MESSAGE FROM THE PRESIDENT: WEIGHT OF EXPECTATIONS ON SCIENCE CONTINUES TO GROW

Each year the Academy of Finland grants competitive and peer-reviewed funding worth around 320 million euros to support high-quality scientific research. Centres of Excellence are prime examples of what can be achieved by this funding support. CoEs are great success stories, the flagships of Finnish research. They have created the necessary conditions for the development of leading-edge, creative and efficient research and training environments. The research they generate is world-class.

2012 marked the beginning of a new six-year CoE programme for the 2012–2018 term. In all, 15 CoEs were launched in different fields of research. Each of them represents an important and interesting line of inquiry at the very cutting edge of international research. In 2012, there were 33 CoEs in ongoing CoE programmes.

Academy-funded CoEs are well aware of their special status. As researchers at the Finnish CoE in Biological Interactions Research have pointed out: “We’re now in the position to take a longer-term focus and to tackle even tougher challenges. We can even take risks now – something without which many genuinely new innovations would never happen.”

In 2012, Finnish science and research policy was overshadowed by the climate of continued economic uncertainty. After years of growth, public research funding in Finland was flatlined. The Academy had less money at its disposal for research funding than earlier. There were more excellent applications and more excellent researchers than there were funding opportunities – clearly a situation

Evaluations of research quality form an integral part of the Academy’s applications review and funding decisions process. Evaluations also need to consider the broader picture. In 2012, evaluations were completed in three disciplines, i.e. physics, ecology and evolutionary biology, and sport sciences. The sport sciences evaluation was a Nordic undertaking. In 2012, the Academy also completed its review of the state and quality of scientific research in Finland, providing a comprehensive overview of research funding and the results of science in Finland. Broader evaluations form an important part of the Academy’s mission, and steps were launched to ensure that their results can be put to more effective use.

In any assessment of science, research and innovation policy it is important to bear in mind that high-quality research, high-quality education and the practical application of research are not mutually exclusive, but in fact synergistic activities.

In 2012, the Academy of Finland was charged with the administration of national research infrastructures. At the same time, a dedicated new item was created in the State Budget. For the continued development of infrastructure policy a broad-based expert committee has been set up under the Academy’s auspices. Research infrastructures are under substantial funding pressure, and dedicated funding covers only a small part of overall needs. Indeed, research infrastructures have to be seen as one part of Finnish science policy’s broader development agenda in which the collaboration and division of labour between universities and research institutes are key themes.

The weight of expectations on science is ever increasing. It is crucial that the Academy continues to work closely with universities and research institutes to develop its funding schemes and to ensure that research funding has maximum impact.

Heikki Mannila
President
FROM THE RESEARCH COUNCILS

The end of 2012 marked the end of the three-year term for both the Board of the Academy of Finland and the Academy’s four research councils, i.e. the Research Council for Biosciences and Environment, the Research Council for Culture and Society, the Research Council for Natural Sciences and Engineering, and the Research Council for Health. The members of the Board and the research councils have made good use of their wide-ranging scientific expertise, particularly in connection with funding decisions.

EXEMPLARY COOPERATION IN THE BEST INTERESTS OF FINNISH SCIENCE

“What really stood out for me during my time as Chair of the Research Council for Biosciences and Environment was the excellent cooperation we had. All of the Council members were highly motivated experts in their respective fields,” says Paavo Pelkonen, Professor Emeritus at the University of Eastern Finland Faculty of Science and Forestry and Chair of the Research Council for Biosciences and Environment in 2010–2012.

The Council showed great dedication and commitment even in the tightest situations: “Our policy priorities were to maintain the current level of funding for Academy Projects and to improve senior researchers’ working conditions. Appropriate funding allocation and a successful programme strategy allowed us to complement existing funding in a number of disciplines. The targeted funding we awarded for Baltic Sea research is particularly significant because the EU contributes to funding Finnish researchers.”

Another important achievement of the past term was the effort invested in developing research evaluation procedures. During this development project, an international evaluation team travelled to Finland to discuss the implementation of recommendations concerning the allocation of science and research resources.

Professor Pelkonen is keen to stress the importance of the Research Council’s strategic visits: “It was a privilege to get such a close-up view of the Finnish university field and its cutting-edge research.”

RESEARCH IN CULTURE AND SOCIETY CONTINUES TO GAIN IN IMPORTANCE

“Most of the grand challenges facing society as identified by the Academy of Finland, fall in the domain of cultural and social research. During the Research Council’s three-year term, there was a growing sense of conviction among Council members in the increasing importance of these lines of research inquiry,” says Professor Aila Lauha, Chair of the Research Council for Culture and Society in 2010–2012. Lauha is Professor of Church History and Dean of the University of Helsinki Faculty of Theology, and she will continue as member of the newly appointed Research Council.

Professor Lauha says the Research Council managed to work consistently to develop its procedures and evaluation practices. “One of the most important milestones was the setting up of a new Martti Ahtisaari Academy Professorship in the field of peace research and international conflict management. Preparations for the Research Programme on the Human Mind in the field of culture and social research also exceeded expectations. I’m also delighted with how quickly we got the new targeted call for debt and debt relations off the ground in autumn 2012.”

Another highlight mentioned by Professor Lauha was the Academy delegation’s South American visit in April 2012. This visit involved discussions around new joint international calls as well as fact-finding missions to major science funding agencies and leading universities in the region.

ROLE OF INFRASTRUCTURES ON THE RISE

The Research Council for Natural Sciences and Engineering had its main focus on funding decisions and research infrastructures. “For me personally, the key issues were infrastructures and decisions on funding for doctoral programmes. In my capacity as Chair of the infrastructure subcommittee, I was also involved in the decision by the Ministry of Education, Science and Culture to step up infrastructure funding,” says Professor Erkki Oja of Aalto University, who chaired the Research Council for two successive terms in 2007–2009 and 2010–2012.

Professor Oja is particularly impressed by the high standard of the Academy’s application review process. Unfortunately, only a fraction of all the projects submitted could be funded. He would be keen to see high-quality, investigator-driven basic research retain its strong position in the Academy’s funding portfolio.

“Among the Research Council’s strategic objectives were to increase the average project size, to enhance national cooperation and support international cooperation, to promote young researchers’ and women’s skills acquisition, and to support branches that are most crucial to the national economy. In all these areas we had quite good success. Our collaboration with Tekes, the Finnish Funding Agency for Technology and Innovation, and the start-up of strategic centre funding for Academy Projects were particularly important.”
Professor Oja was also in charge of discipline evaluations in the fields of chemistry and physics and was closely involved in the review of the state of scientific research in Finland 2012. He says it will be interesting to see which fields of research the Academy will decide to prioritise in its future decisions on Centres of Excellence.

**FUNDING FOR HEALTH RESEARCH ON THE DECLINE**

The Research Council for Health was chaired in 2010–2012 by Professor Tuula Tamminen, who describes her team members as extremely hard-working and committed. “One of our major strengths has been the Academy’s internationally recognised peer review process. The number of high-quality applications far outstripped and will continue to outstrip the funding available,” she explains.

Throughout its term, a growing concern for the Research Council for Health was the dwindling of research funding in this field. Recognising the importance of clinical research and the deteriorating funding situation, the Council worked consistently to provide funding for clinical research career development.

Professor Tamminen is full of praise for her hardworking and creative colleagues who have now completed their term with the Research Council. “It was particularly inspiring to see how basic research and applied clinical research can work together to improve public health and care systems.”

“It’s also important for research councils to work more closely together in order to achieve genuine interdisciplinary integration,” Professor Tamminen says. Tamminen will continue to chair the Research Council in its new composition.

**SCIENCE AND RESEARCH DEVELOPMENTS IN 2012**

The long-standing growth of public research funding in Finland came to a halt in 2012. R&D expenditure fell to EUR 7.1 billion. The R&D-to-GDP ratio edged back to 3.61%, down from 3.78% in 2011. Central government R&D funding in 2012 totalled EUR 2.1 billion.

Some 80% of Academy of Finland funding goes to universities. Indeed, universities are the Academy’s most important partner in cooperation, and this cooperation was further deepened. According to an assessment of the impact of the 2010 Universities Act conducted by the Ministry of Education, Science and Culture, the effects will mainly be seen in the governance and management of universities as well as in the way universities profile themselves.

The Ministry also undertook to assess the impact of the new Universities Act on the Academy’s previous research posts. It seems that the legislative reform has not affected the position and working conditions of Academy Professors and Academy Research Fellows. In 2012, the Academy had 41 Academy Professors and 289 Academy Research Fellows.

The Ministry of Education, Science and Culture launched an international evaluation of the Academy of Finland. The results will be published in 2013. In response to an initiative from the Research and Innovation Council, the Ministry appointed an expert working group to review the overhaul of government research institutes. The working group recommended that research resources be pooled with a view to supporting policy-making. Furthermore, it was proposed that government research institutes be integrated and that a third pillar of competitive funding be created alongside scientific research and innovation instruments. This strategic funding instrument would provide funding for problem-driven research, with strategic guidance on research themes and priorities coming from the Finnish Government. Furthermore, a strategic research council will be set up under the Academy’s auspices.

In order to concretise and boost the Government’s research and innovation policy, the Ministry of Education, Science and Culture and the Ministry of Employment and the Economy drew up a research and innovation policy action plan. This plan set out the major development challenges and the necessary clarifications for the latter half of the Government’s term in office. The proposals put forward concern the organisation of research programmes, the promotion of international engagement, the use of intangible investments and incentives for experimental work.

The Academy published its review of the state of scientific research in Finland. This project required a substantial input from each research council, the Academy’s Administration Office as well as the 366 experts consulted.

In the area of European research and innovation policy, the main focus was on the further development of the European Research Area (ERA) and the launch of the new Horizon 2020 funding programme.

**TABLES**

The key indicators are available on our website at [www.aka.fi/eng > About us > The Academy > Presentation material.](#)
FUNDING

RESEARCH FUNDING

The total value of Academy of Finland research funding decisions in 2012 came to 327 million euros, down from 341 million euros the year before.

The number of funding applications processed was 3,724, compared to 3,409 in 2011. The number of applications funded fell slightly from 1,374 in 2011 to 1,317 in 2012.

The Academy supports a diverse range of research. Academy funding was awarded to 61 fields of research at different universities and research institutes. Universities accounted for 80% of all Academy research funding; see Table “Academy funding 2012, by site of research”.

Research fields under the Research Council for Natural Sciences and Engineering were the biggest recipient of Academy funding, taking a total of 104.4 million euros. Research fields under the Research Council for Culture and Society received 79 million euros, the Research Council for Biosciences and Environment 64.7 million euros, and the Research Council for Health 55.5 million euros. See Table “Academy funding 1997–2012, by research council domain”.

The standard of applications funded has for years been extremely high. Just 17% of applications for Academy Project funding, for instance, were approved, and the total amount of funding awarded came to 16% of the total value of all applications (compared to the previous year’s figures of 19% and 17%, respectively). These figures highlight the disparity between demand and supply, which has been widening especially in the case of Academy Projects. All Academy funding decisions are based on peer reviews and science policy deliberation by research councils. More than 90% of the experts contributing to peer reviews in 2012 were from outside Finland.

All Academy funding decisions for different funding schemes are shown in Table “Academy funding 2012”. Most of the Academy’s funding went to support Academy Projects and the research councils’ strategic funding; the total amount came to 119 million euros. Funding for research programmes amounted to 41.3 million euros and for Postdoctoral Researchers to 41 million euros. Salary funding to Academy Research Fellows accounted for 27 million euros and to Academy Professors for 7 million euros. In addition, Academy Research Fellows and Academy Professors received 33 million euros in funding for their research costs.

International membership dues (e.g. CERN and ESO) totalled 22 million euros and the value of international agreements of cooperation came to 5 million euros; see Table “Finland’s membership dues to international organisations paid by the Academy in 2012”.

Academy funding for research infrastructures amounted to over 10 million euros. A total of 6.5 million euros was awarded to research infrastructure projects under the national roadmap, the Integrated Carbon Observing System (ICOS) project and the biosciences project cluster (EATRIS, BBMRI and ELIXIR).

In 2012, Academy spent 10 million euros to support the FiDiPro programme. Funding was awarded for twelve projects undertaken by top-level visiting FiDiPro Professors. Seven of these FiDiPro projects started up in
2012 and five in early 2013. Over the years, the Academy has made funding decisions to support a total of 48 FiDiPro projects and 42 FiDiPro Professors. In 2012, there were 30 ongoing FiDiPro projects; one of the projects launched in 2010 has been discontinued prematurely.

The Administration Office’s total expenditure in 2012 was 15.6 million euros, 0.6 million euros less than the year before. Personnel expenditure accounted for 65.1% of total expenditure.

The key indicators are available on our website at www.aka.fi/eng > About us > The Academy > Presentation material.
In 2012, there were twelve ongoing Academy-funded research programmes. All these programmes were either internationally networked, or they involved international research projects. Academy research programmes were supported by 22 foreign funding agencies from 16 different countries, all representing the Academy’s strategic partner countries and organisations. In addition, nine domestic funding agencies were involved in funding four research programmes. Four public funding agencies contributed their own funds to support Academy research programmes. Funding was also received through businesses and foundations. Under its research programmes, the Academy provided funding to support research projects affiliated with the thematic areas of two Strategic Centres for Science, Technology and Innovation.

The Academy awarded a total of 41.3 million euros to support six research programmes, including three new programmes: Programmable Materials (OMA), Human Mind (MIND) and Sustainable Governance of Aquatic Resources (AKVA). The former two received 10 million euros each and the AKVA programme 11 million euros. In addition, continued funding worth 10.3 million euros was made available to three ongoing research programmes, i.e. Health and Welfare of Children and Young People (SKIDI-KIDS), Climate Change (FICCA) and Sustainable Energy (SusEn).

The Board of the Academy announced its decision to launch preparations for two new research programmes in the areas of learning, knowledge and skills and Arctic research. It is expected that through global research collaboration, these programmes will be able to provide plausible and relevant answers to current questions facing science and society.

The Academy’s multidisciplinary research programmes address issues related to the grand challenges faced by society. Research programmes provide new impetus and direction for research in strategic subject areas. They bring together scientists and researchers from different fields, end-users of research evidence as well as research funding agencies into a network of long-term cooperation. In this setting their aim is to establish long-term scientific and social impact.

The Academy established a thematic research network in the energy field. This network serves as a social media service where users can exchange views on developments and research in the energy field. There were two other active networks in the field of climate change and materials research and the Russia Action Plan. The materials research network was designed closely with Tekes, the Finnish Funding Agency for Technology and Innovation. These networks contribute to strengthening the Academy’s strategic areas of research focus and bolster the impact of Academy-funded research in public policy-making and other ways of using research knowledge.

Scenario and foresight workshops were organised in two research programmes. Foresight is an important part of the Academy’s own evaluations of completed research programmes: the purpose is to look into the future and to identify possible areas of future research inquiry. Foresight also provides important support for programme planning as well as valuable information for researchers and other stakeholders in the field and for interested members of the audience.
CENTRES OF EXCELLENCE

Centres of Excellence in Research (CoEs) are considered the flagships of Finnish scientific research. In all, from 2000 to 2012, there have been 98 Centres of Excellence appointed and funded by the Academy. The fifth Academy-coordinated CoE programme was launched in 2012. The programme is scheduled to run through to 2017, and during the programme's first three-year term, funding worth a total of 45 million euros is made available for 15 CoEs.

There were 33 Centres of Excellence in ongoing CoE programmes in 2012: 18 centres in the 2008–2013 programme (€56.3m/6 yrs) and 15 centres in the 2012–2017 programme (€45m/3 yrs).

In 2012, the Academy opened the call for the sixth CoE programme in 2014–2019. A total of 128 letters of intent were submitted. Based on international peer reviews, the Board of the Academy decided to invite full applications from 34 CoE candidates. These applications will be reviewed during spring 2013. The decisions on the new CoEs will be made at the Academy Board meeting in summer 2013.

The Academy’s Centres of Excellence are creative and target-oriented research communities at the international cutting edge. Working to a clear and challenging research vision, they reinvigorate and reorient research, develop creative research environments and train talented researchers for Finnish academia and business. CoEs comprise one or more leading-edge research teams that are based at universities and government research institutes and that collaborate with businesses.

The Academy’s CoE programmes facilitate the formation and work of research consortia and promote the achievement of scientific breakthroughs. Furthermore, they support collaboration and the use of unique approaches at the interface of scientific disciplines and research fields. CoE programmes help make better use of research infrastructures, contribute to the national and international networking of CoEs, promote the social impact of scientific research and improve the quality standards, international competitiveness, visibility and esteem of Finnish research.

The Academy has had good success in achieving these objectives, as is reflected in the views of scientists and researchers working at different Centres of Excellence. Their opinions are compiled in a 2012 brochure called In the forefront of science. One of the comments from the CoE in Cell-Extracellular Matrix Research was as follows: “This system has worked excellently, providing young scientists a chance to spread their wings in an inspiring but challenging environment. We are a very active, brave and knowledge-hungry bunch of people.”

“The different perspectives within the group complement one another. Our aim is to become a world-leading research centre in this field,” was one of the comments from the CoE in Russian Studies.

Staff at the CoE in Computational Nanoscience had the following comment: “We have managed to build up an exceptionally broadly based team of leading-edge computational science experts. At the same time, the large size of our CoE means we are in the position to allocate a large number of researchers to address a specific issue from very different perspectives and using different approaches.”

Finally, from the CoE in Biological Interactions Research, the following comment: “We are now in the position to take a longer-term focus and tackle even tougher challenges. We can even take risks now – something without which many genuinely new innovations would never happen.”

In 2012, work was started to collect and compile data for the final evaluation of the 2006–2011 CoE programme. The evaluation will also reflect the views of scientists and researchers working at these CoEs.

STRATEGIC CENTRES FOR SCIENCE, TECHNOLOGY AND INNOVATION

In 2012, the Academy awarded a total of some 52 million euros in various funding schemes to support research affiliated with the thematic areas of Strategic Centres for Science, Technology and Innovation. The Academy increased the number of researchers involved in the work of strategic centres and in this way helped strengthen the centres’ contribution to science and research.

A targeted call was announced for the thematic areas that come under strategic centres with a view to improving the opportunities of researchers working in key strategic areas of universities and research institutes. Apart from considerations of quality, special focus was given on the weight and relevance of the research and on the added value it can generate. Funding was made available to two subject areas: novel control methods and user interfaces, and the new bioeconomy chemicals, materials and production technology based on innovative forest biomass use. The themes were developed in close consultation with the centres. The value of applications submitted totalled 35 million euros. Following international peer reviews, the decision was taken to award 8 million euros to support research within the thematic areas of strategic
centres. Funding was granted to six research consortia and eight research projects relating to the thematic areas of four strategic centres. The consortia involved are quite multidisciplinary: one single consortium may involve projects or project components from several different strategic centres.

Researchers filing applications with the Academy can take direct contact with the strategic centre relevant to their research subject in order to obtain a statement affirming the importance of cooperation. At the same time, this provides the centres with an opportunity to establish useful collaboration with high-level researchers and research projects. Most strategic centres take advantage of this opportunity. Research projects that had obtained statements from one or more strategic centres received Academy funding worth a total of 21.4 million euros.

The Academy contributed to developing the strategic centres and together with Tekes conducted an international evaluation of the centres.
INTERNATIONAL ENGAGEMENT

EUROPEAN UNION

Within the European Union, major emphasis was placed on the role of research and innovation, with persistent calls for increased efficiency in resource use in these areas. The European Commission urged all stakeholders in the research field to contribute to building a stronger European Research Area (ERA) for the future. Both the Commission and five European umbrella organisations in the research field stressed the importance of cooperation by signing a joint declaration on the advancement of the ERA.

The Academy of Finland worked actively to promote the ERA objectives both through its own efforts and as a member of two declaration signatories, i.e. Science Europe and NordForsk.

Negotiations were in full swing on the EU Framework Programme for Research and Innovation Horizon 2020 for 2014–2020. The Academy contributed to the preparations for this programme at both national and EU level. Under the ongoing 7th Framework Programme for Research (FP7), the Academy had national responsibility for two Specific Programmes and six subprogrammes:

- Cooperation: Health; Environment and climate change; Socioeconomic sciences and humanities
- Ideas: European Research Council (ERC)
- People: Marie Curie
- Capacities: Research infrastructures; Science in society; and International cooperation.

The Commission published a policy paper on EU research collaboration with non-member countries, which received much attention. The Academy held the position of chair of the Strategic Forum for International Science and Technology Co-operation (SFIC) under the Council of the European Union.

JOINT PROGRAMMING INITIATIVES

The first strategic research agendas were developed under the European Joint Programming Initiatives (JPI). Implementation of these programme initiatives will constitute a significant joint effort in the coming years. The Academy was involved in the first JPI funding call for Neurodegenerative Disease Research (JPND) and for Agriculture, Food Security and Climate Change Research (JPI FACCE). The Academy also joined WatEuR, the coordination and support action for the JPI on European water research (Water JPI).

ERA-NETS

In 2012, the Academy was involved as partner or observer in 16 ERA-NET or ERA-NET plus networks and as partner in two INCO-NET networks.

In 2007–2012, Finnish research teams involved in ERA-NET consortia have received some 20 million euros in Academy funding. In 2012, Finnish researchers received funding through three ERA-NETs: ERA-AGE, ERA-NET NEURON and ERA.Net RUS.

ERA-NETS are networks of national research funding agencies that are funded under the EU Framework Programme and intended to promote cooperation among national research programmes. Once Commission funding has expired, ERA-NETS are set up as independent funding networks or as part of the Joint Programming scheme.
ERA.Net RUS announced a call for research projects with a view to creating long-term research collaboration between EU Member and Associate Countries, on the one hand, and Russia, on the other. A further objective is to create a sustainable programme concept based on joint funding. The pilot call comprised four thematic areas. It attracted interest from twelve countries and 20 organisations, seven of which were from Russia. A total of 212 proposals were received, and 183 of them met the application criteria. Finnish teams were involved in 44 projects. Funding was granted to 31 projects, which included six research consortia with Finnish teams onboard. Two of these consortia are coordinated by a professor based in Finland. Overall, the two-year projects received 6.87 million euros in funding. The Academy allocated 1.04 million euros to the call. Project funds were also received through the INTAS programme: these monies were allocated to the participating funding agencies in proportion to the amount of funding they had granted. The Academy’s INTAS share was 282,560 euros, which is used to complement the funding granted to the participating Finnish projects. These projects funded through the call will be integrated as part of the Academy’s Programmable Materials Research Programme.

The Academy signed an agreement confirming its participation in the ERAfrica Interfacing Challenges call in 2013. This decision was facilitated by the allocation of 150,000 euros from the Ministry for Foreign Affairs of Finland and by the Finnish Cultural Foundation’s decision to team up with the Academy. Tekes, the Finnish Funding Agency for Technology and Innovation, will be participating in the parallel ERAfrica Renewable Energy call. ERAfrica’s Finnish member is the Ministry of Employment and the Economy, which is represented in the project by UniPid.

**EUROPEAN SCIENCE FOUNDATION AND SCIENCE EUROPE**

The European Science Foundation (ESF) continued to wind down its activities. There were further departures of member organisations, forcing the ESF to restructure its operation. All ongoing research and networking programmes and other ESF collaborations will continue to the end of their terms, but for the time being no new programmes or other collaborations will be launched.

The Academy continues to remain a member of the ESF and is involved in ESF activities. Since 2001, the Academy’s research councils have been involved in 24 EUROCORES Programmes launched by the ESF, providing funding to the Finnish research teams involved in the consortia. Overall, project funding to date has totalled some 10 million euros. In addition, the research councils have provided funding for some 40 ESF Research Networking Programmes (RNPs). The Academy’s funding to RNPs is around 300,000 euros per annum.

The Academy has been involved in ten ESF Member Organisation Fora, which have been set up to discuss current and important European-level science policy and science administration issues and to develop new forms of collaboration. A report was published on the forum’s work under the title *Evaluation of publicly funded research*.

In 2011, European research funding agencies joined forces in a new organisation called Science Europe. Science Europe’s role is to provide strategic direction to European science policy, but it does not finance research. The members of the organisation are major public research funding agencies and research institutes in their respective national science and research systems. The Academy of Finland became a member at year-end 2011.

Science Europe has appointed members to scientific committees on the recommendation of its member organisations, published declarations concerning the ERA, set up working groups to address science policy and research cooperation issues, and recruited staff.

**EUROPEAN RESEARCH COUNCIL**

The Academy of Finland provided information on upcoming European Research Council (ERC) calls and supported successful applicants. Interview training was organised for researchers shortlisted for the second round of the ERC Starting Grants (StG) call. In addition, the Academy awarded 1.4 million euros in incentive money to eleven researchers who had done well in the previous call but who did not receive funding.

Projects conducted in Finland and those planned for implementation by Finnish researchers abroad had notable success in the latest ERC calls. ERC funding was granted to eleven researchers originating in Finland. In addition, a second Proof of Concept (PoC) grant was awarded to Finland for the commercialisation of a research idea.

In all, ERC funding has been granted to 54 Finnish projects, of which 35 have received Starting Grants and 19 Advanced Grants.
NORDIC COUNTRIES

NORIA-NETS

In 2009–2011, NordForsk launched several NORIA-net projects in which the Academy was involved with other Nordic research funding agencies. Completed projects have led to more far-reaching cooperation, such as the Nordic eScience Globalisation Initiative (NeGi) and the Nordic Research Infrastructure Network (NRIN).

No new major NORIA-net projects have been set up of late, but NordForsk uses the NORIA-net concept as a background tool in its strategy-making as well as in strategy implementation.

The latest NORIA-net is called NORIA-net Arctic, which has been set up to coordinate preparations for a research programme in Arctic areas. The Academy is involved in this initiative that will run with NordForsk funding for about one year before the actual research programme starts up.

NORDIC CENTRES OF EXCELLENCE

There was just one ongoing Nordic Centre of Excellence Programme (NCoE), i.e. NCoE Welfare.

The Academy contributed to funding and implementing the Nordic Top-Level Research Initiative (TRI). Launched in response to an initiative by the Nordic Council of Ministers, TRI represents the biggest ever joint Nordic investment in climate, environment and energy research and innovation activities. Six NCoEs, several research networks and a number of research projects are funded through six separate thematic programmes. The budget for the five-year initiative is 50 million euros.

FOCUS COUNTRIES

CHINA

New ways have been discovered to support the cultural and social research carried out at Chinese and Finnish universities. The Academy of Finland announced a joint project call in the field of comparative law for researchers based at universities and units under the Chinese Academy of Social Sciences (CASS). The CASS contributed to financing the projects in which its own researchers were involved, but in joint university projects only Finnish partners were eligible to receive funding. The comparative law call attracted 17 applications. Funding worth just over 2 million euros was granted to two CASS cooperative projects and to two university cooperative projects.

The Academy entered into talks with European funding bodies in the field of cultural and social research, discussing their joining a China joint project call.

The Academy had cooperation with the National Natural Science Foundation of China (NSFC) particularly in the fields of health, medicine and forestry research. The joint call in the forestry field attracted 18 Finnish-Chinese applications.

In 2012, the Academy funded a total of 19 Finnish-Chinese research projects, including the previous years’ calls.

Academy funding for researcher mobility to China was less sought-after than before, although Taiwan attracted considerable interest.

INDIA

The Indian Council for Medical Research (ICMR) and the Academy signed a new agreement of cooperation. The Academy continued its bilateral funding cooperation with two departments under the Indian Ministry of Science and Technology. The Department of Biotechnology (DBT) and the Academy announced a joint call in the field of synthetic biology as part of the Academy’s Synthetic Biology Research Programme. Discussions were also held with the Indian Department of Science and Technology (DST) on future areas of cooperation. In connection with its cooperation with India, the Academy also awarded researcher mobility grants.
The Academy contributed to the work of the Finnish India network involving research and innovation stakeholders, and to the innovation working group under the Finnish-Indian science and technology agreement.

In the India working group under the EU Council’s Strategic Forum for International S&T Cooperation (SFIC), the Academy contributed to drafting a strategic research agenda, to planning EU cooperation with India, and to preparations for a European-Indian research and innovation conference.

The Academy was involved in the network project among European and Indian research funding agencies. The New Indigo ERA-Net hosted the EU-India S&T Cooperation Days, which showcased the joint water research projects that had received funding. Finnish researchers were involved in two projects.

JAPAN

The Japan Science and Technology Agency (JST), Tekes and the Academy announced a joint project call on ICT applications in the field of medical and health sciences. The Academy received eleven Finnish-Japanese applications.

Together with the Japan Society for the Promotion of Science (JSPS), the Academy decided to award almost 1 million euros to support four Finnish-Japanese research projects in the biosciences and environmental research field. In addition, the Academy and the JSPS agreed to gradually revert to the cycle of annual joint calls so as to ensure a more equitable distribution of funding opportunities among researchers in different fields.

In 2012, the Academy funded a total of 19 Finnish-Japanese research projects, including the previous years’ calls.

Academy funding for mobility grants to Japan was less sought-after than before.

LATIN AMERICA

The Brazilian Council for Scientific and Technological Development (CNPq), the Chilean National Commission for Scientific and Technological Research (CONICYT) and the Academy organised a joint call under the Research Programme on Sustainable Energy. With its Brazilian partner, the Academy awarded a total of 3.3 million euros to support eight four-year joint projects. In the Chilean cooperation, funding was awarded to five four-year joint projects, in which the Academy’s funding contribution is around 2 million euros.

The São Paulo Research Foundation (FAPESP) and the Academy signed an agreement of cooperation. The first areas of cooperation comprise biodiversity and the sustainable use of natural resources, and on the other hand, materials research in electronics, photonics and ICTs. The joint calls will be opened during 2013.

The Academy started as Finnish contact point for the Brazilian government’s student and researcher mobility programme (Science without Borders), taking specific responsibility for the mobility of doctoral students and postdoctoral researchers. Under this programme, the Brazilian government will be sending 100,000 degree students and researchers to foreign countries.

NORTH AMERICA

The Academy, Tekes and the US National Science Foundation (NSF) opened two new virtual institute calls (Science Across Virtual Institute, SAVI). The virtual institute Wireless Innovation between Finland and US (WiFiUS) that had received excellent reception was followed by a new WiFiUS call. Furthermore, the three agencies organised a SAVI call on learning and education innovations. The SAVI concept will help the NSF strengthen international research collaboration and researcher networks.

The Academy and Tekes have participated in the NSF Graduate Research Fellowships Programme, under which American GRF scholars have been able to apply for positions at Finnish Centres of Excellence and on Academy Professors’ teams. The Academy has dedicated funds to support this activity.

REPUBLIC OF KOREA

Cooperation between Korea’s National Research Foundation (NRF) and the Academy got underway after prolonged preparations. A joint project call was announced in the fields of nanoscience and ICT. The application, review and decision process was completed during 2012.

A total of 27 applications were submitted to the call, with a good spread across different themes. The Academy awarded funding of around 1 million euros to four joint projects, one of which was a consortium of two Finnish partners. The focus in the projects concerned is on carbon nanotube thin-films, atomic layer deposition and interference and energy efficiency in wireless networks.
RUSSIA

The Academy’s partners in Russia are the Russian Foundation for Basic Research (RFBR) and the Russian Foundation for the Humanities (RFH). With the RFBR, the Academy conducted talks on the organisation of a joint seminar and joint call in the field of geosciences, and with the RFH on a joint call under the Academy-funded Research Programme on the Human Mind. The talks also touched upon a research programme on the Arctic.

The Academy continued to provide support for researcher mobility between Finland and Russia under the agreement signed between the Academy and the Russian Academy of Sciences.

The Academy contributed to the implementation of the ERA.Net.RUS project, which involves several science funding organisations from EU countries as well as the RFBR, the RFH and the Russian Academy of Sciences. A pilot call was opened in March 2011 in the ERA.Net.RUS project, to which the Academy contributed through the intelligent materials research theme with the RFBR, the RFH and the Russian Academy of Sciences. A total of 212 applications were submitted from 22 countries, and the funding decisions were made in May 2012. Finnish research teams are involved in 44 projects, and Finnish partners have the coordination of 14 projects. Funding was granted to 31 projects, six of which involve Finnish teams. The Finnish projects that were funded through the call were integrated as part of the Academy’s Programmable Materials Research Programme.

The Academy took part in preparations for an extension to the ERA.Net RUS plus project together with 25 funding organisations, and in the IncoNet EECA project, which was focused on developing cooperation and dialogue on science and technology between the EU, Eastern Europe and Central Asia.

SOUTH AFRICA

The National Research Foundation (NRF) of South Africa and the Academy hosted a workshop focusing on research on children and young people and prepared a joint call for research projects. Applications were received from 20 joint consortia from the two countries, with at least one application going to each of the four Academy Research Councils. Furthermore, Finnish researchers in all fields had the chance to apply for mobility funding related specifically to research infrastructures in South Africa.
In 2012, the Academy of Finland awarded 64.7 million euros to support research in biosciences and the environment.

In the September 2011 call, the Research Council for Biosciences and Environment received more than 400 applications for Academy Projects and research posts. The applications were reviewed in nine international panels, two of which were appointed jointly with the Research Council for Culture and Society. Some 70 experts from 20 countries were involved in these panels.

The Research Council bases its funding decisions primarily on criteria of high scientific quality. Other science policy criteria espoused by the Academy are also considered, such as the extent of interdisciplinary collaboration, international cooperation and the promotion of young researchers’ careers. In preparing its funding decisions, the Research Council takes account of the fields of research that the applications represent. Keen to promote the benefits of long-term continuity, the Research Council always seeks to ensure that applicants receive adequate overall funding, allowing them to carry out their research plans as detailed in the application, both in its original and in its reviewed form.

Through its funding for Academy Projects, the Research Council encourages researchers to embrace scientifically ambitious projects, to search for real breakthroughs and to take genuine scientific risks. The Research Council provides funding for four-year Academy Projects of the highest scientific standards and involving researchers at PhD level. In 2012, funding was awarded to 34 projects and 36 applicants. One-fifth or 20% of the applications were funded, with the total amount of funding reaching 21.2 million euros. On average, the Research Council covered 73% of overall project costs.

The Research Council’s funding for research posts as Academy Research Fellow is dedicated to support young, promising researchers with the drive and capacity to constantly reinvent themselves. From the very outset, the Research Council gives its Academy Research Fellows the opportunity to carry out their research plans by awarding adequate project funding for the duration of their term.

The Board of the Academy allocated resources for the Research Council to finance 13 research posts as Academy Research Fellow. The Research Council granted funding worth 5.9 million euros for 15 research posts as Academy Research Fellow, persisting with its policy of giving most support to highly qualified researchers on the third tier of their research career. Evaluations focused especially on supporting talented researchers on a consistent career path. Other key considerations were the researcher’s suitability to the research post of Academy Research Fellow and the ability to perform in the role of research team leader. Close to one-third or 29% of Academy Research Fellows are foreign nationals.

A total of 8.2 million euros was awarded to finance 27 research posts as Postdoctoral Researcher. As well as assessing the proposed research plans and the applicants’ scientific qualifications, the experts reviewing the applications and the members of the Research Council took account of the researchers’ international and national mobility as well as their growth to independence during the Postdoctoral Researcher term. It is the Research Council’s view that international experience and the creation of networks of cooperation both at home and abroad is often crucial to carving out a successful research career.
The international evaluation of Finnish ecology and evolutionary biology described the standard of research in this field as excellent. Researchers in this field have had excellent success in getting competitive research funding both at home and internationally. In 2006–2010, the value of Academy funding decisions totalled 65.4 million euros, and in 2012 the figure came to 16.1 million euros. Finnish ecologists have also received significant funding from foreign sources, including the ERC in 2009–2012.

RESEARCH COUNCIL FOR CULTURE AND SOCIETY

In 2012, the Academy of Finland awarded 79 million euros to support research in the fields of culture and society.

The Research Council for Culture and Society had the interesting task of undertaking preparations for a new Academy Professorship in 2012. Established by the Academy, the new Martti Ahtisaari Academy Professorship is dedicated to the field of peace research and international conflict management. Based on the Research Council’s submission, the Board of the Academy appointed to the post Professor Jan Klabbers from the University of Helsinki. During his tenure, Professor Klabbers will be working to develop the ethics of global governance.

Another important achievement in 2012 was the completion of fast-track preparations for the debt and debt relations targeted call in the autumn. This call is a good example of the Research Council picking up on a current idea coming from the research community and turning that idea into a targeted call. The multidisciplinary call is focused on the economic, political, cultural, legal and social factors associated with debt and debt relations.

The Research Council also had excellent success with its preparations for the Human Mind Research Programme in the field of cultural and social research. The human mind is investigated from various angles in a number of different disciplines of science and art. The research programme brings together the fragmented research field, promotes interaction and dialogue between the various disciplines, supports the national and international networking of researchers and guarantees that the field is well placed to achieve the highest international standards. It supports multidisciplinary research into the human mind and adds to our understanding of how the healthy mind grows and develops and how the unhealthy minds can be supported and eventually fixed.

The Research Council also contributed to planning international research programmes and to opening new calls. The Humanities in the European Research Area (HERA) network announced a call on the subject of Cultural Encounters, and the Norface network (New Opportunities for Research Funding Co-operation in Europe) a call for the Welfare State Futures Research Programme.

The Research Council for Culture and Society received 797 applications for Academy Projects (incl. targeted calls) and for research posts. Work has been continued to upgrade and develop both the Research Council’s and Research Unit’s practices and review processes. In line with the Academy’s general principles, project applications are reviewed by discipline-specific evaluation panels consisting of internationally recognised researchers. There are several smaller disciplines under the Research Council’s purview where the limited number of applications or other reasons have made the idea of discipline-specific panels unviable. Following the 2010 reform of the Academy’s funding schemes and application timetables, it has been possible to appoint new review panels in such fields as archaeology, law, cognitive neuroscience and women and gender studies. The Research Council has also advocated the use of multidisciplinary or transdisciplinary review panels insofar as this has been justified in view of the range of applications received. Examples include the panel for educational and developmental psychology and the panel for theology and religion research.

The Research Council was actively involved in preparing the review of the state of scientific research in Finland 2012, which was published in late 2012. The review produced an abundance of new ideas in the fields of humanities and social sciences research, providing a sound basis for further deliberations by the Research Council. It was particularly interesting that despite the diversity and even difference between the fields of research that come under the Research Council’s purview, researchers identified similar features and needs in the changing operating environment and in the development of doctoral training. Interdisciplinary and multidisciplinary exchange have increased. Many fields have witnessed increased international engagement both in their practical activities and in publishing. The increased social impact of research was another aspect that received a positive assessment.

RESEARCH COUNCIL FOR NATURAL SCIENCES AND ENGINEERING

In 2012, the Academy of Finland awarded 104 million euros to support research in natural sciences and engineering.

The Research Council for Natural Sciences and Engineering granted over 31 million euros for promoting the qualifications of researchers in research posts as Post-doctoral Researcher, Academy Research Fellow and Academy Professor. Some 41.5 million euros was channelled to research projects that earned high ratings in international peer reviews.

The Research Council devoted special focus on promoting international and national research collaboration
and on foresighting future needs. It awarded more than 1 million euros to support Finnish participation in five international research infrastructures in the fields of space physics, geosciences, mathematics and astronomy. In its funding decisions, the Research Council also took account of ongoing major science projects. In 2012, it awarded 6.5 million euros to support Academy Projects benefiting from major international research infrastructures, including CERN, ESA, ESO, ESRF, IODP, ICDP, ITER and MaxLab. In the area of international research infrastructures, the Research Council also continued to work closely with Nordic research funding organisations. Finland has signed the international Antarctic Treaty, which requires that Finland undertake significant research in the Antarctic or on research materials sourced from the Antarctic. Based on this Treaty, the Research Council awarded 2.5 million euros in 2012 to support Antarctic research. All of the funded projects are based on international cooperation.

The Research Council conducted an international discipline assessment of physics. In 2004–2012, the Research Council has granted 45 million euros to support Academy Projects in the physics field as well as some 40 Academy Research Fellows and 100 Postdoctoral Researchers.

The Research Council supported investigator-driven research by granting 32.7 million euros in support of Academy Projects. More than 80% of these projects were scheduled to run for four years. Almost 40% of the projects funded and over 30% of the volume of funding went to consortia of two or more research projects, usually involving partners from different research organisations. The average amount of funding awarded to individual research plans came to 540,000 euros. Average consortium funding was 960,000 euros.

Wireless data transfer and nuclear technology research, both areas of critical importance to Finland’s future, received 6 million euros in funding from the Research Council. The projects funded under the targeted wireless data transfer call are aimed at scientific breakthroughs that will result in more efficient use of the frequency spectrum or the development of higher frequency bands for wireless data transfer. Key areas of nuclear technology research included the development of new types of nuclear reactor and promoting the safety and reliability of nuclear power plants.

**RESEARCH COUNCIL FOR HEALTH**

In 2012, the Academy of Finland awarded 55 million euros to support health research.

The Research Council for Health emphasised the role of general project funding in supporting leading-edge research and maintained its strategic focus on promoting clinical research careers. Every opportunity was taken to highlight the deteriorating funding situation in health research, which was primarily due to cuts in special government allocations to university hospitals. The Research Council repeatedly drew attention to the fact that health research fields receive only a small proportion of Academy funding despite their prominence and significance and high visibility and quality.

The Research Council’s decisions on the allocation of research grants were based on criteria of scientific quality and aimed at supporting high-level projects in as many different disciplines as possible. The Research Council’s aim was to promote diverse investigator-driven research with a strong ability to renew and reinvent itself.

A Nordic evaluation of sport sciences was completed in 2012 and planning was started with the Research Council for Culture and Society and the Ministry of Education, Science and Culture on how to implement its recommendations. In response to a Research Council initiative, preparations were started for a discipline assessment of pharmacy, although start-up was postponed until 2015.

The Research Council for Health joined forces with the Research Council for Culture and Society to submit a proposal for the launch of a research programme on life-course and ageing. However, the elaboration and implementation of this initiative were postponed to a later date. The Research Council contributed actively to ongoing research programmes, seeking to influence their contents and give the themes of health research maximum exposure.

The Research Council continued its efforts to strengthen the position and visibility of science through its active involvement in the project to review the state of scientific research in Finland 2012. Among the various stakeholders in the sector, the Research Council had particularly close collaboration with the Finnish Medical Society Duodecim, with which it hosted a consensus meeting on old age.

On the international scene, the Research Council was active both in its collaboration with the Nordic countries and the EU and in its bilateral collaboration with China and India. In the context of Nordic cooperation, the Research Council stepped up its efforts by contributing to the work of the Joint Committee of the Nordic Medical Research Councils (NOS-M) and by preparing for Finland’s upcoming chairmanship of the committee in 2013–2015. The Research Council contributed to European funding cooperation by participating in ERANETs (ERA-AGE2 and ERA-NEURON2) and in the Joint Programming Initiative on Neurodegenerative Diseases, JPND). There was also increased cooperation between the Academy and the Indian Council of Medical Research (ICMR) based on a new agreement of cooperation.
Evaluation

Good Results in Review of State of Scientific Research

The Academy of Finland completed its review of the state of scientific research in Finland 2012. The first part of the report discusses the impact of Finnish research and the second looks at the strengths and areas of improvement in individual disciplines. The report *The State of Scientific Research in Finland 2012* also includes development recommendations for individual disciplines. The third part is a thematic analysis of the state of Finnish science in selected areas of research concerned with the grand challenges faced by society. The key areas of development identified in the review concern the recruitment of students and researchers, incentives for international and national mobility, securing the position of basic research, developing new initiatives and lines of scientific inquiry and high-risk research, and continued efforts to restructure the higher education system.

The Academy started preparations for the next review of the state of scientific research.

Discipline Assessments

Two international discipline assessments commissioned by the Academy were completed in 2012. The assessments of both ecology and evolutionary biology research and physics research included an abundance of conclusions and recommendations that will be useful both to the Academy and to Finnish universities and research institutes.

Finnish ecology and evolutionary biology received excellent reviews in the international evaluation, which comprised 14 research units. All these units turn out high-level research: in some cases Finnish research is at the very cutting edge internationally. The work that is done has a very high scientific impact and its results have practical application both in local community planning and in the prevention and resolution of major global environmental problems. One reason why the scientific standards in this field are so high is that it has long enjoyed a strong following among young Finnish students. Research teams have access to a highly motivated and talented pool of undergraduate and postgraduate students. The high standards are also reflected in the large number of foreign students and researchers.

The international evaluation of physics research conducted by the Research Council for Natural Sciences and Engineering concludes that the standard of physics research in Finland is high and that the research field covers all the core areas of international research interest. However, Finnish physics research should also have the ability to renew and reinvent itself and to discover new research subjects. At a national level, Finland should avoid developing and supporting virtually identical activities in different units. Physics is one of the most heavily financed disciplines in the field of natural sciences and engineering.

The joint Nordic discipline assessment of sport sciences was published in 2012. Nordic research in this field is of a very high standard, but the quality of work varies widely between research units, countries and research fields. Measured in terms of publication numbers, the strongest area of Nordic research is medical and health research. A total of 97 sports science units, institutes or research teams based at uni-
versities, hospitals and research institutes in Norway, Finland, Sweden, Denmark and Iceland were included in the discipline assessment. The fields of research were divided into three main groups: basic and applied biological research, medical and health sciences, and social and behavioural sciences.

**FORESIGHT**

Work was started in preparation of a report on Finnish society’s long-term choices. The Government of Finland will issue a report to Parliament in the autumn session 2013. The Prime Minister’s Office will take charge of preparing the report. One part of this report will involve a foresight project.

The Academy of Finland, Sitra, the Finnish Innovation Fund, Tekes, the Finnish Funding Agency for Technology and Innovation, and the Ministry of Employment and the Economy are all assisting the Prime Minister’s Office in the execution of the necessary foresight activities. The first part of the foresight project was completed in spring 2012. This includes a breakdown into six themes that will be examined in order to unravel the issues regarding the future of sustainable growth and welfare in Finland.

Alongside these preparations, an Academy-funded research project is underway where an international team of researchers are exploring the changes unfolding in the world economy as well as sustainable growth solutions. The second part of the foresight project started in summer 2012.

**IMPACT**

The impact of scientific research and the Academy’s work is manifested over the long term. The Academy applies a variety of tools to determine the impact of both science and research and its own work and is therefore involved in impact evaluation projects and in directing the future choices of Finnish society.

Conducted jointly by the Academy and Tekes, the impact assessment of research and innovation in Finland (VINDI) was introduced to the Research and Innovation Council. One of the project’s outputs is a publication *Better results, more value. A framework for analysing the societal impact of research and innovation*. Tekes and the Academy are continuing work to develop impact indicators and to build up related skills and knowledge.

The Research Council for Natural Sciences and Engineering monitors the impact of the projects it has funded through research reports. When in 2007 the Research Council allocated funding to the development of intelligent products and processes in the forest industry, for instance, the projects that were completed in 2012 reported a total of 15 invention reports and ten patent applications, which is an exceptionally high figure compared to average Academy Projects.
The Academy of Finland’s Administration Office had a staff of 140 at the end of 2012. During the year, this number fell by 7.3%. Women accounted for 70.7% of personnel. The average age of Academy personnel was 48.3 years. The proportion of staff with a higher university degree was 60.7%. Doctorate or equivalent-level tertiary education was the single largest category (33.6%).

Job satisfaction surveys suggest that some of the most important strengths in the Academy workplace are the high standard of immediate supervisor work and access to support from immediate supervisors, high levels of job autonomy and influence over job contents, opportunities to reconcile work, family and private life, and a positive climate in the workplace. Results from the assessments of supervisor performance in the workplace were consistent with the findings of the latest job satisfaction survey. Supervisor performance remains at a very high level, even though scores were slightly lower than in the previous year. An important strength of supervisor and management performance at the Academy is that supervisors are committed to their job role and that they trust their employees. Furthermore, supervisors are easy to approach. In the future, it is important that focus is given to promoting a proactive orientation and organisation, to ensuring an equitable distribution of job tasks and to preventing excessive workloads. The importance of supportive and encouraging feedback in conformity with the objectives set out was also stressed.

The Academy hosted two events where all staff members were involved in updating the Academy’s strategy and strategy implementation plan. The strategy is concerned with the quality of the Administration Office’s services and with improving cost efficiency. The aim is to consolidate the Academy’s pioneering role as an attractive employer with the capacity to constantly reinvent itself, to ensure that its practices and processes are both high quality and efficient and that the climate in the workplace inspires its skilled and motivated staff.

The Academy’s updated strategy formed the basis for the Administration Office’s human resources plan, which was drawn up in compliance with the Government’s Effectiveness and Productivity Plan. The strategy also ties in with the Academy’s human resources strategy whose key areas of development include staff competencies and human resources planning, wellbeing at work, and supervisor and management work.

A more strategic and longer-term approach was adopted in human resources planning in view of the current economic climate and consequent redundancies. Active efforts were continued to promote physical and mental wellbeing in the workplace. The Academy joined forces with the National Board of Education and CIMO, the Organisation for International Mobility and Cooperation, to launch a joint mentoring programme.

The International Relations Unit was closed down and its staff were reassigned to work in other units within the Academy’s organisation.
NAMES & LISTS

ACADEMY BOARD
ACADEMY MANAGEMENT
RESEARCH COUNCILS
ACADEMY PROFESSORS
FIDIPRO PROFESSORS
ACADEMICIANS
RESEARCH PROGRAMMES
CENTRES OF EXCELLENCE IN RESEARCH
NORDIC CENTRES OF EXCELLENCE
ERA-NETS AND INCO-NETS
EUROCORES

The information is available on our website at