Archaeology, Art and Art History, Classical Studies, Cognitive Science, Gender Studies, Heritage Studies, History, History & Philosophy of Science, Literature, Linguistics, Oriental and African Studies, Pedagogical & Educational Research, Media Studies, Music & Musicology, Philosophy, Psychology, Religion & Theology.

Trans-cultural dimensions of research questions

They are studied through comparative approaches, addressing issues such as science, values and religion or migration, integration and identity. Such studies will shed light on the complex inner workings of past and contemporary civilisations and societies.

Examples:

- Development of an ESF Forward Look *Security: A Framework for Enquiry* (with INTAS and NATO Science Committee for Peace and Security)
- EUROCORES Programme *The Evolution of Cooperation and Trading* (with LESC and SCSS)
- ESF Research Networking Programme *Representations of the Past. The Writing of National Histories in Europe*



- ESF Research Networking Programme *From Natural Philosophy to Science*
- Exploratory Workshop *Sciences in Asia, 17th – 20th centuries*

Trans-disciplinary research activities

They will generate new knowledge in the Humanities, in fields such as consciousness research/cognitive sciences, human dignity/health and disease, cultural diversity/technological innovation and sustainability.

Examples:

- EUROCORES Programme *Consciousness in a Natural and Cultural Context*
- EUROCORES Programme BOREAS (circumpolar studies: with USA, Canada, Russia)
- Scientific Network *Discourses of the Visible: national and international perspectives*
- Workshop series and ESF-LiU Research Conference *Pathways to Human Dignity. From Traditions to a New Paradigm* (with UNESCO and Union Académique Internationale)
- ESF Research Networking Programme *Early Agricultural Remnants and Technical Heritage*
- Exploratory Workshop: *Multilingual Linguistic Diversity in Multicultural Contexts*

Trans-national research infrastructures

They will facilitate the exchange between distinct traditions of European Humanities research and will stimulate new questions.

Examples:

- ESF-Eurohorcs-EU survey of research infrastructures: typologies and validations of research infrastructures in the Humanities
- ERIH: "European Reference Index for the Humanities": accessing and assessing the best of Humanities research in Europe



European project: Building a Reference Index for the Humanities - ERIH

Humanities research in Europe is rich in lively national, linguistic and intellectual traditions. They all find their expression in scholarly publications. The new transnational mobility of researchers and the often transdisciplinary nature of contemporary science require that Humanities researchers position themselves in changing international contexts. Researchers and institutions need a tool that helps them to evenly assess and access the scientific quality of humanities research output, irrespective of disciplinary and linguistics boundaries. ERIH will provide such a service: a reference index of top journals in the 15 areas of the Humanities, across the continent and beyond. This exercise will eventually be extended to also include book-form publications and non-traditional formats.

Humanities will engage with society's needs for targeted foresight activities: better methodologies and practices will allow the integration of Humanities research into such future-oriented exercises. SCH consists of representatives of ESF Member Organisations (research funding agencies, research performing agencies and academies).

SCH Chair: Professor Gretty Mirdal
SCH Head of Unit: Dr. Monique van Donzel
 Email: humanities@esf.org

www.esf.org/sch

The Life, Earth and Environmental Sciences (LESC) Standing Committee aims at a better understanding of biological, environmental and Earth systems across time and space. LESCC covers activities from molecular and systems biology over regional ecosystems to global change of the environment. LESCC is achieving these goals through Member Organisations and through synergetic actions with other Standing Committees, Expert Committees, COST Domain Committees and external partners.

ACTION TOGETHER MEANS EFFECTIVE COMMUNICATION!

Extracts from LESCC News 1 and 2

Communication plays a significant role in implementing LESCC strategy.

LESC communicates in many ways – through brochures, fliers, web pages, visits to Member Organisations, participation in conferences and workshops and, in particular, through its newsletter, *LESC News*.

www.esf.org/lescc/news



Editorial

The Standing Committee for Life, Earth and Environmental Sciences (LESC), composed of leading scientists nominated by the ESF Member Organisations, is responsible for identifying scientific priorities, formulating strategies and overseeing the research agenda in its respective area.

At a time when the life sciences, geosciences and environmental issues that affect our planet have gained increased visibility, LESCC is striving to integrate many of these challenges into its short- and medium-term goals. The White Paper that the ESF General Assembly last September adopted establishes a science and innovation strategy to sustainable development and will continue to interact with the other ESF Standing Committees, Expert Boards and the COST Domain Committee to integrate our efforts and avoid duplication of initiatives.

LESC will use the available instruments to identify emerging systems of research and innovative ways of addressing a variety of challenges. These include topics such as monitoring of the planet and ecosystems, sustainable production of energy, advanced food systems, innovative diagnostic tools and the frontiers of modern biology and biotechnology. These can be illustrated by some of the most recently approved European Research Council (ERC) research grants: materials, and Economic and Financial Analysis, Conferences, Forward Looks and the latest EUROCORES TOPIC-EUROPE: Risk Quality EuroMARC and EuroEPIC.

Policy issues will continue to occupy a major portion of our activities in the effort to become a leading force in Europe in the 2008 and beyond. LESCC covers regular reports on our strategic and scientific activities to be featured in the LESCC newsletter, to be published three times per year.

Professor Alex Quintanilha
Chair of the Standing Committee
for Life, Earth and Environmental Sciences



LESC NEWS

Standing Committee for Life, Earth and Environmental Sciences (LESC)

LESC Core Group meets in the Azores



Members of the LESCC Core Group met, Chairman, Chair, 'Forward Looks' Committee, 'Open System' and Chair of Science Committee (present from left to right) Member not pictured are Mark Sosa and Ralf Richter

A very fruitful meeting of the LESCC Core Group took place on 1 February 2007 in one of the most beautiful parts of Europe on the island of the Azores. The meeting was hosted by José Gabriel do Amaral, the Member of the Regional Government for Education and Science of the Azores, and lasted enough long (seven to be exact) on the Azores television news.

The Core Group, appointed by the LESCC Standing Committee, assists the Chair with detailed Commission and prepares the Commission's bi-annual primary sessions. The Core Group normally meets four times a year. This was its 40th meeting.

The main focus of the meeting was ESF Forward Look activities, with a general update on the ongoing Forward Looks initiative and Life Sciences, and the selection of the proposals for the LESCC Core Group. The meeting also discussed the 15 eligible proposals put forward by the Member Organisations, the work in the year of LESCC, the Forward Look Committee, which will make the final recommendations to the ESF Governing Council for decision.

After consultation with the Standing Committee members of the Core Group, invited by support, the meeting will be held in Paris, Europe, on 24-25 May 2007. LESCC is preparing notes for young

scientists to attend the conference. The call for applications will be launched by mid-March with a deadline for applications on 3 May. Information will be available at www.esf.org/lecc2007.

LESC and EGU 2007

The European Geosciences Union (EGU) General Assembly annually brings together specialists from all over Europe and the rest of the world into one meeting covering all disciplines of the Earth, Planetary and Space Sciences. The 2007 General Assembly 2007 will be held in Vienna, Austria on 15-20 April and ESF/LESC activities will again be well represented.

Four LESCC EUROCORES Programmes are organising special open sessions:

- **EUROCORES** - Processes of rifting, sediment transport, fluid flow and biogenic activity
- **EURO-MATE** - Climate variability and the carbon cycle: present and future: multi-proxy reconstructions and coupled climate models: European and tropical sectors with the V. Vindimsky Medical Lecture

• **EUROCORES** - Mineral properties and behaviour with the European Mineralogical Union Research Excellence Medal Lecture

• **EUROCORES** - 'Biodeversity' science in Europe: new facts and strategies

LESC-COST synergy

The motto of LESCC's 'Action together - make it happen!' LESCC-COST synergy emphasises the motto: joint activities with COST previously focused mainly on Earth and environmental sciences but life and social sciences have recently also become an integral part of the working agenda of the Science Policy Forum.

Policy issues were discussed at a joint LESCC-COST workshop on 'Downstream environmental information made for improved policy formation' in November 2006. The general theme of the workshop was the scientific policy framework to be enhanced to the mutual benefit of both communities, with further collaboration in determining what steps and what forums are involved in technology policy making that the issues are often very complex. Collaborative work is needed in order to bring this to fruition. However, not the case of LESCC, with its trans-disciplinary approach, it is well placed to take the challenge and provide policy advice for Europe.

During the EGU week, topical presentations will be held in relation to the ESF/LESC 'EUROCORES' and 'EURO-MATE' programmes.

In addition, the ESF/LESC corporate presence will be reinforced through the ESF booth in the exhibition area.

www.esf.org/lecc2007

Dr. Arja Kallio
Head of the ESF/LESC Unit



Editorial: Systems, a unifying concept?

The space of research domains covered by the Standing Committee for Life, Earth and Environmental Sciences (LESC) is very broad. It ranges from life sciences (including e.g. molecular genetics, ecology, zoogeography) over environmental issues (including e.g. ecology, forestry, agriculture, crop production, geosciences, including e.g. geology, seismology, oceanography). Over the past decade we have learned in the Standing Committee that systems is a central based an integrated understanding of functions.

A system can be defined as a group of parts that interact according to some kind of process. Therefore, systems are often considered as complex systems with interrelated parts between them. Because of the interactions between the different parts, the entire system becomes more than the sum of the parts, whether these parts are chemical molecules, cellular organs, individual populations, or landscapes. A system has emergent properties from the interactions among the parts. For instance, a system of people is not the sum of individual people, but the system of people and their interactions, such as social norms, system control methods (such as cybernetics) and system design.

Within the realm of size there are parts that interact to form other sub-systems. For example, several chemical molecules form chemical entities, biological cells and organs form biological systems, organisms and physical environments form ecosystems, and there are larger interactions of humanity and nature that form environmental systems. In ecology, for example, the ecosystem is the basic functional unit. It includes both organisms and their interactions, and the ability to maintain, such interactions, the properties are not the same. The ability for maintenance of life we know it on Earth.

The laws of thermodynamics apply to nearly all systems, although the temporal and spatial

systems might offer dramatically the concept of systems can help us to better understand and predict the various challenges that have been encountered. These include global climate, extreme events, sustainable development and production, as well as applications of modern biology, zoogeography and innovative ecological biology toward an improvement of the quality of life on Earth.

Professor Reinhart
Member of the Core Group
of the Standing Committee
of LESCC

LESC Standing Committee meets in Tallinn

The LESCC Core Group and Standing Committee met on 19-20 April 2007 in the historical city of Tallinn, Estonia. The meeting was kindly hosted by Dr. Marko Saik of the Estonian Science Foundation.

The LESCC Standing Committee is one of the five disciplinary Committees composed of the ESF Member Organisations, many of the 35 LESCC Standing Committee members are distinguished professors in their own countries having close relations with the national research funding organisations. The ESF Standing Committees are responsible for



View across Tallinn from the Science Foundation

Identifying scientific priorities, formulating strategies and developing research agendas, scientific initiatives and user review as a key component of the action-making process.

The LESCC Core Group consists of nine Standing Committee members and the Chair. It meets more often and does the preparatory work for the Standing Committee meetings.

The main focus of the 2006 LESCC Standing Committee meeting was the reconformation and ranking of the 40 Research Networking Programme proposals of relevance to LESCC. ESF Research Networking Programme are redefining activities, including nationally funded research activities for four to five years, to address major scientific issues at the European level with the aim of advancing the frontiers of science. At the moment 10 Research Networking Programmes are funded by LESCC.

The first top ten proposals were first ranked by the Chair of the unit that related to the LESCC Standing Committee. After the meeting of the Chair of the unit of the ESF Standing Committee, proposals in the LESCC unit, 15 in total, were presented to the Member Organisations for their consideration for funding. Programmes which achieve a viable level of funding will be launched in early 2008.

ESF Member Organisation representatives and LESCC Core Group members discuss Forward Looks and visibility of LESCC

The LESCC Core Group invites relevant disciplinary Heads of the Member Organisations once a year to discuss science policy and other issues of common interest. This year, the Report Table meeting took place in June in Prague at the kind invitation of the Czech Science Foundation (Grafarova apartment). The meeting was held in the presence of the President Professor Jozef Sulya, the Director of the Department of International Relations.

Two break-out sessions focusing on the Life Sciences and Earth & Environmental Sciences, respectively, discussed Forward Looks around 6 questions developed by the LESCC Core Group. The outcome of the break-out and subsequent primary discussions during the meeting were put forward to improve the current Forward Looks Scheme. Although these 'terminations' were seen as a major issue in the selection of a number of steps, namely the selection of a topic concerning the Forward Look, and publication of the outcome and recommendations, the suggestions made by the Member Organisations, focused on changing the selection criteria of topics by replacing the external review process through the discipline-relevant body of ESF: Expertory Workshops was seen as an additional source for Forward Look topics. In general, once a topic has been selected a working workshop should be set up in place to evaluate whether all areas are covered and whether they are reflected in the composition of the Organisations as very crucial, as it diverts the activities of the Member Organisations. Round Table discussions revealed that the recommendations to be specific and published in a timely manner in the form of a Science Policy Briefing and/or a Final report, in order to feed into the national and European research agencies.

Photo in Prague from: Core Group Meeting

Organisations specifically. The communication strategy of ESF was presented by M. C. N. Nobrega, Head of the ESF Core Group. It was agreed that LESCC visibility could be increased among scientists if there were annual scientific reports available.

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It provides information concerning LESCC's current and upcoming activities. It could also serve as a forum for the exchange of ideas and approaches within LESCC fields.

The primary focus of the LESCC newsletter is on cooperation and coordination between LESCC and its Member Organisations.

LESC invites active participation from the readers!

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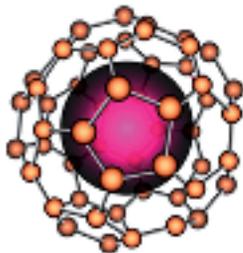
www.esf.org/lescc

Physical and Engineering Sciences

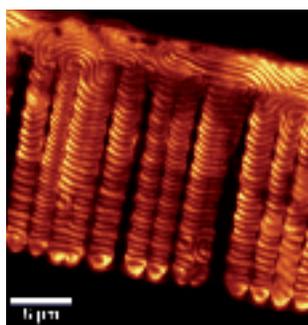
The Physical and Engineering Sciences Standing Committee covers chemistry, mathematics, informatics and the computer sciences, physics, fundamental engineering sciences, material sciences.

EUROCORES Programmes

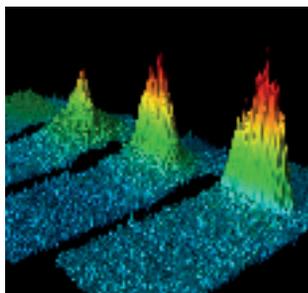
- **Chemical Control at the Nanoscale – EuroNANOCHEM**
Theme selected for further development.
- **Cold Quantum Matter – EuroQUAM**
Research and Networking phase.
- **Friction and Adhesion in Nanomechanical Systems – FANAS**
Full proposal selection phase.
- **Fundamentals of NanoElectronics – FoNE**
Research and Networking phase.
- **Quantum Standards and Metrology – EuroQUASAR**
Full proposal selection phase.
- **Self-Organised NanoStructures – SONS 1**
Final Report under preparation.
- **SONS 2**
Research and Networking phase.
- **Smart Structural Systems Technologies – S3T**
Research and Networking phase.



FoNE: N@C₆₀ nitrogen atom trapped inside a football-shaped carbon molecule called a buckyball.
Courtesy of A. Briggs of Oxford, UK

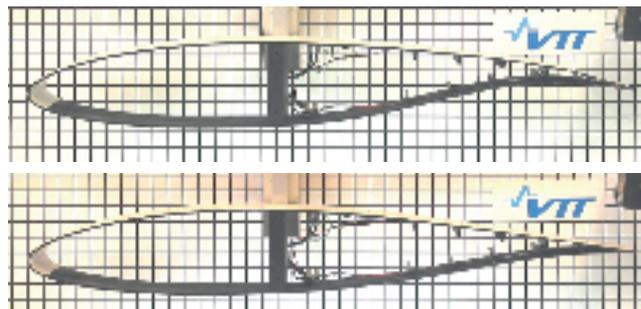


SONS 2: Director field of a self-organised cholesteric liquid crystal structure in a porous template.
Courtesy of H. Kitzrow, Paderborn University, Germany



EuroQUAM: Formation of a molecular Bose-Einstein condensate of Fermionic Lithium, ⁶Li.
Courtesy of IQOQI, Innsbruck University, Austria

Quantum Matter typically exists at temperatures less than one millionth of a degree above absolute zero. It describes a coherent quantum state of several particles. Possible applications range from high-precision measurement to quantum information.



S3T: US-Europe Workshop on Adaptive Aerospace Structures and Materials, Saint-Maximin, France, 4-7 November 2007. Active (up) and non-Active (down) Wings.
Courtesy of VTT, Finland

Exploratory Workshops

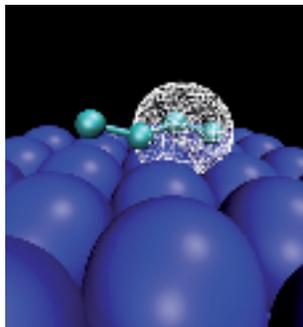
- 14 workshops in 2007.
• www.esf.org/pesc/workshops

Interdisciplinary New Initiatives Fund

- **Clean Solar Fuels: Scientific perspectives and their impacts on society and the global energy market**
Science Policy Briefing in preparation.
- **Emerging New Science Fields: The synergy of national lights sources in Europe**
Position paper in preparation.

Forward Look on European Computational Science

- Final Conference scheduled for mid-2008.
• www.esf.org/lincei

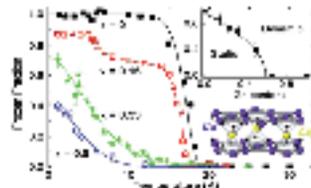


C₄ fragment on a Nickel (111) surface. The electron density shown in wireframe format relative to one of the sigma-bonds.
Courtesy of S. Meloni, CASPUR, Rome, Italy

Research Networking Programmes

- 27 RNPs currently active with a further 5 currently under consideration.
• www.esf.org/pesc/programmes

Example: **Highly Frustrated Magnetism** (2005-2010) is a joint effort between solid-state chemists, experimental and theoretical physicists. Goal is to reach a broad understanding of the novel quantum states and effects driven by magnetic frustration.



Phase diagram of the paratacamite family compounds Cu_xZn_x(OH)₆Cl₂. Magnetic order vanishes as the perfect kagome case (x=1) is approached.



RNP Methods of Integrable Systems, Geometry, Applied Mathematics (MISGAM): Heliocoid with two handles; minimal surface constructed using the methods of the theory of integrable systems.
Courtesy of A. Bobenko, U. Pinkall and M. Schmies

GÉANT2/ EARNEST Foresight Study

- ESF-led report on researchers' requirements for IT/grid technology.
• www.terena.org/activities/earnest/ws4/documents.html

PESC Chair: Professor Michel Mareschal, Université Libre de Bruxelles, Belgium
PESC Head of Unit: Dr. Patrick Bressler
PESC Unit Science Officers: Dr. Antonella di Trapani, Dr. Thibaut Lery, Dr. Farzam Ranjbaran
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www.esf.org/pesc

Social Sciences 30th Anniversary in 2007

The social sciences are the umbrella for disciplines which have the common aim of examining human functioning at various levels, ranging from neural foundations of human functioning to individual behaviour, group processes and the functioning of whole economies and societies. The mission of the Standing Committee for the Social Sciences (SCSS) is to promote high quality social science research at the European level, in all of its aspects.

The disciplines engaged in SCSS activities include Business and Administrative Sciences, Communication Sciences, Demography, Economics, Gender Studies, Geography, International Relations, Law, Pedagogy and Education Research, Political Sciences, Psychology and Cognitive Sciences, Social Anthropology, Social Statistics and Informatics, Socio-Environmental Sciences and Sociology.

New SCSS Chair



Prof. Sir Roderick Floud, President Emeritus of London Metropolitan University and Dean of the School of Advanced Study of the University of London is the new SCSS Chair. He is an economic historian, author of books and articles on technological change, on the use of IT in the study of history, on the evolution of technical education and on changes in human height, health and welfare; he is editor of the leading textbook of modern British economic history.

New Head of Unit, Social Sciences



Dr. Balázs Kiss comes to the ESF from the Institute for Political Sciences of the Hungarian Academy of Sciences where he established and directed the Centre for Political Communications Research. Balázs Kiss was also a member of the COST Domain Committee "Individuals, Societies, Cultures and Health" and was recently elected to its Executive Group. He has now taken up position as the Head of Social Sciences Unit.

Forward Look Ageing, Health and Pensions

The life expectancy of the European population continues to increase very significantly. Several of ESF's Member Organisations have suggested to launch a Forward Look project to identify the examine some of the consequences and identify research themes which can be addressed at the European level. The foresight project on 'Ageing, Health and Pensions' will look into three themes: (1) Labour market issues, (2) Income security of an ageing population, and (3) Well-being of the elderly. The project will run in 2008 and 2009.

Exploratory Workshops

In 2007, 20 Exploratory Workshops have been organised in the domain of social sciences. Two examples:

- **Transdisciplinary Review of a Proposed Agenda for Social Science Research related to Long-Term Energy Options**
Convenor: Thomas Flüeler (CH)
- **Education and the Capability Approach – Towards an European Perspective for Welfare Service Research**
Convenors: Hans-Uwe Otto and Holger Ziegler (DE)

Research Project Citizens of the Future

'Citizens of the future: the concerns and actions of young people around current European and global issues' is one of five funded Collaborative Research Projects (CRP) in the 2006 competition of the EUROCORES ECRP Scheme which operates with an annual call and selection of new projects. This study investigates the concerns of young Europeans aged 10, 14 and 17, on issues such as democratic processes, poverty, unemployment, human rights, the environment and conflict.

• www.uwm.edu.pl/citizens



Following up on one of its success stories, namely the European Social Survey (ESS), the SCSS is supporting a thematic EUROCORES programme on 'Cross-National and Multi-level Analysis of Human Values, Institutions and Behaviour' (HumVIB). By early December 2007 the peer review process of the full proposals will have ended, and a selection made of research projects to start in 2008.

• www.esf.org/humvib

Higher Education Looking Forward

Higher education institutions have, in recent years, been subjected to pressures to enhance their contribution to the successful creation of the so-called 'knowledge economies', together with the achievement of greater equity and social justice. The Forward Look on Higher Education beyond 2010 has explored these issues with the aim of drafting a broad research agenda examining the link between higher education and society.

• www.esf.org/helf



SCSS Chair: Professor Sir Roderick Floud

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www.esf.org/scss

European Space Sciences Committee

Created in 1975 ESSC is the ESF's expert body on space research and the ESF interface with the European Space Agency. The mission of the ESSC is to provide an independent voice on European space research and policy. It holds an observer status in ESA's Ministerial Conferences, in ESA's High-Level Science Policy Advisory Committee, has two representatives in the EC's 7th Framework Programme Space Advisory Group.

ESSC Strategic Plan 2007-2010

Space sciences as basic pillars of Europe's space venture. The ESSC was created to offer a forum to the European space science community to organise itself, make its views heard, and try and speak with one voice on the other side of the Atlantic. In 1994 ESSC decided to create sub-panels in the three main areas of space research, i.e. "classical" space science, Earth observation from space, and life and physical sciences in space. In subsequent years, the ESSC, thereby recently renamed "European Space Sciences Committee" became the natural home to which European agencies and decision-makers involved in space-related affairs turned to for independent advice. Allegedly it is

the only body of its kind in Europe where such advice can be provided without having to take into consideration national biases, or the obligation to balance the needs and priorities across the different fields of space research. The Charter under which the ESSC operates since 1999 has therefore become inadapted to a whole new range of activities and to the role it is called upon to play in Europe. To make a difference in the future the Committee needs the resources to deliver, and the status to provide acceptable strategic views. This realisation led the ESSC members to discuss and adopt a Strategic Plan for the period 2007-2010 which will be substantiated by a 5-year Financial Plan.

© NASA, ESA, N. Smith (UC Berkeley) - Hubble Heritage Team (STScI/AURA)



"Mountain" of cold hydrogen - Site of new star formation in the Carina nebula.

Science and exploration

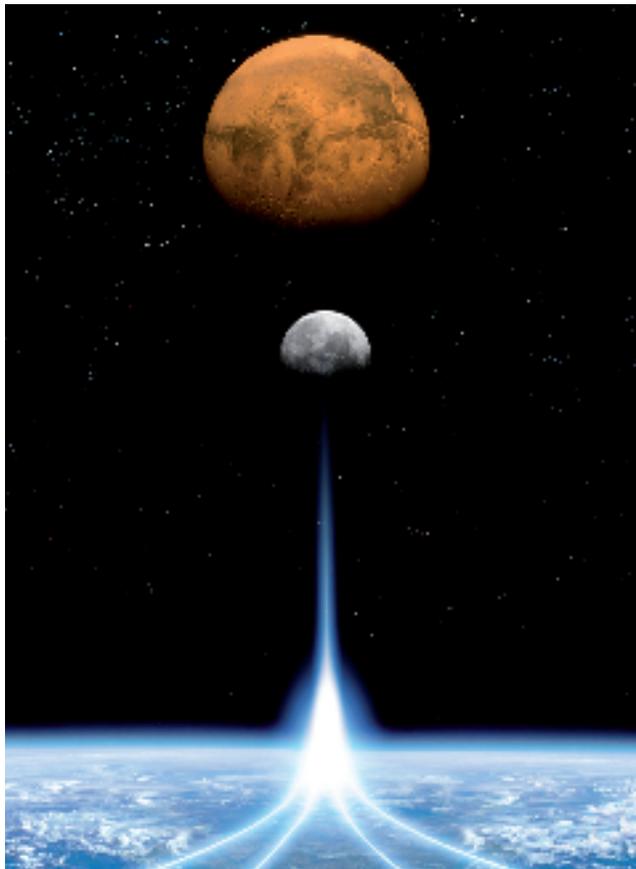
At the request of ESA, ESSC has conducted in 2005 and early 2006 a strategic assessment of the science component of its Aurora programme. In 2007 the ESSC complemented this exercise by formulating a long-term science scenario for Aurora, also at ESA's request. The objective of Aurora is to formulate and implement a European long-term plan for robotic and human exploration of solar system bodies holding promise for traces of life. The European vision could be to prepare for a European participation in a global endeavour of human exploration of the solar system, initiated by robotic exploration programmes with a strong scientific content. If European decision-makers endorse this

vision, it should be supported appropriately. The ESSC is also part of the ESF INIF initiative on Global Approach to Human Exploration of the Solar System, with the Standing Committee for the Humanities.



ESA's Aurora programme will explore the Moon and Mars.

© ESA - ARIES Mediatlab



ESA's "Aurora" Programme - artist's impression.

The ESSC mission and added value

With the development of a European space policy the role of ESSC should be amplified and diversified in order to set up a high-level independent body aimed at providing advice and expertise in the European space arena, by:

- (i) underlining the role of space sciences and technology

- developments as basic pillars of the European space venture
- (ii) supporting European visibility and advising for a role of Europe in global space initiatives
- (iii) regularly assessing the status and perspectives of European space activities

ESSC Chair: Professor Jean-Pierre Swings
Head, Space Sciences Unit: Dr. Jean-Claude Worms
Email: essc@esf.org

www.esf.org/essc

Marine Board

The Marine Board (established in 1995) facilitates the development of scientific strategy and policy issues both at European and national levels. The Marine Board represents 28 marine research organisations from 20 European countries. From November 2007 the Marine Board Secretariat operates from Ostend (Belgium) developing synergy with other co-located pan-European marine agencies.

Marine Board 2007 publications

- **Impacts on Climate Change on the European Marine and Coastal Environment – Ecosystems Approach** (Position Paper 9, March 2007)
- **European Ocean Research Fleets – Towards a Common Strategy and Enhanced Use** (Position Paper 10, March 2007)
- **Response to European Commission's Green Papers on Maritime Policy, and on the ERA** (Position Paper 11, November 2007)

Pending publications:

- **Remote Sensing of Shelf Seas Ecosystems** (Position Paper 12)
- **Effects of Anthropogenic Sound on Marine Mammals – A draft research strategy** (Position Paper 13)



Working onboard a buoy.

© Mick Mackey, 2006

Marine Board Working Groups

Aim: synthesise the state of the art in specific issues and identify challenges and recommendations.

New working groups:

- Risk Assessment and Monitoring of Existing and Emerging New Chemicals in the European Marine and Coastal Environment
- Science Dimensions of Ecosystem-based Management of Ocean Resources



A live Actinian at 630m depth on the West Rockall Bank.

© MARUM / University of Bremen

EuroOCEAN 2007 Science Policy Conference

Context: Consultation on the *Future European Maritime Policy Organising Committee:*

established under the chairmanship of Lars Horn (Marine Board Chair); composed of representatives from major marine and maritime networks

Outcome: the Aberdeen Declaration – *Voicing* European marine research priorities

Follow on: Towards the development of a European marine and maritime research strategy and the creation of a network of existing marine and maritime networks as part of the process.



Satellite image of North Achill Sound – Irish National Coastline Survey.

© Marine Institute, Ireland

Marine Board Panels

Aim: collaborative, long term operational network whose members benefit from mutual interactions.

On-going panel:

- Marine Board Communications Network (launched in June 2006)

EU FP6 ERA-NETS

MarinERA (2004-2008)

Aim: facilitate the coordination of national and regional marine research programmes

Consortium: 16 partners, representing national public funding agencies from 13 European countries and the Marine Board-ESF; joint coordination by Ifremer and the Marine Board.

Publications:

- **Preliminary Description of MarinERA Member States Marine Research Funding Programmes and Implementation Procedures** (Technical Report 1, May 2006)
- **Barriers to Cooperation in MarinERA Partner State Marine RTD Programmes** (Technical Report 2, February 2007)

Calls: A common call “Regional Drivers of Ecosystem Change: Description, Modelling and Prediction” is to be launched in December 2007 with 4.7 M euros (provisional); 6 funding agencies involved.

AmpERA (2005-2009)

Aim: foster prevention and best response to accidental marine pollution. The Marine Board is responsible for the interaction between AmpERA and other European Research Area related activities.



James Cook research vessel docked at NOCS Southampton quay.



Harbour seals.

© Michelle Cornin 2006

EU FP6 Coordinated Action

Future of European Fisheries and Aquaculture Research (FEUFAR)

Aim: undertake a foresight analysis to identify key challenges and options towards a more sustainable development of European fisheries and aquaculture industries.

EU FP7 Coordinated Action

Research Activities on life in Extreme Environments

Follow on: ESF's Investigating Life in Extreme Environments initiative and related publication

- A FP7 three-year Coordination Action successfully evaluated
- Coordination: British Antarctic Survey; Project Management: Marine Board-ESF; Consortium: seven other European research institutions.

© MARUM / University of Bremen

Marine Board Chair: Lars Horn (The Research Council of Norway)
Marine Board Executive Scientific Secretary: Dr. Niamh Connolly
Email: marineboard@esf.org

www.esf.org/marineboard



What is EUROCORES?

EUROCORES enables researchers to work in joint research projects with colleagues in other European countries and beyond for example in the US and Canada, whilst the funding remains national. The EUROCORES Programmes within the scheme address research questions which require cooperation crossing national borders and disciplinary boundaries. The high quality international peer review operated by the ESF, which is the basis for the national funding decisions, creates a quality benchmark for national research projects.

EUROCORES adds value by:

- Tackling scientific questions requiring an integrated European or even global effort.
- Creating efficiency by avoiding unnecessary duplication of national research efforts.
- Serving as a powerful tool to boost high class research at the European level by combining top-level research with network activities.
- Eliminating barriers for scientists who want to work together in international teams across borders by enabling them to apply for funding and perform research together.

Contact

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EUROCORES Scheme

European Collaborative Research

The Revised Scheme (2008): An Overview



An Overview in Geosciences and Environmental Sciences

EUROCORES Scheme



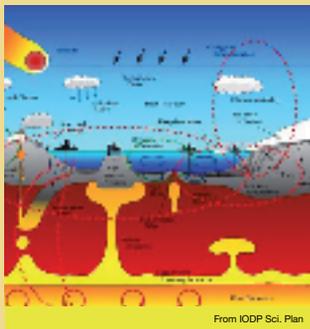
Added Value of the EUROCORES (European Collaborative Research) Programmes.

- ✓ Enable researchers in different European countries to develop innovative collaboration and scientific synergy
- ✓ Investigator-driven research in and across all scientific areas
- ✓ European critical mass for topical research excellence
- ✓ Flexible, open and transparent scheme in a global context
- ✓ ESF-manages selection through international peer review
- ✓ Science funding remains national
- ✓ ESF provides extra funding for networking activities and scientific coordination and dissemination

Introduction about the EUROCORES in LESC

Within the ESF Unit for Life, Earth and Environmental Sciences (LESC), several EUROCORES Programmes have been developed and launched in the last few years.

LESC has now an extended and coherent portfolio of activities, especially in the fields of Geosciences and Environmental Sciences. Herein is a short description of these EUROCORES Programmes.



From IODP Sci. Plan



New EUROCORES Opportunities

How to start a new EUROCORES Programme?

- Structured approach to EUROCORES development
- ESF open a Call once a year (next deadline expected in June 2008)
- New and challenging ideas (EUROCORES Theme proposals)
- From the scientific community and its Member Organisations
- Selection process of Themes to become EUROCORES Programmes
- ESF agrees with interested research agencies on EUROCORES Programmes

How does a EUROCORES Programme work?

- Call for Projects in a given EUROCORES Programme inviting Collaborative Research Project (CRP) proposals from the scientific community
- Each CRP consists of a number of Individual Projects (IPs) based in different European countries.
- International Peer Review managed by ESF
- Each EUROCORES Programme with about 10-25 research funding agencies, about 10-20 CRPs funded
- About 40-80 IPs with a Programme budget of 5-13 MEuros, for 3 or 4 years
- National support for personnel, equipment and consumables, publications and general dissemination, access to large infrastructures, participation in conferences and other intra-CRP travels
- ESF supports networking (workshops, conferences, summer schools etc.) between CRPs with funds from the EC-FP6 (until early 2009).

Acknowledgement

These EUROCORES Programmes are supported by national research funding and performing agencies from 26 countries and by the European Science Foundation (ESF) under the EUROCORES Programmes, with support by the European Commission, DG Research (Sixth Framework programme, contract ERAS-CT-2003-980409).

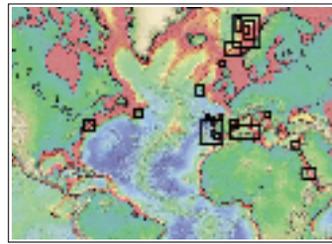
European Science Foundation

The European Science Foundation (ESF) provides a platform for its Member Organisations to advance European research and explore new directions for research at the European level.

Established in 1974 as an independent non-governmental organisation, the ESF currently serves 75 Member Organisations across 30 countries.

EUROMARGINS

(Processes at the Passive Continental Margins)



Map with the EUROMARGINS study areas investigated by the projects (after D.T. Sandwell)

EUROMARGINS provides the international framework for promoting innovative, interdisciplinary studies for the imaging, monitoring, reconstruction and modelling of the physical, chemical and biological processes in the European passive continental margins.

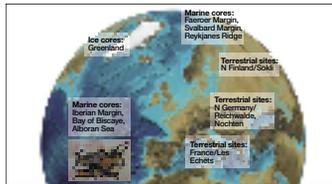
More information: www.esf.org/euromargins

EuroCLIMATE

(Climate Variability and the (past, present and future) Carbon Cycle)



EuroCLIMATE addresses issues related to climate variability of the past, present and the future and particularly its inter-relationship to global carbon cycle dynamics.



Above: Iceberg in Lancaster Sound (H. Oerter)

Example of the RESOLUTION collaborative research project focusing on paleoclimate deconvolution based on marine and terrestrial sites, ice cores and archeological artefacts (B. Wohlfarth)

More information: www.esf.org/euroclimate

EuroMinSci

(European Mineral Sciences Initiative)



EuroMinSci draws together different experimental techniques and computational activities into integrated research projects. Sometimes it calls for separate 'computer experiments' while at other times computer simulation is needed even to interpret the experimental data uniquely.



Above: Crossed-lamellar structure of aragonite in a gastropod shell (polarized light) - Field view; 550 µm (J.-P. Cuif)
Examples of EuroMinSci research outputs linking classical crystallography, seismology, in vitro experiments, computational physics and high-energy beam observations from the MICEO, GRICO, EuroSLAB and BIOCALC projects

More information: www.esf.org/eurominisci

TOPO-EUROPE

(4-D Topography Evolution in Europe: Uplift, Subsidence and Sea Level Change)



Map displaying the main seismic zones and geomagnetic anomalies within Europe

TOPO-EUROPE intends to investigate through an integrated, interdisciplinary approach the 4-D topography evolution of the European continent, its margins, and its adjacent parts. Its main goal is to understand and assess the coupled deep Earth - surface processes that control continental topography development, related geohazards and the vulnerability of the environment to intensified land use.

More information: www.esf.org/topoeurope

EuroDIVERSITY

(Challenges of Biodiversity Science)



EuroDIVERSITY bridges the gaps between the natural and social science, across terrestrial, freshwater and marine ecosystems, by focusing on plants, animals and micro-organisms. It supports the emergence of an integrated biodiversity science, based on an understanding of the fundamental ecological and social processes in a globally changing world.



Up right: Cliffs of Inishmore, Ireland (© Y. Arthur-Bertrand / Altitude)
Left image: The ancient freshwater Lake Tanganyika as study site (E. Verheyen, MOLARCH project)
Right image: The role of decomposer diversity in biogeochemical cycling (S. Hättenschwiler, BioCycle project)

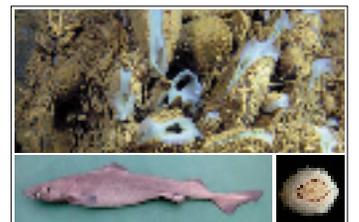
More information: www.esf.org/eurodiversity

EuroDEEP

(Ecosystem Functioning and Biodiversity in the Deep Sea)



EuroDEEP focuses on deep-sea biology and ecology and it favours collaboration between taxonomists, ecologists, physical & chemical oceanographers, microbiologists and geoscientists. It aims at exploring and identifying the different deep-sea habitats and ecosystems, assessing both the abiotic and biotic processes that sustain and maintain deep-sea communities.



From left to bottom right: *Bathymodiolus* from Mid-Atlantic Ridge (ATOS/VENTOX, © Ifremer) / Leafscale gulper shark, (P.M.N. Cambráis Duarte, © ImagDOP) / *Bryopsis pyrifer* from NW Mediterranean. (Dantari), Pillar Coral. (© Wikimedia)

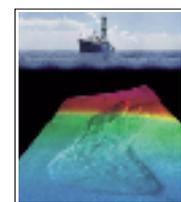
More information: www.esf.org/eurodeep

EuroMARC

(Challenges of Marine Coring Research)



EuroMARC stimulates the development of innovative scientific drilling proposals to support the European leadership in international marine drilling expeditions and the utilisation of specific drilling platforms. Its main topics are Earth's Surface Environmental Change; Deep Biosphere & Sub-Sea-floor Ocean; Solid Earth Cycles & Geodynamics.



Above: Shallow-water coral reefs provide information on recent paleoclimates and environmental changes (K. Sugihara & T. Yamada)

Left: The study of marine landslides is important in Europe as a large portion of its population could be affected by the resulting tsunamis (A. Camerlenghi)

More information: www.esf.org/euromarc

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www.esf.org/eurocores

European Collaborative Research Projects II

The European Collaborative Research Projects (ECRP) has been formed in response to the continuing demand from the scientific community for funding to support responsive-mode, investigator-driven collaborative research projects within the Social Sciences in Europe.

What is ECRP?

The ECRP Programme is designed to promote research of the highest quality, offering opportunities to test innovative ideas, pool expertise and strengthen research capacity in line with the objectives of the European Research Area. Five projects from the EUROCORES ECRP 2006 Competition have been funded and the topics range from "Concerns and Actions of Younger Citizens" to "Short and long range dynamics of attention", from "Disaggregating Civil Wars" to "Political Communication in Western Europe".

In the 2007 competition, 23 scientific proposals have been received. This means that the EUROCORES ECRP Scheme will continue to act as a catalyst to promote multilateral research projects in the social sciences that go beyond networking activities. We do this by offering funding support to cover salaries, equipment, consumables and access to infrastructure. Moreover, EUROCORES ECRP is widely recognised to provide a forum where research Councils can work together to devise common procedures for applications.

Projects within ECRP II

Citizens of the future: the concerns and actions of young people around current European and global issues

Dr. Beata Krzywosz-Rynkiewicz
University of Warmia & Mazury, Poland

Constructing regional advantage: towards state-of-the-art regional innovation system policies in Europe?

Professor Björn Asheim
Lund University, Sweden

Disaggregating civil wars

Professor Lars-Erik Cederman
ETH Zurich, Switzerland

Political communication cultures in Western Europe – A comparative study

Professor Barbara Pfetsch
University of Hohenheim, Germany

The short and long range dynamics of attention

Dr. Christian N. L. Olivers
Vrije Universiteit Amsterdam, The Netherlands



Research is funded by the following national funding agencies:

- Fonds zur Förderung der wissenschaftlichen Forschung (FWF)
- Austrian Science Research Fund, Austria
- Fonds voor Wetenschappelijk Onderzoek – Vlaanderen (FWO)
- Research Foundation Flanders, Belgium
- Research Promotion Foundation (RPF), Cyprus
- Grantová agentura České republiky (GAČR) Czech Science Foundation, Czech Republic
- Forsknings- og Innovationsstyrelse (FIST) Danish Agency for Science Technology and Innovation, Denmark
- Suomen Akatemia/Finlands Akademi (AKA) Academy of Finland, Finland
- Centre National de la Recherche Scientifique (CNRS) National Centre for Scientific Research, France
- Deutsche Forschungsgemeinschaft (DFG) German Research Foundation, Germany
- The Icelandic Centre for Research (RANNIS), Iceland
- Irish Research Council for Humanities and Social Sciences (IRCHSS), Ireland
- Fonds National de la Recherche (FNR) National Research Fund, Luxembourg
- Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO) Netherlands Organisation For Scientific Research, Netherlands

- Norges Forskningsråd (NF) Research Council of Norway, Norway
- Polska Akademia Nauk (PAN) Polish Academy of Sciences, Poland
- Ministry of Scientific Research and Information Technology, Poland
- Ministerio de Educación y Ciencia (MEC) Ministry of Education and Science, Spain
- Forskningsrådet för arbetsliv och socialvetenskap (FAS) Swedish Council for Working Life and Social Research, Sweden
- Vetenskapsrådet (VR) Swedish Research Council, Sweden
- Schweizerischer Nationalfonds zur Förderung der Wissenschaftlichen Forschung (SNF) Swiss National Science Foundation, Switzerland
- Türkiye Bilimsel ve Teknolojik Araştırma Kurumu (TÜBİTAK) The Scientific and Technological Research Council of Turkey, Turkey
- Economic and Social Research Council (ESRC) United Kingdom

The EUROCORES Programme ECRP is a European Science Foundation (ESF) initiative supported by the European Commission, Sixth Framework Programme, under Contract No. ERAS-CT-2003-980409.

ECRP Programme Coordinator: Dr. Frank Kuhn
Email: ecrp@esf.org

www.esf.org/ecrp

ESF Research Conferences provide European and international scientists, including young researchers, with an informal discussion framework in attractive, remote venues for exploring the latest developments in their areas of research. They promote synergy and the creation of new scientific communities on topics that range over all disciplines, from Physics to Humanities. Interdisciplinary approaches are encouraged as appropriate. ESF and its Partners in the Scheme provide the essential core funding that enables our high-ranking Conference Chairs to develop top-quality scientific programmes, with the organisational services of the ESF Conferences Unit.

ESF-Japan Partnership

ESF-JSPS Frontier Science Conference for Young Researchers on Robotics – Kanagawa, Japan, 9-15 March 2008

This conference is a result of collaboration between ESF and the Japan Society for the Promotion of Science (JSPS), specifically aimed at young researchers. The aim is to provide for an annual research conference on a leading edge topic bringing together



both senior and junior researchers from both parts of the world.

• www.esf.org/conferences/08231

New Partners – New Countries joining the Scheme

ESF has recently signed a Memorandum of Understanding with The Ministry of Science and Higher Education (MSHE), in association with The Institute of Mathematics of The Polish Academy of Sciences (PAN), for a series of conferences in Mathematics, to take place in Bedlewo, near Poznan, Poland. With the new conference series to start from 2008 and 2009, ESF Research Conferences will be present in nine countries in Europe as well as Africa and Japan.



© iStockPhoto

First World Conference on Research Integrity, Lisbon, 16-19 September

The issues of fraud, falsification and plagiarism in science were the topics at the first World Conference on Research Integrity, organised by ESF and the US Department of Health and Human Services Office of Research Integrity (ORI). About 300 scientists, scientific managers, policy makers and science journalists from 52 countries gathered in Lisbon to analyse and share their growing concerns over misconducts in science.

• [www.esf.org/conferences/research integrity](http://www.esf.org/conferences/research%20integrity).



Janez Potočnik, European Commissioner for Research, European Commission; Jose-Mariano Gago, Portuguese Minister of Science, Technology and Higher Education; Angel Gurria, Secretary-General, Organisation for Economic Co-operation and Development (OECD).

© Luisa Ferreira, ESF



Invertebrate Immune Systems are anything but simple, conference finds

A hundred years since Russian microbiologist Elie Metschnikow first discovered the invertebrate immune system, scientists are only just beginning to understand its complexity. Presenting their findings at *The Impact of the Environment on Innate Immunity: At the Defence Frontier – The Biology of Innate Immunity Conference*, organised by ESF in partnership with the Fonds zur Förderung der wissenschaftlichen Forschung in Österreich (FWF) and the Leopold-Franzens-Universität Innsbruck (LFUI) (Universitätsszentrum Obergurgl, Austria, 19-24 May 2007), scientists showed that



© Richard Naylor, University of Sheffield

invertebrates have evolved elaborate ways to fight disease. The conference was attended by 90 immunologists and evolutionary ecologists and appealed to an international audience.

• www.esf.org/conferences/07223.

Research Conferences Head of Unit: Caroline Hirst
Email: conferences@esf.org

www.esf.org/conferences

European Young Investigator Awards

In 2003, the European Heads of Research Councils (EUROHORCs), in collaboration with the European Science Foundation (ESF), created the European Young Investigator (EURYI) Awards. The aims of the EURYI Awards Scheme are to strengthen the European Research Area (ERA) and to attract outstanding young researchers, from all over the world, to work in Europe and establish and pursue independent research careers. The awards are funded by the EURYI Participating Organisation, who are typically ESF Member Organisations.

As a consequence of the launch in 2007 of the European Research Council's Starting Investigator Grant, largely modelled on EURYI, EURYI will have no further calls.

The first 25 awards were made in 2004, 25 in 2005, and 25 in 2006. The fourth annual call for proposals was launched on 1st September 2006 with Participating Organisations from 16 countries, and resulted in 20 Awards being made in 2007.

Key characteristics

- Selection has been on the basis of the research quality and potential of the applicant; the quality, originality and feasibility of the research proposal, the quality of the proposed host institution, and the potential of the proposal to improve the position of European research at world level.
- Awardees have typically between 4 and 8 years after their PhD when making their proposal.
- Proposals were assessed firstly at the national level, and then the highest ranked were passed to ESF for assessment by 6 high-level international panels, whose recommendations were combined into a single priority list.
- Award holders are expected to devote their full working time to the research described in the proposal.
- Awards last for a 5 year period, subject to satisfactory progress.
- The total value of an award will normally be no less than € 750 over 5 years and shall not exceed a maximum of € 1250.
- Awards must be held at a host institution in a country participating in the EURYI Award scheme



19 Young Investigators on occasion of receiving their award certificates at the 2007 EURYI Award Ceremony in Helsinki.

The Future of EURYI

EURYI has been successful in not only selecting and funding excellent young researchers but also delivering its objective of structuring the ERA by developing standards, procedures and mechanisms for transnational cooperation and funding between research organisations in a complex and larger-scale programme.

EURYI provided the inspiration for the European Research Council's Starting Investigator Research Grant (SIRG) scheme, with which it shares many similarities and which was launched in 2007. EURYI know-how was transferred to the ERC to help in the establishment of their schemes. With the launch of the SIRG, with its larger scope, EUROHORCs decided to close EURYI for further calls. During the lifetime of the existing EURYI Awards, which will continue until 2013, ESF will continue to provide a basic coordination function for Par-

ticipating Organisations and Awardees. EUROHORCs, ESF and the ERC have agreed that the long-term stewardship of the EURYI Awardees Network will be transferred to the ERC as a foundation stone for their "SIRG Alumni Association". With financial support from EUROHORCs, ESF will organise a final EURYI Network scientific event during 2008.



Nobel Laureate Tim Hunt in Helsinki, where he presented the Awards at the EURYI Ceremony.



EURYI Award Winner Natalie Sebanz conducting a 'social experiment' with the guests at the Award Ceremony.

The work of the European Science Foundation in implementing and coordinating the EURYI Award scheme has been supported by funds from the European Commission's Sixth Framework Programme under Contract no. ERAC-CT-2003-510191



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Email: euryi@esf.org

www.esf.org/euryi

**“Science knows no country,
because knowledge belongs
to humanity, and is the torch
which illuminates the world”**

Louis Pasteur

**“Let’s build a future –
not just polish the past”**

Frank Vizarre

**“If you think research
is expensive, try disease”**

Mary Lasker

**“We haven’t got the money,
so we’ve got to think”**

Ernest Rutherford

**“The whole is more than
the sum of its parts”**

Aristotle



Coordinating and financing life sciences research

To meet the needs of its citizens and remain competitive in a global setting, Europe requires new, bold strategies for coordinating and financing life sciences research. This field has undergone a revolution in terms of research approaches, infrastructure needs and technological developments. Changes are also taking place in the financial world,

with new funding sources opening up including foundations, charities and industry. To maximise the available resources and mobilize these new potential sources of funding, new approaches are needed and so ESF has launched EuroBioFund, with strong support from the European Commission.



Human Resources Making strategy everyone's job!

Over the past five years, the staff size of the ESF has more than doubled. Starting as a small organisation with a strong family culture, the ESF has undergone a considerable transformation and witnessed a rapid growth in its activities.

In an effort to accommodate the increase in new activities the Assembly approved the ESF's new Strategic Plan 2006-2010 in November 2005. With this ambitious strategic plan it is apparent that ESF staff will be confronted by new and challenging objectives. These challenges require changes allowing the ESF to demonstrate continuous improvement in professionalism, high quality science and streamlined administrative processes.

Living the values of the ESF

Excellence, Openness, Responsiveness, Pan-European, Ethical Awareness

Via these core values we will continue to strengthen and build on our delivery of:

Quality Assurance, Professionalism, Customer Orientation, Process Efficiency, Corporate Identity, Performance

Human Resources will successfully support the ESF's Strategic Plan by ensuring we have:

- A continuous focus on a high level of professionalism
- A strong network with MO's human resources departments to attract top-level science managers, science administrators and administrative staff
- The right scientific and administrative competencies
- Clear definition of responsibilities to deliver organisational effectiveness
- More flexibility in employment conditions to enable ESF to respond effectively to an increased number of externally funded activities
- Continued to strengthen the international culture of the office with 19 nationalities currently represented on our staff
- A rewarding performance based remuneration system and competitive hiring offers
- Strictly applied policies to both equal opportunities and gender equality.



"ESF is a key player among stakeholders who bring the vision of a European Research Area to fruition. An exciting place to be at an exciting time for someone with a background and interest in science policy studies"

Dr Alexis-Michel Mugabushaka Science Officer in CEO Unit, Germany

Management, Team Training, Staff Development

The ESF has invested in management and staff training through a series of sessions over 2006. Staff received an in-depth training course designed to improve quality, effectiveness and accountability. Staff development is an investment which should be translated into excellence



"Working for the ESF has allowed me to use my experience as a journalist to capture and convey science to a wider audience"

Thomas Lau, Communications Writer, Hong Kong



"Joining ESF has given me an opportunity to help promote high quality science at a European level"

Dr Fiona Kernan, Assistant Scientific Officer EuroBioFund, Ireland



"Joining the ESF has given me the opportunity to use my scientific background for the needs of the European scientific community and for the development and strengthening of the European Research Area (ERA), while working in a multidisciplinary and multicultural environment"

Dr. Antonella Di Trapani, EUROCORES Programme Coordinator for Materials Science, Italy

Strategy implementation

ESF Mission, Values and Vision



ESF Strategy and Implementation Plan



Units Objectives



Individual Responsibilities and Objectives

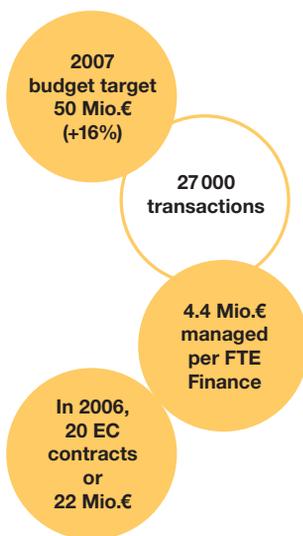
Strategy implementation is a top-down process to share the strategy and align the staff but is also a bottom-up process to internalise and execute the strategy.

Head of Human Resources: Catherine Lux

www.esf.org

After experiencing a dramatic growth over the last years, the main objective for ESF is now to deliver high quality output. In this context, the Administration and Finance team aims at providing professional and efficient services to science initiatives in a client oriented way.

Key figures



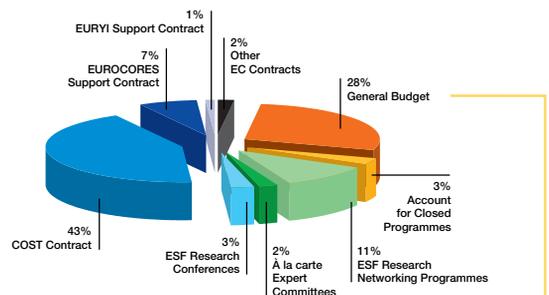
Highlights of 2006-2007

- New COST FP7 Contract and transition with FP6
- Efficient closing and reporting process
- Risk register
- Efficiency savings
- Accountability Workshop

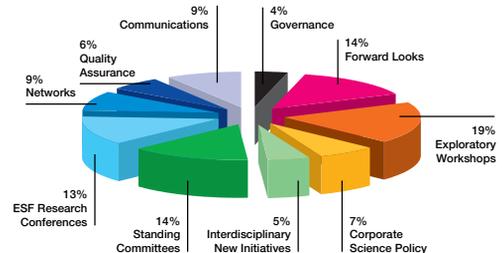
Challenges for 2008-2009

- Consolidated budget process
- Measuring cost efficiency of instruments
- Implementing new Information System
- Launch of Peer Review services
- Transition to new EUROCORES funding scheme
- New FP7 contracts

Consolidated expenditure 2006



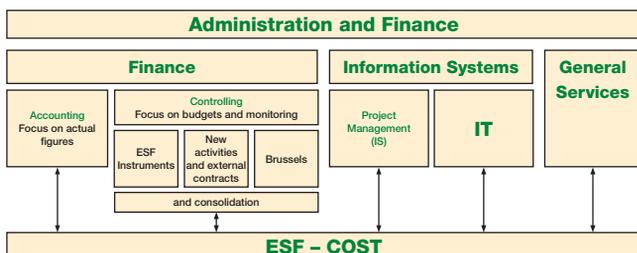
Science Activities funded by ESF General Budget 2006



Finance and Audit Committee: link to Governance

- Reports to ESF Governing Council
- Chaired by Martin Hynes
- Composed of high level Finance and Science Managers nominated by Member Organisations

Team and Functions



Budget Structure

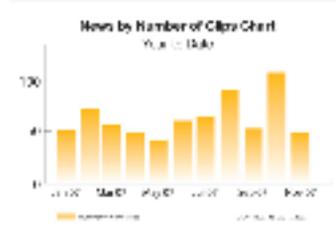
Budget component	Related activities	Sources of funding
General Budget	<ul style="list-style-type: none"> • Basic activities that are essential for the proper implementation of the ESF mission • Quality control • Running of the Office and general infrastructure 	<ul style="list-style-type: none"> • Contributions from MOs • Other internal income (Financial earnings...) • Overheads from external contracts
À la carte	<ul style="list-style-type: none"> • Specific activities such as Programmes and Expert Boards 	<ul style="list-style-type: none"> • Contributions from MOs on an à la carte basis
Partnerships	<ul style="list-style-type: none"> • Partnership activities such as Conferences 	<ul style="list-style-type: none"> • Partners' contributions • Contribution from General Budget • Participation fees
Contracts with external parties	<ul style="list-style-type: none"> • Support for the coordination of programmes such as EUROCORES, EURYI, EuroBioFund and ERA Nets • Management of scientific secretariats for activities such as COST 	<ul style="list-style-type: none"> • Grants from the European Commission

Reaching the Media

Newsletters

- In 2007 ESF achieved:
- 65 press releases to date v 40 in 2006
 - 200 citations in the press v 450 in 2006
 - Podcast interviews
 - Proxiguity

This year has seen the launch of several ESF newsletters, all with different purposes. The MD Newsletter aims to communicate ESF's activities and the decisions from the Governing Council to ESF's Member Organisations. The Internal Newsletter keeps the staff up to date on internal ESF activities and initiatives. The EURCOORES insight communicates the activities of the EURCOORES Scheme and Programme to the various EURCOORES communities.



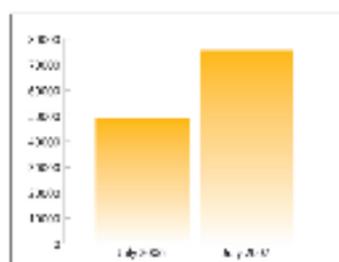
Publications

ESF publications are a large part of the Communication Unit's work. In 2007, we have produced around 60 printed publications.



The Web

With the launch of ESF's new website in a world where 'good' technology is becoming more common, rather than the exception, communicating using the web is becoming increasingly important. With the launch of the new ESF website, we have seen an increase in number of unique visitors, proving that investing in web technology increases company stability.



Communications Network

Following ESF's vision of facilitating networks, this year, the Communication Unit held the first meeting of the Communication Network which attracted members from 12 different countries. The network involves Communications staff from the ESF Member Organisations where the aim is to share resources, best practice and to develop ways of working together. The meeting concluded that to start with, the network should find a common project. EURCOORES was recognised as something that many people are involved in. The network also decided to launch a fully collaborative weekly European Science Podcast, probably the first of its kind.



Media Training

One of this year's initiatives involved organising media training for ESF Heads of Unit. Participants learn how to identify good stories, how to get your point across succinctly and half a day was dedicated to learning to think on your feet during interviews by the media.



Management Science
Independence
Excellence
Research Cutting-edge
Member Organisations
Medical Sciences
Synergy
Polar Policy
Europe and Environment
Strategy Nuclear Physics
Humanities Marine
Social Science Space
Radio Astronomy Frequency
Physical and Engineering Sciences
Ethical Awareness



At ESF, we utilise a variety of communication avenues in order to reach out to both the media and to the scientific community. Our communication efforts aim to raise the profile of ESF by ensuring that our science and networking activities are clearly explained and easily understood. Effective communication means efficient promotion of ESF. This also includes developing an ESF brand. A brand is a symbolic embodiment of all the information connected to a company, product or service. Because we live in a world where we are bombarded with information every day, where only the clearest messages are heard, the stakes are high if you want to get your point across.

