

#### RESEARCH FUNDING AND SCIENCE POLICY

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#### Research Funding

- I. Operating environment
- II. Forms of funding
- III. Funding decisions
- IV. Application processing

V. Researcher mobility



### **Academy of Finland**

- Promotes high-quality scientific research
- The Academy's operation covers all scientific disciplines
- An expert organisation on research funding
- Provides funding for research with around 200 million euros annually
- Academy-funded projects account for a total of some 5,300 person-years



### **Academy of Finland**

### Mission statement

Promotion of welfare, culture and the national economy by means of science

- promotes high-quality scientific research
- by long-term quality-basedfunding allocated for a fixed period, reliable evaluation, science policy expertise, and global cooperation
- strengthens the diversity of research and its capacity for renewal
- increases public understanding of science, raises its esteem and strengthens its position in society



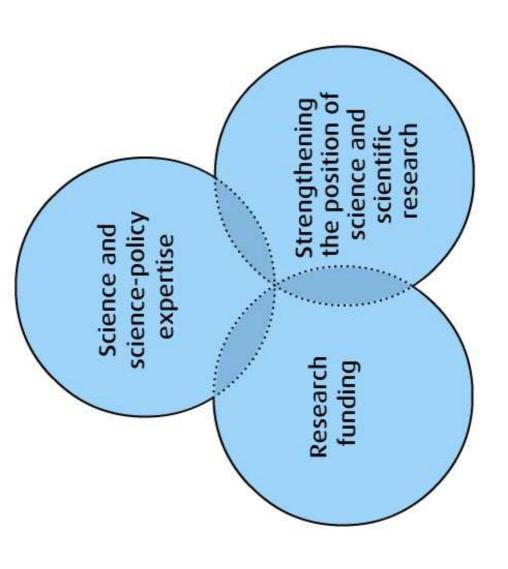
# Academy of Finland's operating environment

#### Finland

- Finland continues to implement its future strategy based on knowledge and know-how
- University research has a key role
- Public and private investments in research
- The challenge is to ensure the viability of the research system and a sufficient supply of competent professional researchers

## Operations by task area

## Academy of Finland's task areas





## Operations by task area

## Science and science policy expertise

- Science policy strategies
- Review of applications
- Evaluations and improvement of indicators
- Surveys and statements
- Cooperation with national and international science and research funding organisations
- Science policy publication series



## Academy's priority areas

- Supporting the development of innovative research environments
- Promoting professional careers in research
- Advancing gender equality in research
- Strengthening international cooperation and interaction



## Public R&D funding actors

#### Parliament

Science and Technology Policy Council

Government

Ministry of Education

Ministry of Trade and Industry

Other Ministries

National Technology Agency, Tekes

Sitra Fund

Academy of Finland

Universities and government research institutes

Business enterprises and private research institutes

## Academy of Finland organisation 1

#### Board

Research Council for Biosciences and Environment

Research Council for Culture and Society

Research Council for Natural Sciences and Engineering

Research Council for Health

Administrative Office



## Academy of Finland organisation 2

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Board	President
Boar	■ Presid

Two members appointed by the Council of State

Chairs of Research Councils

Research Councils Chair, 10 members	Administration Office President	
<ul> <li>Research Council for Biosciences and Environment</li> </ul>	Vice President (Research)	Vice President (Administration)
<ul> <li>Research Council for Culture and Society</li> </ul>	<ul> <li>Bioscience and Environment</li> <li>Research Unit</li> <li>Cultures and Society</li> </ul>	Administration Unit Services Unit
<ul> <li>Research Council for Natural Sciences and Engineering</li> </ul>	Natural Sciences and     Engineering Research Unit	<ul><li>Communications Unit</li><li>Information</li></ul>
<ul> <li>Research Council for Health</li> </ul>	■ International Relations Unit	Management Unit  Finance Unit



# Research Council for Biosciences and Environment

# Research Fields Hosted by the Research Councils

- Biochemistry
- Microbiology
- Genetics
- Ecology, biosystematics and biophysiology
- Forest sciences
- Agricultural sciences
- Food sciences
- Research into substances hazardous to the environment
- Reseach relating to the state of the environment and to environmental protection
- Geography and regional studies
- Research relating to environmental policy, environmental economics and environmental law
- bioinformatics, and economic and technological relating to the above fields Biotechnology, molecular biology, cell biology, biophysics and of research



# Key forms of Academy of Finland research funding

- General research grants
- Research programmes
- Centre of excellence programmes
- Research posts of Academy Professor and Academy Research Fellow
- Grants to postdoctoral researchers
- Research training
- Other support





## The stages of the career

- Researcher training stage
- Postdoctoral research stage
- Stage of becoming independent/established researcher



## Researcher training stage

- Subsidy to graduate schools and researcher training courses
- Research grants (project funding, research programmes etc.)
- Grants for researcher training and research abroad
- Doctoral studies of employed persons



## Postdoctoral research stage

- Grants to postdoctoral researchers
- Grants for researcher training and research abroad
- Research grants (project funding, research programmes, etc.)
- Start-up money for young persons



# Gaining independence and established researcher

- Academy Professorships
- Academy Research Fellow posts
- Grants to senior scientists
- Research grants (project funding, research programmes etc.)
- Centre of excellence programmes



## General research grants

- Major form of Academy research funding
- Funding granted to high-level researchers and research teams
- for hiring research and other personnel
- for acquisition of material and equipment
- for travel and seminar costs etc.
- Priority given to research teams composed of both senior researchers and doctoral students



### Research programmes

## General science policy objectives

- To develop research environments
- To coordinate scattered research capacities
- To promote multidisciplinarity, interdisciplinarity and where possible transdisciplinarity
- To develop national and international cooperation between researchers, funding bodies and end-users of research results
- To promote researcher training and professional careers in research



### Research programmes

## A research programme is composed of a number of research projects that

- are focused on a defined subject area or set of problems
- are financed for a fixed period of time and
- have a co-coordinated management.

A research programme is the joint effort of researchers, funding bodies and end-users of research results.



## International research programmes

## A platform for international cooperation

- possibly even whole programmes to the international research community. The Academy shall take steps towards the wider international networking programmes and towards the opening up of programme components or of national research programmes, towards jointly funded research
- The Academy shall be well-placed to take part in and contribute financially to programmes run by foreign funding bodies.
- according to current needs. The choice of partners in cooperation shall be Programme initiatives from foreign funding partners shall be prioritised based upon needs for cooperation.
- researchers in European and other international research programmes. The Academy shall support in various ways the participation of Finnish
- The Academy shall participate in ERA-NET projects and submit new ERA-NET initiatives on an active basis.

## Centres of excellence in research

#### **Objectives**

- To create the information base required for cultural, social and industrial development
- To create a solid base for a national innovation system
- Consists of factors affecting the development and use of new information and expertise
- CoE programme must be integrated into the Finnish research, training and technology policy, including sectoral research, and as applicable, enterprises
- To lay the foundation for the emergence of creative and efficient research and training environments that can generate top international research



## Centres of excellence in research

## A centre of excellence is a research unit

- Being at (or close to) the international cutting edge of research in its field
- Having distinctly common research objectives and a common management
- Training new researchers in the field
- Consisting of one or more research teams of high international standard

#### Research posts

- Academy Professor (39 posts\*)
- has proved to be a talented researcher and can contribute to the progress of research within his/her field of research
- leads his/her own research team and supervises junior researchers
- appointed for a maximum term of five years at a time or for an indefinite time
- the Academy also awards research grants
- Academy Research Fellow (238 posts\*)
- considered as merits in the filling of an Academy Research Fellow successful postdoctoral research and scientific publishing are
- the post is intended for independent scientific work according to a research plan
- work duties include teaching and supervision associated with their research work
- appointed for a maximum term of five years at a time
- the Academy may also award research grants

\*(1 Aug. 2004)



### Researcher training

#### The Academy

- Funds research projects including PhD students working on their doctoral theses
- Supports national researcher training courses
- Grants funding to postdoctoral researchers with the aim to advance professional competence and independence of young researchers
- Funds researcher training abroad
- Supports doctoral studies of employed persons



## Other support to research

- Subsidy for a researcher's return to Finland
- Subsidy for organising seminars and conferences
- Support to scientific societies
- Bilateral researcher exchange
- Preparation of international research projects





## Academy research funding

#### General

- Based on competition
- Granted to the best researchers and the most promising young researchers
- the applicant and the research proposal and on science policy lines Decisions on research funding based on careful scientific review of
- Long-term funding granted for a fixed period



## Academy research funding

### Applications in 2003

- The Academy received applications worth 841.6 million euros
- The Academy made funding decisions worth 184.4 million euros
- Research councils processed 5,053 applications
- Several times more applications received than could be funded out of the Academy's resources
- → Exclusion of many high-quality projects from Academy funding
- Heavy demands on selection procedure

## **Model of application processing**

#### 1. INITIAL PROCESSING

- registration of applications to Research Councils
- selection of experts

#### 2. PEER REVIEW

- a joint statement by a panel of experts, or
- a written statement, usually from two Finnish or foreign experts

## 3. PROCESSING BY THE RESEARCH COUNCIL

## A. Preparatory processing by drafting groups

- Council members and any outside experts needed go through the applications and statements obtained
- each group lists the applications in order of preference

### B. Processing by the executive group

Council members prepare a proposal for the projects to be funded

### C. Decision by the Research Council

- the Council decides upon funding within its research appropriation budget
- a written decision sent to all applicants, list of grants published on the Academy's web site



# Assessment criteria applied by the Academy

#### Criteria

- Scientific quality and innovativeness of the research plan
- Competence of the researcher / research team
- Feasibility of the research plan
- National and international cooperation partners
- Significance of the research project for the promotion of professional research careers and for researcher training
- The Academy's other research policy objectives



# Other criteria for research funding decisions

- Development of innovative research environments
- Advancement of research careers, focus on women and young persons
- Promotion of gender equality in research
- Implementation of extensive research entities
- Special objectives of research programmes
- Support to centres of excellence
- Applications and the significance of research to end-users
- Principles of good scientific practice
- Research funding received from the Academy of Finland or from other sonices

#### Good application

- Read the guide for applicants and the call for applications every time
- What are you applying?
- Format of the research plan
- Abstract
- CV and publications
- Be realistic in the budget
- In english, please
- Research posts vs. other appropriations
- Send your application with all appendixs
- Don't hesitate to call to science adviser
- Comments from the reviewers (panelists / experts)

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V. Researcher mobility



# Support to researcher capacities and mobility

- The objective is to raise the quality of research by e.g. promoting the international mobility of researchers
- Researcher mobility funded by means of
- support to research and studies abroad
- research projects
- research programmes
- centres of excellence programmes
- bilateral agreements
- ERA-CONNECT: the European Mobility portal and national Mobility portals



#### **ERA-NET**

## **ERA-MORE AND CONNECT**

- ERA-MORE is the European Network of Mobility centres
- CONNECT is the Finnish national Mobility project
- Partners in CONNECT: Academy of Finland and University of Helsinki
- and personal assistance to foreign researchers coming to Finland as well The CONNECT-Finland project provides up-to-date practical information as to Finnish researchers going abroad or returning
- The project aims at developing the provision of information to researchers about job opportunities and research funding possibilities within the ERA
- http://europa.eu.int/eracareers. and the national pages: The European Researcher's Mobility portal: www.aka.fi/mobility
- Budget 199,992 €, 2003 2006



- International agreements
- treaties
- bilateral agreements between the Academy of Finland and foreign organisations
- agreements with 27 countries and regions and 39 foreign organisations
- a good platform for other types of cooperation (e.g. joint programmes) in addition to researcher exchange, agreements also provide
- Implementation
- researcher exchange
- project, programme and centre of excellence cooperation
- exchange of peers for scientific evaluations
- seminars, workshops



## Academy's bilateral agreements

- Old and new EU Member States and Associate Countries (e.g. Bulgaria, Czech Republic, Estonia, France, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, Switzerland)
- NIS countries (Belarus, Russia, Ukraine)
- Asia (China including Taiwan, India, Iran, Japan, Republic of Korea)
- Other countries (e.g. Argentina)
- Negotiations under way (e.g. Brazil, Chile)



# Cooperation forms in bilateral agreements

- Forms of cooperation involved in bilateral agreements:
- Researcher exchange, some agreements include invitation money (28 agreements)
- Project cooperation (23)
- Programme cooperation (2)
- Peer reviewer and panellist cooperation (16)
- Researcher training, researcher training courses (11)
  - Exchange of information (24)

#### www.aka.fi/eng



#### News

13.09 - Academy of Finland Centre of Excellence doing research on mitochondrial diseases

Read more

#### In cooperation



Mobility of researchers

▶ Europe ▶ Finland





#### Press releases

31.08. - Academy of Finland September round for applications

**05.08.** - The Academy of Finland participates in a European network on pathogenomics

29.07. - New way of thinking in European science funding European Young Investigators Awards (EURYI) Scheme

Press archive

#### **Events**

≪ September 2004									
//eek	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
36			1	2	3	4	5		
37	6	7	8	9	10	11	12		
38	<u>13</u>	14	15	<u>16</u>	17	18	19		
39	<u>20</u>	<u>21</u>	22	23	<u>24</u>	<u>25</u>	26		
40	27	28	29	30					

Vilhonvuorenkatu 6, POB 99, FI-00501 Helsinki. Tel. +358 9 774 881, fax +358 9 7748 8299

## The Researcher's Mobility Portal Finlan

## >> The Pan-European Researcher's Mobility Portal



search here for career opportunities and other relevant If you are a researcher planning your stay in Finland information and assistance

What's new? | Site map

>> EU site

#### ✓ Organisations

Find ideal candidates Organisation Opportunities Registration

- N Researchers
- Researchers Registration
- Search for research opportunities

10

- Mobility centres and information offices International Finland
- Women in Science
- Research landscape

Research.fi



Questions and feedback





ACADEMY OF FINLAND

This site is maintained by the Academy of Finland

#### Research Funding

- Research funding in Finland
- Academy of Finland
  - Tekes
    - Sitra
- OMD
- Others

### Financing possibilities for foreign researchers



#### Job opportunities

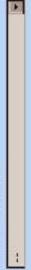


#### Research policy

- Finland

- Good scientific practice

#### Finnish universities



#### Research institutes



#### Finnish business partners

#### Practical Information

· General and practical information

Read this

- Contact persons
- About this site

#### Researchers coming to Finland

- Working and legal issues
  - Studying
- Accommodation and housing
  - Living

### Finnish researchers going abroad

- Practical information
- **European Mobility Centres**

#### Facts about Finland

- Introduction
  - History
- Society and institutions
  - Economy and industry
- Culture
- Climate
- Towns and municipalities
- Practical links
- Disclaimer



#### INFORMATION ON FINNISH SCIENCE

#### AND TECHNOLOGY







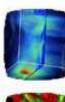






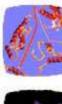












IMPORTANT STATISTICS, DOCUMENTS, PUBLICATIONS, INTERNATIONAL COMPARISON DATA

#### Finnish innovation system Finnish technology policy Finnish science policy

#### Input

International research cooperation Cooperation with business and Government R&D funding Research and technology Centres of excellence Researcher mobility Researcher training R&D expenditure R&D personnel programmes industry

### Performance, impact, quality

Finland's competitiveness Scientific publication Doctoral degrees High technology Evaluation nnovation Patents

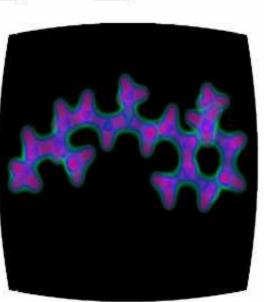
#### Higher education, research institutes

Research institutes Polytechnics Universities

#### technology information service to the Finnish science and Welcome

Research.fi contains key statistics and other information: statistical and other publications, data on Finnish science and technology. There are also links for more in-depth documents and databases.

description of development of Research.fi. This service is jointly maintained and developed by several authorities. A



Total electron density of a retinal molecule joined to the rhodopsin protein

#### Suomeksi | Svenska

#### What's new

#### Ministry of Trade and 22.9.2004 Industry

Facilitates the Activities of Agreement with China Finnish Companies in A Technological China

#### 6.8.2004

echnology significant decisions to invest in underlying factor in Finland

#### Ministry of Education

Finland becomes 11th ESO member state



## More information on the Academy



- Academy of Finland Research Funding: Guide for Applicants
- Calls for application
- Brochures and the Annual Report
- Academy of Finland publication series
- The magazine ProAcademia
- Newsletters

