



ACADEMY OF FINLAND
RESEARCH FUNDING AND EXPERTISE

Reviewing breakthrough, high risk and interdisciplinary research proposals

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Academy of Finland in brief

- The Academy's tasks
 - to promote scientific research and its application
 - to develop international scientific cooperation
 - to act as a science policy expert
 - to provide funding for scientific research and other promotion of science
- In 2007, the Academy provides 260 million euros in funding for high-level scientific research
- **The Academy's operations cover all scientific disciplines**
- Each year some 5,000 people benefit from Academy research funding



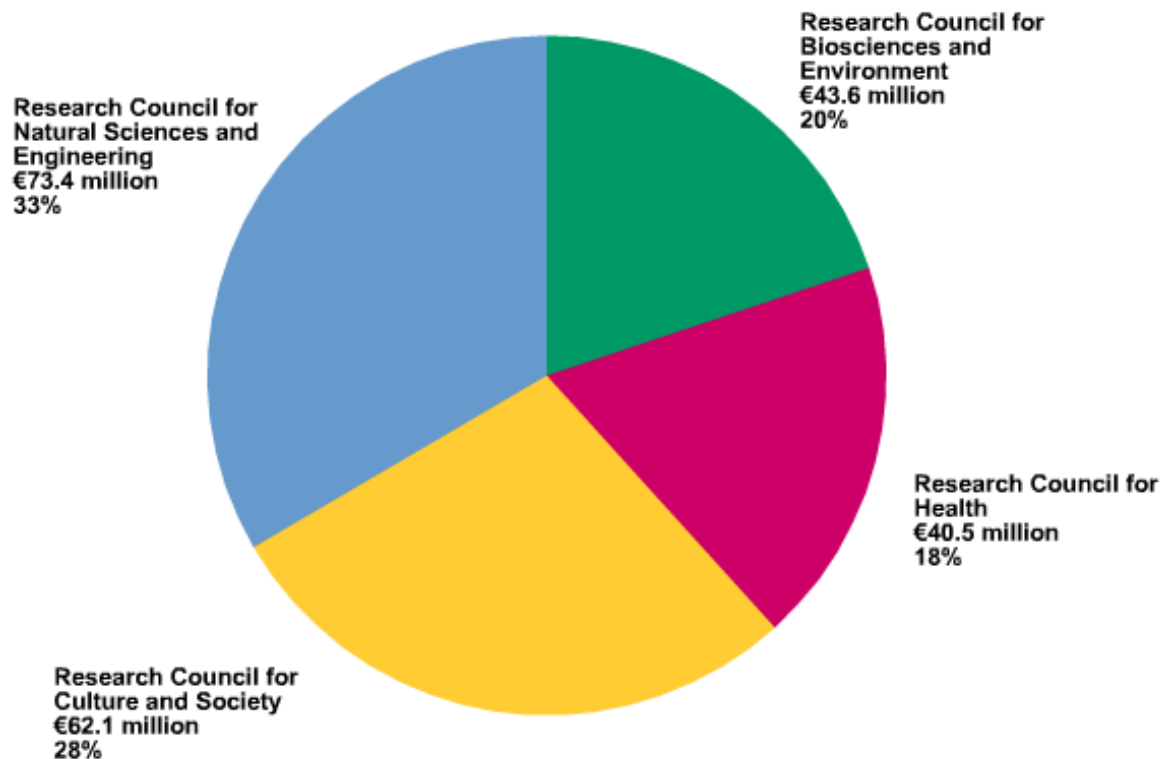
Academy's strategic means

- Research funding
- Developing the research career
- Strategic partnerships
- Significance and visibility of science
- Impacts of research
 - All disciplines
 - **Interdisciplinarity, diversity and renewal**
 - High scientific quality
 - Long-term monitoring

Research programmes

- A research programme is focused on a defined subject area or a set of problems, financed for a fixed period, and has a coordinated management
- A research programme generates added value in comparison to project-based separate funding
- Research programmes have special science policy objectives, such as
 - **to promote multidisciplinary and interdisciplinarity**
 - to develop national and international cooperation between researchers, funding agencies and end-users of research results
 - to piece together scattered research capacities
- Research programmes as promoters of international cooperation
 - international networking of programmes
 - co-funded international programmes
 - opening up of whole programmes or programme elements to the international research community

Funding decisions among Research Councils in 2006



Total €220 million



Breakthrough research

Funding of high-risk research at the Academy of Finland 4/07

- Criteria: particular scientific innovativeness, conscious risk-taking and breakthrough potential
- Academy funds projects containing significant risks
 - 1/10 of all proposals and 1/5 of the projects receiving funding could be identified as breakthrough research
 - Half of the identified breakthrough research proposals were funded
 - No specific funding scheme
- General Research Grants 2008: in the peer review specific emphasis on
 - Is the project breakthrough research containing risks and does it have potential for exceptionally significant outcomes?
 - Does it have potential for innovations?





Promoting interdisciplinary research

The Case of the Academy of Finland 8/05

Recommendations on **research policy**

- Strengthening and actively publicizing Academy's current research policy promoting integrativeness and interdisciplinarity.
- Modifying Academy's funding schemes with the aim of promoting interdisciplinary research.
- Intensifying Academy and Tekes' efforts to forge collaborative thematic research programs and funding procedures. In addition, engagement in international interdisciplinary research programs.
 - Comprehensive evaluation of thematic research programs.



Promoting interdisciplinary research

The Case of the Academy of Finland 8/05

Recommendations on **monitoring**

- Developing indicators for monitoring institutional for interdisciplinary research
- Monitoring of interdisciplinary research as key element in Academy's international benchmarking activities
 - Long-term systematic evaluation
- Ombudsman for interdisciplinary research in each research council



Promoting interdisciplinary research

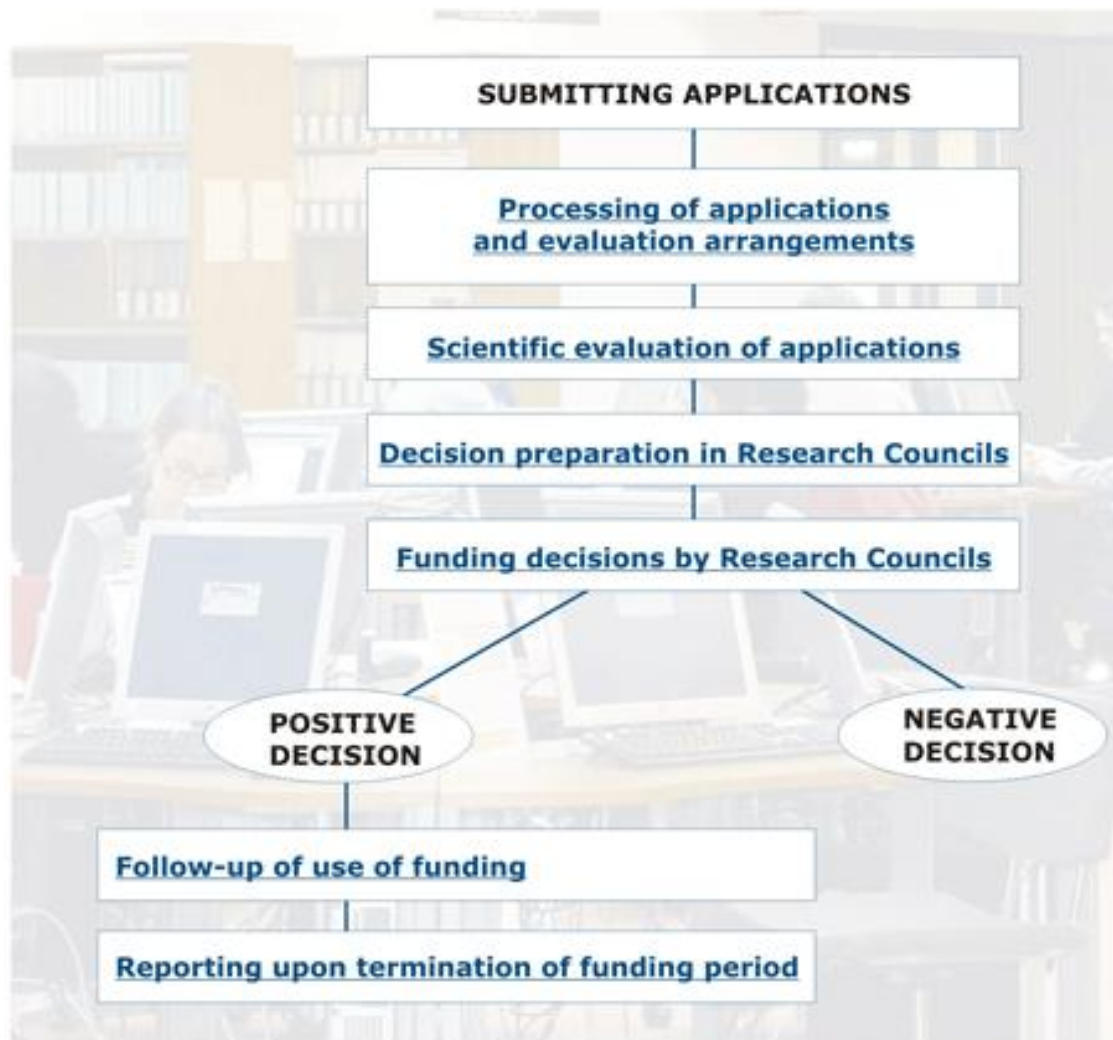
The Case of the Academy of Finland 8/05

Recommendations on **evaluation**

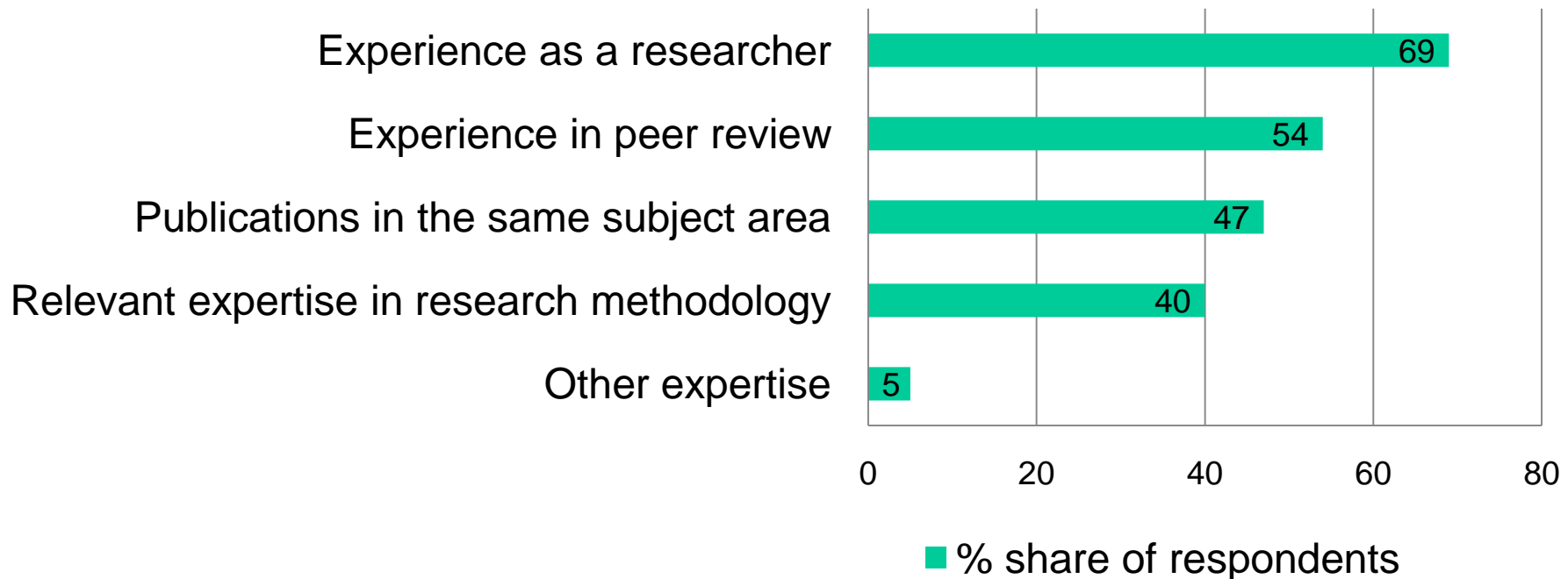
- Increasing collaboration in the planning and assessment of research.
- Interdisciplinary innovativeness as an explicit guideline for applicants.
- Developing interdisciplinary evaluation procedures, research processes, and research capabilities.
- Revising assessment criteria of research proposals with the purpose of rewarding interdisciplinary research.
- Interdisciplinary experience of reviewers



Application processing - one-stage call



Expertise of panel members considered important in the evaluation of the scientific quality of a research plan. You may select at most two alternatives. (N = 92)



Source: Customer Survey 2 (Health Research), Academy of Finland 2007.



Evaluation criteria

- Scientific quality and innovativeness of the research plan
- Competence of the applicant/research team
- Feasibility of the research plan
- Research contacts
- Significance of the research project for the promotion of professional careers in research and for researcher training
- Other research policy objectives adopted by the Academy



Example: General Research Grants, January 2008 call

Call text:

- The Academy encourages researchers to draft ambitious research plans that cross discipline boundaries and are aimed at new scientific breakthroughs.
- ‘The Academy also welcomes applications from research projects related to the Strategic Centres for Science, Technology and Innovation (one centre, the forest cluster, has been launched).’

Factors affecting funding decisions

Academy's research policy objectives

- Advancement of research careers of women and young people
- National and international mobility of researchers
- Development of innovative research environments
- Internationalisation of research
- Implementation of larger research entities
- Promotion of gender equality in research

Funding instrument-specific objectives

- Special objectives of research programmes
- Support to Centres of Excellence in research
- Strategies and focus of Research Councils, e.g. in targeting funding

Other factors

- Quality of the research environment
- Funding received from the Academy or from other sources
- Applicants' ability to manage research funds
- Good scientific practice (incl. ethical issues and IPRs)