The evolution and aims of the Centres of Excellence Programmes

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Academy of Finland

THE CALL INFO FOR CENTRES OF EXCELLENCE PROGRAMME 2022-2029, 02.04.2020, Helsinki
Academy research funding in 2000–2019

Currently approximately 30 million euros per year for the CoE program

Total in 2019 €469.8m

These figures also include funding for support functions of research funding. The increase since 2015 is mainly attributable to new funding schemes.
Funding decisions 2019, by funding opportunity

Funding for research environments and clusters
€117 million
- Centres of Excellence
- Research infrastructures
- Finnish Flagships
- University research profiling

Funding for researchers
€87 million
- Academy Professors
- Academy Research Fellows
- Postdoctoral Researchers
- Research costs in research posts
- Researcher mobility
- Clinical Researchers

Funding for research teams
€235 million
- Academy Project Funding, incl. international co-funding
- Academy Programmes, incl. international collaboration
- ICT 2023 programme
- Strategic Research Council (SRC) funding

Other funding
€30 million
- International memberships
- Application review, Academy Programme coordination, development & maintenance of funding information systems

26% Research funding in 2019
03/04/2020
The updated Strategy of Academy of Finland

Research funding and expertise

The Academy of Finland offers competitive peer-reviewed research funding and actively contributes its science policy expertise to advance the quality and impact of scientific research, support the renewal of science and develop research environments in Finland.
The Academy funds high-quality, high-impact and innovative research

• Academy research funding is open to application from all scientists and researchers. Our funding decisions are based on an international peer review process that is constantly being improved.

• **The single most important criterion for the Academy is the high quality of research.** International exchange and cooperation are crucial to high-quality research.

• Science renews itself in many ways, such as by identifying new research topics, creating new research communities and developing new approaches, concepts and methods.
The Academy funds high-quality, high-impact and innovative research

- Research has multiple impacts both within science and in the wider society.

- The channels, targets and timespans of these impacts vary. In many fields of research, impact is considered integral to scientific quality.

- Open science, data management and analysis and research infrastructures are gaining ever greater significance in almost all disciplines.
The Academy’s values and principles

• The core values guiding the Academy in all its activities are openness, transparency, reliability, equality and non-discrimination.

• Responsibility is a cross-cutting principle in the Academy’s operation as well as in all Academy-funded research.

• In the context of the Finnish research, education and innovation system, the Academy works closely with other stakeholders and the wider society.
Programme for Centres of Excellence in Research
Centres of Excellence and Competence Clusters*

- Basic idea of a Centre of Excellence has been in different countries to focus on fostering science and increase excellence.

- Competence clusters, such as the Flagships in Finland, are more complex systems and usually aim to achieve broader goals including both scientific excellence as well as economic and/or societal impact.

- Networking and collaboration are essential for the success.

*Science Europe High Level Workshop, Helsinki, 2019
## Success rates in CoE Programmes

<table>
<thead>
<tr>
<th>Programme</th>
<th>Plans of Intent</th>
<th>Full proposals</th>
<th>Nominated as CoEs</th>
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<tbody>
<tr>
<td>2000–2005</td>
<td>166</td>
<td>51 (31%)</td>
<td>26 (16%)</td>
</tr>
<tr>
<td>2002–2007</td>
<td>105</td>
<td>30 (29%)</td>
<td>16 (15%)</td>
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<tr>
<td>2006–2011</td>
<td>143</td>
<td>53 (37%)</td>
<td>23 (16%)</td>
</tr>
<tr>
<td>2008–2013</td>
<td>113</td>
<td>44 (39%)</td>
<td>18 (16%)</td>
</tr>
<tr>
<td>2012–2017</td>
<td>135</td>
<td>36 (27%)</td>
<td>15 (11%)</td>
</tr>
<tr>
<td>2014–2019</td>
<td>128</td>
<td>34 (25%)</td>
<td>14 (11%)</td>
</tr>
<tr>
<td>2018–2025</td>
<td>179</td>
<td>34 (19%)</td>
<td>12 (7%)</td>
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The CoE Programmes have been dynamic over time

• In early 2000 the intention was to nominate many CoEs to give boost to different areas of science.
• Nowadays the intention is to nominate less and give better funding for the nominated ones.

• The limitation has changed from
  • at close or at the top of the research field-> at the top -> at the close or at the top

• CoEs are always been co-funded by the Academy and the research organizations - the research organizations play an important role
# Programme for Centres of Excellence in Research

<table>
<thead>
<tr>
<th>Year</th>
<th>Type</th>
<th>Number of CoEs</th>
<th>Funding Amount</th>
</tr>
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<tbody>
<tr>
<td>1995–1999</td>
<td>17 CoEs</td>
<td></td>
<td></td>
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<tr>
<td>2000–2005</td>
<td>26 CoEs</td>
<td></td>
<td></td>
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<tr>
<td>2006–2011</td>
<td>23 CoEs, <strong>63.1</strong>M€</td>
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<tr>
<td>2002–2007</td>
<td>16 CoEs</td>
<td></td>
<td></td>
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<tr>
<td>2008–2013</td>
<td>18 CoEs, <strong>56.34</strong>M€</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014–2019</td>
<td>14 CoEs, <strong>97.5</strong>M€</td>
<td></td>
<td></td>
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<tr>
<td>2018–2025</td>
<td>12 CoEs, <strong>110</strong>M€</td>
<td></td>
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<tr>
<td>2022–2029</td>
<td><strong>New CoEs</strong></td>
<td></td>
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</table>

**Major operational changes**

- 2009 The funding level of the Programme was increased
- 2015 The duration of the Programme extended from 6 years to 8 years
- 2015 The scientific mid-term evaluation was added to the Programme
The Academy of Finland’s Centres of Excellence

- Centres of Excellence (CoE) are at close or at the very cutting edge of science in their fields.

- CoEs carve out new avenues for research, develop creative research environments and train new talented researchers for the Finnish research system and for Finnish business and industry.

- CoE consists of one or more research teams
- CoEs have common research objectives and management

Key words: raise the quality of research, renewal of science, broader impact and added value
Collaboration is increasingly important in the research process.

Multiple researchers or units are often needed to run a project and its various sub-components.

The complexity and interdisciplinary nature of new scientific questions strengthens this need for collaboration.

The increase of scientific and technological competition worldwide.

Grand and global challenges need to find solutions supported by the science and research.
Conclusions

• Since 1995, the Centres of Excellence programs have been tailored to best support the current and forecasted future and based on current science policy

• The original idea on fostering science and increase excellence by funding the development of research environments still remains valid

• With increasing global scientific competition, CoEs have even more important role as hubs of high-quality, high-impact and innovative research
Thank you!