Academy of Finland – overview of strategic and operational activities

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Public research funding in Finland

Parliament

- Ministry of Education, Science and Culture
  - Academy of Finland
    - Universities
  - Tekes – the Finnish Funding Agency for Innovation
    - Government research institutes
- Ministry of Employment and the Economy
- Other ministries
  - Research and Innovation Council

Government
Government research funding in 2015

- **Universities** 29%  
  €578 million
- **Universities** 29%  
  €578 million
- **Government research institutes** 13%  
  €256.2 million
- **University hospitals** 1%  
  €21.7 million
- **Other research funding** 12%  
  €242.8 million
- **Academy of Finland** 21%  
  €415.6 million
- **Tekes** 24%  
  €488.2 million

Source: Statistics Finland 26 Feb 2015
Recent changes in the operational environment

**Inside the research system**
- University reform 2010
- Restructuring the government research institutes (2013)
  - Merging some of the units
  - Increasing collaboration with universities
  - Fraction of base funding reallocated to open competition
- Evaluation of the Academy of Finland (2013)
  - New law: restructuring the board; strategic research council
- Universities are encouraged to profile
  - New funding instrument

**External drivers**
- Open science
- Economical development
Public funding of research and higher education in Finland in 2015, millions of €

Two new funding instruments:

- Ministry of Education and Culture: 280 + 55
- Academy of Finland: 50
- Other ministries: 260
- Tekes: 526
- Universities: 1900
- Polytechnics: 900
- Gov. research institutes: 50
- Companies: 526

Source: Academy of Finland
What’s new?

- Changes in science itself
  - Open science, open innovation; grand challenges; new research areas; infrastructures

- Changing role of science in society
  - Emphasis on the role of data and evidence in decision making
    - New funding instrument in the Academy of Finland

- Need for modernization of universities
  - New funding instrument in the Academy of Finland
  - Supporting focusing / profiling of research actions at the universities
Supporting the focusing actions at the universities

- 14 universities in Finland with many small departments
- Clearer profiles for the universities are needed

- A single university cannot do everything
- It does not have to do everything
- Whatever is done, should be done well
Supporting the focusing actions at the universities

- Competitive funding for the universities for focusing actions
- What they plan to do and what they plan to not do
- Proposals evaluated by an international panel, decisions by the Academy of Finland

- First round of funding in 2015
- 50 million € – about 3 % of the direct university funding
- The nudge effect is very strong

- Has encouraged strategic planning, division of labour and cooperation between the universities considerably
Strategic research funding

- Funding for science support for policy and solution-oriented work
- Foundation for scientific advice
- Competitive funding, 55 million € per year
- 3+3 year projects; interaction with the users crucial
- First themes:
  - Disruptive Technologies and Changing Institutions
  - A Climate-Neutral and Resource-Scarce Finland
  - Equality in Society
- Evaluation in two stages
  - Relevance and scientific quality; separate panels
  - First decisions in September 2015, 16 large consortia selected
Evaluating and foresighting science and research

Reviewing the state of scientific research in Finland

- Regular reviews facilitate long-term monitoring of research and disciplines at Finnish universities and provide a basis for science policy.

Impact assessment and indicators

- Understanding and finding mechanisms for the impact of research
- Case studies and data analysis
- Impact in science, society, economy

Foresight activities

- National foresight forum bringing relevant actors together
- Academy foresight instruments in programme planning
Publication proportion per disciple and university
Academy of Finland in the national research, education and innovation system

**Academy of Finland, core activities**

Evaluation process

Academy funding figures
Academy of Finland

• The name is misleading: the Finnish Research Council

• Main task: competitive research funding
• Evaluation procedures: ERC-like

• Researchers apply for funding: 4000 applications per year
• Applications evaluated by international panels (about 1000 experts)
• Decisions made by four research councils
• Acceptance rate 8-18 %
Academy of Finland and relation to key stakeholders

- Ministry of Education and Culture
  - Annual negotiations, agreement on goals
  - Collaboration in research policy; based on information from data
- Universities and other research organisations
  - Facilitating discussions
  - Interaction in refining Academy’s funding instruments
- Tekes
  - Continuous common planning activities at various levels
  - New funding collaboration initiatives, e.g. connecting commercialisation with top-level research
Decision-making at the Academy

The Finnish Government

Ministry of Education, Science and Culture

Board of the Academy of Finland

Research councils
1 chair, 10 members

Finnish Research Infrastructure Committee

Research Council for Biosciences and Environment
Research Council for Culture and Society
Research Council for Natural Sciences and Engineering
Research Council for Health

Strategic Research Council
Our organisation

Administration Office

- President
  - Vice President for Research
  - Vice President for Administration
  - Executive Director of Thematic Research Funding

Planning and Management Support Unit

General research funding

- Biosciences and Environment Research Unit
  - Administration Unit
  - Finance Unit
  - Information Management Unit
  - Communications Unit

- Culture and Society Research Unit

- Natural Sciences and Engineering Research Unit

Thematic research funding

- Health Research Unit

- Academy Programme Unit

- Strategic Research Unit
Our forms of funding

For research
- Academy Projects
- Targeted Academy Projects
- Research programmes
- Centres of Excellence

For researchers
- Postdoctoral Researchers
- Academy Research Fellows
- Academy Professors

For research environments
- University profiling
- Research infrastructures
- FiDiPro
Research infrastructures

- Tasks of the FIRI Committee at the Academy of Finland:
  - monitors and develops Finnish and international research infrastructure activities
  - submits proposals (every five years) on long-term research infrastructure plans
  - selects and monitors research infrastructure projects

- Finland’s Strategy and Roadmap for Research Infrastructures 2014–2020

- Academy funding for research infrastructures €17 million in 2014, €16.7 million available in 2015
  - Membership fees
  - Roadmap infrastructures
  - New initiatives
International activities

Supported in all Academy funding opportunities:

- Academy Projects
- Academy Programmes, CoE Programmes
- Academy Research Fellows, Postdoctoral Researchers

Opportunities for international engagement:

- Finland Distinguished Professor Programme (FiDiPro)
- Research mobility based on bilateral agreements
- Joint project calls with foreign funding agencies

Scientific infrastructure cooperation:

- Finland’s membership in international research infrastructures
- Partnership and membership in ESFRI research infrastructures
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Academy of Finland, core activities

**Evaluation process**

Academy funding figures
# Review and evaluation

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<th>Research projects</th>
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<td><strong>Programmes</strong></td>
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<td>- research programmes</td>
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<td>- Centre of Excellence Programmes</td>
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**International peer review**

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<th>Disciplines or research fields</th>
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**Research system**

- review of the state of scientific research in Finland
- development of impact assessment and indicators
- foresighting
Application processing – Who does what?

Presenting officials handle and process the applications.

International panels prepare scientific reviews (reports) on the applications.

The Academy’s research councils make the funding decisions based on both the panels’ reports and science policy lines.
The review process

Call for applications
- Open competition
- Several funding opportunities

Review panel
- Scientific review
- RATING

Research Council
- RANKING
- Funding decisions
Criteria used in reviewing applications

- Scientific quality and innovativeness of the research plan
- Competence of the applicant/research team
- Feasibility of the research plan
- Quality and strengthening of the research environment
- International and national collaborative contacts as well as researcher mobility
- Each year, the Academy enlists some 1,000 experts to review applications; foreign nationals account for about 95%
Factors influencing funding decisions

• Assessment of scientific quality

• The Academy’s objectives for research policy
  • foster multidisciplinary and interdisciplinary research
  • concentrate research into larger programmes
  • contribute to the internationalisation of research
  • advance the research careers of women and young people
  • promote gender equality in research
  • boost research relevant to Strategic Centres for Science, Technology and Innovation

• Instrument-specific objectives
  • consider special objectives of research programmes
  • support the establishment of Finnish Centres of Excellence

• Other factors
  • applicants’ ability to head a research project and manage research funds
  • good scientific practice a must (incl. ethical aspects and IPR issues)
  • open access
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**Academy funding figures**
Academy funding in 2014

- **Research environments 6%**
  - €17.0 million
    - Research infrastructures €17.0 million

- **Researchers 30%**
  - €96.0 million
    - Academy Professors €5.5 million
    - Academy Research Fellows €26.6 million
    - Postdoctoral Researchers €26.2 million
    - Research costs in research posts €28.8 million
    - FiDiPro €9.0 million

- **Research projects 57%**
  - €180.8 million
    - Academy Projects, incl. strategic funding by research councils €113.2 million
    - CoE Programmes €28.4 million
    - Academy Programmes €39.1 million

- **Other 7%**
  - €23.0 million
    - International membership fees €20.3 million
    - Researcher mobility €1.2 million
    - Project funding by Administration Office €1.5 million

Total €316.8 million
Academy funding in 2014, by site of research

- Universities and university hospitals: 82% (€261.2 million)
- Research institutes: 9% (€27.8 million)
- Foreign organisations: 7% (€20.9 million)
- Other sites: 2% (€6.9 million)
Thanks!