



ACADEMY OF FINLAND

BOARD OF THE ACADEMY OF FINLAND

CRITERIA FOR FUNDING DECISIONS 2017–2018

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Contents

INTRODUCTION	3
1. FUNDING CRITERIA	3
1.1. Financial basis.....	3
1.1.1. Co-funding of research costs, full-cost model	4
1.2. Applying for funding	4
1.2.1. Call dates	4
1.2.2. Who can apply?	4
1.2.3. Funding to be applied, commitment by site of research	5
1.3. How funding is granted, used and reported	5
1.3.1. Granting and restrictions	5
1.3.2. Terms and conditions for use of funding.....	6
1.3.3. Changes to funding decisions.....	7
1.3.4. Reporting.....	8
1.4. Other science policy principles	8
1.4.1. Promoting the internationality of research.....	8
1.4.2. Open science.....	8
1.4.3. Equality and non-discrimination	9
1.4.4. Research ethics.....	10
1.4.5. Sustainable development	10
2. HOW APPLICATIONS ARE REVIEWED	10
2.1. Review principles	11
2.2. Review process.....	13
3. FUNDING INSTRUMENTS	14
3.1. Funding for researchers	14
3.1.1. Funding for research post as Academy Professor	14
3.1.2. Funding for research post as Academy Research Fellow	14
3.1.3. Funding for research post as Postdoctoral Researcher	16
3.1.4. Funding for research post as clinical researcher	16
3.2. Funding for research projects	17
3.2.1. Academy Project funding.....	17
3.2.2. Centre of Excellence Programme	18
3.2.3. Academy Programme funding.....	18
3.3. Funding for framework conditions for research and research environments	19
3.3.1. Funding for research infrastructures.....	19
3.3.2. Competitive funding to strengthen university research profiles	20
3.3.3. Flagship Programme	21
3.4. Special funding for international research cooperation	21
3.4.1. Funding decisions concerning co-funded research programmes	22
4. BACKGROUND INFORMATION	22

INTRODUCTION

The Academy of Finland's decision-making bodies are the Board, the subcommittees appointed by the Board, the research councils, the Finnish Research Infrastructure Committee (FIRI Committee) and the Strategic Research Council (SRC). This document describes the criteria for funding decisions made by all of these bodies except for the SRC. The SRC does apply the funding criteria defined in this document, except to the extent that it has adopted different criteria. The latest SRC funding principles were adopted on 12 December 2016.

This document contains the Academy of Finland's general policies for its funding criteria, the review principles and the funding opportunities on offer. Funding decisions by the Academy are accompanied by an appendix that elaborates on the funding criteria and that describes procedures, terms and conditions for the use of funding. This document and its appendices also include strategic principles for Academy research funding. The practical implementation of these principles is described in more detail in the Academy's General Conditions and Guidelines for Funding and in the latest call text. The Academy's funding activities are also guided by the Act and Decree on the Academy of Finland and by the Academy's Rules of Procedure.

The contents of this document apply to funding calls implemented between 1 September 2017 and 31 August 2018 and to funding decisions made based on such calls.

1. FUNDING CRITERIA

At the core of the Academy of Finland's activities is to provide funding to excellent scientific research. To support this mission, the Academy has a wide range of funding opportunities at the disposal of the Board, the subcommittees appointed by the Board, the four research councils, the Finnish Research Infrastructure Committee (FIRI Committee) and the Strategic Research Council (SRC). All funding decisions are made based on the applications submitted, and the funding is granted for a fixed term. The Academy sets objectives for the funding it grants and monitors the attainment of the objectives. The results of Academy-funded projects must be made public and they must be produced following good scientific practice. The Academy is committed to following the guidelines of the Finnish Advisory Board on Research Integrity and requires that all Academy-funded researchers and sites of research respect the same guidelines.

1.1. Financial basis

The state budget allocates a budget authority to the Academy of Finland (incl. the SRC) that gives the Academy the authority to commit to multi-year funding decisions. The state budget provides the Academy with funds for expenditure incurred from its budget authority use in the budget year and in previous years. In addition, the budget includes appropriations for the Academy's Administration Office, the funding of research infrastructures, the funding of one-year research projects, and the payment of membership fees to international organisations.

The Academy Board allocates the funds that make up the funding budgets of the Academy's research councils, the FIRI Committee and the subcommittees. When a subcommittee makes a funding decision,



it also notes to which research council and research unit domain at the Academy the funded project belongs.

1.1.1. Co-funding of research costs, full-cost model

The Academy of Finland's research funding is usually a form of co-funding in which the funds to finance the costs of a project always come from at least two sources. When Academy funding is applied for, universities, research institutes and other research organisations commit to the co-funded activity by contributing their percentage of the costs.

The Academy plays a proactive role in research funding cooperation with universities, research institutes, funding agencies and other actors both in Finland and abroad.

With some exceptions, the Academy's funding decisions are prepared, made and executed following the full-cost model (the exceptions are mentioned below). This affects the whole funding process from application to budget drafting, funding allocation, accounting and reporting.

Under full costing, the Academy's funding contribution normally comes to a maximum of 70 per cent of the total costs of a project. In the case of funding to strengthen university research profiles, the Academy's contribution comes to 100 per cent, whereby the applicant organisations need not contribute with their own percentage of the funding. The same applies to the funding granted by the SRC, where the funding contribution also comes to 100 per cent.

The full cost model is not applied to the cost calculation of salaries of Academy Professors and Academy Research Fellows nor to mobility grants based on bilateral agreements. Deviations from the full cost model are also possible in co-funded international calls in which the partners have determined joint financial administration principles for funded projects.

1.2. Applying for funding

1.2.1. Call dates

As a rule, the Academy of Finland has two main application rounds each year: September and April. Funding calls are opened under specific funding schemes as decided by the Administration Office.

The call deadlines are non-negotiable. The Academy will not process an application that has not been submitted within the set deadline.

1.2.2. Who can apply?

The person who applies for funding from the Academy of Finland is usually the principal investigator (PI) of the research project in question. The PI must be a researcher with a doctoral degree or a researcher at the professor or docent level, unless otherwise indicated in this document separately under each funding instrument. Funding for research infrastructures is applied for by a university or a research organisation. Funding to strengthen university profiles is applied for by a university.



In many Academy funding instruments, the applicant may be a consortium composed of several research projects. A consortium is a fixed-term body of subprojects that work under a joint research plan with a view to utilising systematic collaboration to generate greater added value than through normal project collaboration. The Academy treats a consortium application as one application and the funding decision is made by a single decision-making body.

1.2.3. Funding to be applied, commitment by site of research

In the funding application to be submitted to the Academy, the applicant must provide an estimate of the project's overall costs and a funding plan that shows the funding to be applied for from the Academy. The application must also include a commitment by the site of research (i.e. the applicant's host organisation, which commits itself to managing the funds granted) or the research infrastructure site. The commitment means that the site commits itself to funding the project with the percentage indicated in the funding plan. The application also includes the site's commitment to providing the project with the necessary basic facilities and the site's overheads percentage, indirect employee costs and coefficient for effective working hours. If the funding is regarded as a discretionary government transfer, the site of research undertakes to act as the recipient of the transfer on behalf of the applicant and will accordingly assume all related obligations.

In the case of applicants for funding for research posts as Academy Professor and Academy Research Fellow, the commitment by the site of research also applies to the use of the researcher's working hours for purposes other than research, and to salaries and other circumstances surrounding the researcher's work.

1.3. How funding is granted, used and reported

1.3.1. Granting and restrictions

The Academy of Finland grants fixed-term funding.

Academy funding is granted following the Finnish Act on Discretionary Government Transfers if the applicant or recipient is a non-governmental organisation (e.g. university, independent public institution, municipality, joint municipal authority, association, business, foundation, foreign organisation or private individual). Nevertheless, the Academy's funding conditions are the same irrespective of whether the case involves a central government organisation or a recipient of discretionary government transfers. As a rule, Academy funding is not granted to support economic activity. Economic activity is defined as all activity where goods or services are offered on an open market. Funding may be granted for economic activity only if it can be granted in keeping with the EU's state aid rules in the form of de minimis aid.

The Academy aims to make each funding decision so as to best support the implementation of the research project. The goal is to consider all financial needs of the project within the scope of the same decision. A research council, the FIRI Committee or a subcommittee may impose conditions for the funding. Normally, the Academy does not grant additional funding for the same funding period. All Academy funding decisions come with justifications.



When making funding decisions, the Academy may also draw up a reserve list of other high-quality applications. The list is valid until the end of the year in question.

Funding can be granted to one and the same applicant in only one of the following funding opportunities: funding for research post as Academy Research Fellow, funding for research post as Postdoctoral Researcher and Academy Project funding. As regards Academy Project funding, each applicant may receive only one favourable funding decision in the same application round. If an applicant does submit more than one application for any of these funding opportunities in the same application round, the Academy will only process and review the first application to arrive.

Directors, vice directors and team leaders of Academy-funded Centres of Excellence (CoE) cannot receive Academy Project funding during the first three years of the CoE term.

A researcher who has been granted funding for a research post as Postdoctoral Researcher can be granted partly overlapping funding for a research post as Academy Research Fellow only in special cases.

Academy research funding is granted to Finnish sites of research, unless there are special reasons for not doing so. The PI of the funded project must have a close connection with Finland to support the implementation of a multi-year project.

1.3.1.1. Salary of principal investigator

Academy funding for research projects (Academy Project funding, Centre of Excellence funding and Academy Programme funding; see 3.2) is primarily intended for the salaries of full-time researchers working on the projects and for other project costs.

The Academy may grant funding towards the salary of the project PI for a maximum of one year. The salary funding is intended to support project implementation and granted only for well-substantiated research-related reasons (e.g. work abroad, return to Finland or transfer to another research organisation or a company in Finland).

Notwithstanding the above and following the full cost model and the research plan, the PI's salary costs can be incorporated into the project costs to be funded. The salary costs, which must be entered in the project's cost estimate, must not be significant in relation to the project's total costs, unless the funding decisions states otherwise. This policy concerning the project PI may be applied to both previous and current Academy decisions that have been made under the full cost model.

1.3.2. Terms and conditions for use of funding

The applicant bears the primary responsibility for the implementation of the research project and for adherence to the funding plan (see 1.2.2).

As a rule, staff hired with Academy of Finland research funding must have an employment relationship. We recommend that they be hired for a period of employment no shorter than the funding period, unless a shorter contract is necessary for special reasons dictated by the implementation of the



research project. Short-term research, studies or other assignments may also be carried out in the form of outsourced services.

Based on a request for payment, the Academy may pay advances on its funding to universities and universities of applied sciences. Advances are not paid on personal grants, funding to strengthen university research profiles or research infrastructure funding.

The duties of Academy Professors and Academy Research Fellows include teaching in the researcher's own field of research (see 3.1.1 and 3.1.2). As regards university teaching and research careers, the Academy of Finland considers it to be important that also other Academy-funded, doctoral-level researchers provide teaching related to their own research. However, any other tasks not directly related to the researcher's own research must not impede the actual research work.

If doctoral candidates working on Academy-funded projects provide teaching, we recommend that this teaching be associated with their own research. Teaching must not delay the completion of a doctoral dissertation.

1.3.2.1. Rights of ownership and use

All project partners in a project funded by the Academy of Finland must agree on the rights of ownership and use concerning the project's research results. The agreement should be made in writing and as soon as possible after the funding decision has been issued. At the launch of the project, the partners should also agree on the rights of ownership and use of the materials and data to be used by the project.

Any supplies and equipment acquired with Academy funding will remain in the ownership of the site of research. The parties can agree in writing on other procedures in the case of research infrastructures. The agreement must be made in writing and notified to the Academy at the application stage.

At sites of research applying the Finnish Act on the Right to University Inventions, Academy-funded research is defined as commissioned research as referred to in the Act. In these cases, the university has the primary right to inventions produced by the research. Researchers working at other sites of research come under the Finnish Act on the Right to Employee Inventions.

1.3.3. Changes to funding decisions

Funding recipients can apply to have the funding period extended only on special grounds. The funding period cannot be extended on the grounds that granted money has not been used. Changes to funding issues cannot be applied for after the validity period of the funding has expired.

It is possible to apply to change the site of research or to change the principal investigator of a research project or research infrastructure project. Likewise, it is possible to apply to change the funding proportions of consortium subprojects. The total funding for the consortium must not change.



1.3.4. Reporting

Research projects and research infrastructure projects funded by the Academy of Finland must submit reports on their scientific activities and their funding use. The scientific reports are submitted by project PIs. The use of funds is monitored with financial reports submitted via the Academy's electronic systems. The two sets of data are combined to allow for comparisons between the use of funds and the results produced with those funds.

The scientific reports are the Academy's most important tool to assess the scientific, societal and other impact of funded projects.

The Academy's research councils and the Finnish Research Infrastructure Committee must monitor the results of research projects and research infrastructures within their own fields. After the end of the funding period, or when preparing a new application for the Academy of Finland, the PI of the research project or research infrastructure project must submit reports to the Academy on the project's personnel, mobility, progress and results. A consortium reports on its activities as one whole, and the consortium's report is submitted by the consortium PI. A funding application submitted to the Academy will only be processed if the applicant has submitted final reports on their completed Academy-funded projects.

The Academy has separate guidelines for reporting on Centres of Excellence funding, research infrastructure funding and funding to strengthen university research profiles.

1.4. Other science policy principles

1.4.1. Promoting the internationality of research

The Academy of Finland promotes the internationality of research to further strengthen the quality, impact and renewal of science and research in collaboration with research organisations and other actors.

The Academy encourages researchers to be internationally mobile and strengthens the international competitiveness and appeal of Finnish research environments. In assessing the scientific merits of a funding application, the reviewers consider the international and national collaborative contacts and research mobility presented in the application. An application submitted to the Academy must include a mobility plan for the research project.

The Academy works with other relevant actors to increase the international visibility of Finnish research, improve the international opportunities of Finnish researchers and promote responsible research. The Academy stresses the importance of multinational funding cooperation.

1.4.2. Open science

Openness is a fundamental principle of science and research. Openness increases the repeatability and improves the critical appraisal of research results, for instance, and thereby improves the overall



quality of research. Openness also promotes the impact of research by, for example, increasing open access to research knowledge and data and making data usage more efficient.

The Academy is committed to promoting and implementing the practices outlined in Finland's national Open Science and Research Roadmap 2014–2017. We require that Academy-funded projects commit to open access publishing. We also work to promote open access to research data and methods. The goal is to make research publications, data and material, metadata and methods widely available for reuse.

The Academy requires that Academy-funded researchers make any and all research results produced with Academy funding openly available. Researchers can publish with open access by, for instance, depositing parallel copies of their articles in open access repositories or databases or by publishing their results through scientifically high-quality open access publication channels. This requirement particularly concerns peer-reviewed scientific articles. The costs associated with open access publishing can be included in the cost estimate of an application to be submitted to the Academy.

Scientific publications and research data produced with funding from the Academy of Finland or by using Academy-funded research infrastructures must always indicate that the research has been conducted with funding from the Academy of Finland. The Academy's grant number(s) must also be mentioned.

To support the reuse and subsequent availability and usability of data produced and used in the research projects and research infrastructure projects, applicants must draft a data management plan. Data produced with Academy funding must be made freely available as soon as possible after the research results have been published, via key national or international repositories in the researcher's own field. Sites of research must therefore provide researchers with the necessary guidance and ensure that they have access to suitable storage infrastructure. The costs associated with storing and sharing research data are regarded as overheads for the project's host organisation, but they may also be legitimately accepted as research costs to be covered with Academy research funding.

Data may come in varying degrees of openness, ranging from fully open to strictly confidential. The publisher of the data must ensure that the publishing of the data will not be in breach of the Finnish Act on the Openness of Government Activities, the Finnish Personal Data Act or the Finnish Copyright Act. When making data openly available, the parties involved must also consider licensing issues.

1.4.3. Equality and non-discrimination

The Academy of Finland grants research funding following the principles of equality and non-discrimination. The Academy follows its Equality Plan in preparing and making funding decisions.

The Academy takes care to increase the proportion of women among reviewers with a view to working towards a balanced gender composition in review panels.

All Academy decision-making bodies will monitor gender equality when granting funding for research. A particular monitoring target is the effects of the Academy's newest funding instruments or amended instruments on equality and non-discrimination.



Particular attention will be paid to the transparency of the funding process and the funding for research posts as well as to the balanced review of both genders, for example as regards career breaks due to parental leaves.

1.4.4. Research ethics

The Academy of Finland requires that the guidelines of the Finnish Advisory Board of Research Integrity (*Responsible conduct of research and procedures for handling allegations of misconduct in Finland*) be followed in all Academy-funded research.

Adherence to the principles of good scientific practice is primarily the responsibility of each individual researcher and research team, but the responsibility is also shared by the director of the research unit and the management of the organisations conducting research. Besides complying with good scientific practice, the research community and the individual researcher must also consider the legislation in force.

Where necessary, the PI must indicate in the research plan how research ethics has been considered in the project.

The site of research undertakes to submit to the Academy's Registrar's Office the final report of any investigations concerning violation of good scientific practice by the PI or a researcher of an Academy-funded project.

The Academy will not process a funding application if the applicant has been found guilty of research misconduct in the three years preceding the year of the call. Information on research misconduct does not get through to Academy decision-making bodies. If the Academy finds out about the misconduct during the funding period, whatever is left of the funding period will be added to the three-year limit. If the applicant appeals the decision on the misconduct, and the appeal is successful, the Academy will process the applicant's new applications following normal procedures.

1.4.5. Sustainable development

The Academy of Finland takes into account the principles of sustainable development in all its funding for research. Themes related to sustainable development cut across all Academy research funding, with a variety of nuances in different research fields. In terms of research funding, the objectives of sustainable development are especially reflected in the Academy's targeted, multidisciplinary programme activities. The themes covered in the Academy's current Academy Programmes effectively support the sustainable development objectives.

2. HOW APPLICATIONS ARE REVIEWED

Chapter 2 presents the principles governing the review of applications submitted to the Academy of Finland. The principles apply to funding granted by the Academy's Board, the subcommittees appointed by the Board, the research councils and the Finnish Research Infrastructure Committee. In accordance with its strategy and in all its research funding, the Academy stresses the importance of the quality, impact and renewal of science and research.



2.1. Review principles

The Academy of Finland allocates funding on a competitive basis to the best researchers and research teams and to the most promising young researchers to support them in carrying out scientifically ambitious projects. The Academy also provides funding for the acquisition, establishment or upgrading of nationally significant research infrastructures that promote scientific research. In the case of the Academy's funding to strengthen university research profiles, the funding is allocated to the profiling measures described in the proposed action plans. In the Flagship Programme, the funding is allocated to the activities described in the proposed research and impact plan.

The Academy's funding decisions are based on a review of the scientific merits of research plans, research infrastructure project plans and applicants. The following criteria are used when reviewing scientific merits:

- scientific quality, innovativeness and novelty of the research plan
- scientific impact of the research
- competence of the applicant/the research team
- feasibility of the research plan
- quality and strengthening of the research environment
- international and national research collaborations, researcher mobility
- project's significance for the promotion of professional research careers.

In principle, the projects we fund must benefit Finnish research, Finnish society and international collaboration.

Ambitious research projects that aim at achieving new breakthroughs always carry a risk of failure. Such a risk is not however an obstacle to being granted funding. While being aware of the risks involved, the Academy's aim is to open up opportunities for scientific breakthroughs and to enhance the renewal and regeneration of science and research.

Funding to strengthen university research profiles is granted based on the following review criteria:

- how the plan is linked to the university's strategy
- scope and clarity of proposed profiling measures
- feasibility and follow-up of the proposed plan
- development needs and opportunities in the proposed focus areas
- how research in the proposed focus areas compares with international standards and what added value it generates in comparison to research at other Finnish units
- possible plans for reaching the international level of research in the selected focus areas
- ensuring the creation of new, strength-based initiatives and seeing to their resources
- university's overall commitment to the profiling measures and to improving the quality of research, such as through the core funding resources freed after deselection
- collaborative structures and distribution of work between other universities, research institutes and societal actors (incl. research infrastructure collaboration)



- significance of selections and deselections for competence-based growth and other needs in society.

Applications for funding under *the flagship programme* will be reviewed based on the following criteria:

- scientific quality
 - how the research compares with international standards
 - plan for strengthening the quality and renewal of research
 - scientific merits and competence of the researchers
 - quality and progress of the research environment
 - capacity to attract top researchers
- societal impact of research
 - demonstrated impact that supports economic growth or other significant societal benefits
 - plan for strengthening impact and adaptability
 - connections to innovation networks and ecosystems as well as to other actors important for research utilisation
 - capacity to attract key impact actors
- commitment of host organisations and stakeholder participation
 - how the flagship candidate is linked to the organisation's strategy
 - organisation's investments and how they will develop
 - appropriateness and potential of the flagship candidate's structure and partnerships in terms of its activities
 - roles of and resources provided by partners
 - feasibility and follow-up of the proposed plan
 - added value generated by the flagship candidate.

When making funding decisions, we also pay attention to other science policy objectives. These objectives include

- promoting the internationality of research
- promoting science renewal
- advancing the research careers of early-career researchers and women
- promoting multi- and interdisciplinary research
- implementing more comprehensive research programmes
- promoting gender equality in research
- promoting good scientific practice
 - promoting open science
 - treating research-ethical issues appropriately
 - considering principles of sustainable development
 - considering principles related to IPRs
- promoting the utilisation of scientific research



- promoting research that is connected to innovation activities
- promoting impact beyond academia
- observing the special objectives of Academy Programmes
- supporting Centres of Excellence.

Other factors that are considered include the following:

- principal investigator's ability and experience in terms of project management
- PI's and research team's ability to manage funds granted
- how the project's researchers are connected to the Finnish scientific community
- potential for undermining trust in the impartiality and independence of the Academy's operations.

In deciding on *research infrastructure funding*, the Academy of Finland will in addition to its general funding principles consider the following issues:

- national and international scientific significance and added value of the research infrastructure
- added value of the research infrastructure for education and researcher training
- project's links to the research strategy of the host organisation/s and the commitment by the organisation/s to the project
- connections to projects that are included in Finland's or ESFRI's roadmap for research infrastructures.

Attention will also be paid to the following:

- systematic and broad utilisation of the infrastructure
- quality and scope of potential user community
- technological and other advancement of the infrastructure
- economic efficiency during the infrastructure's life cycle
- alternative national and international solutions.

2.2. Review process

In the case of applications for multi-year research grants, the Academy requests a written review report from an expert panel or at least two written reviews by external experts who are, as a rule, esteemed international researchers in their own field. The panel drafts one review report on each application.

Reviews are not requested from persons who are unable to act due to the likelihood of bias.

A member of an Academy research council or the Finnish Research Infrastructure Committee cannot act as a reviewer, issue a review report on an application or participate in a review panel.



3. FUNDING INSTRUMENTS

3.1. Funding for researchers

The aim of the Academy of Finland's funding for individual researchers is to support the development of a high-quality research community, advance the professional competence and careers of researchers, and increase the appeal of research careers.

Before a call is opened, the Board of the Academy or a research council may decide to target the funding for a fixed-term and on a one-off basis or to target the funding at a research field or purpose determined by the research council in advance. The call may be implemented as a joint call between several research councils or funders. The funding decisions are made either by a research council or by a subcommittee appointed by the Board. After the funding period has ended, the Academy can evaluate the outcomes and added value of the targeted funding.

3.1.1. Funding for research post as Academy Professor

Academy Professors are internationally leading-edge researchers and recognised experts in their field who are expected to have great scientific impact in the scientific community and in society at large.

Applicants for funding for a research post as Academy Professor must have demonstrated excellence in research and must contribute to the development of their field as a whole. The Academy Professor posts are intended for leading-edge researchers for fixed-term, full-time research and related tasks. Academy Professors pursue their own research plan, supervise their team and provide guidance to junior researchers. Their duties include (without separate compensation) supervision of thesis and dissertation writers and teaching associated with their own research.

The funding for a research post as Academy Professor covers a maximum of five years at a time. In order to be granted funding for a second term as Academy Professor, applicants must demonstrate their successful activities during their previous term and their research plans must show scientific ambition and renewal. Academy Professor may be granted funding to cover research costs during their term.

The funding towards the salary of an Academy Professor is determined according to a monthly salary of 8,900 euros. Academy Professor applicants can indicate in their application how large a proportion of their salary will be applied for from the Academy.

3.1.2. Funding for research post as Academy Research Fellow

Academy Research Fellows work on research plans of a high scientific quality. Academy Research Fellows have built extensive research networks and the funding allows them to develop their skills of academic leadership and to establish themselves as independent researchers in the international scientific community.

Academy Research Fellow funding is not granted to persons who hold tenured professorships or other senior-level research posts at research organisations.



Successful Academy Research Fellow applicants will have been engaged in successful scientific publication, collaboration and research for 3–9 years since PhD completion. If they have completed medical specialist training after gaining their doctoral degree, Academy Research Fellow applicants may have up to 13 years of experience since PhD completion.

The Academy Research Fellow's site of research is an organisation based in Finland through which the funding is channelled and paid. During the funding period, the Academy Research Fellow may work abroad for periods of varying durations, for example at foreign universities.

If an application for funding for a research post as Academy Research Fellow concerns the same research environment where the applicant worked while completing their doctoral degree, the applicant must have at least six months of research experience from another research environment or research-supporting experience from another sector since PhD completion. The experience may have been gained over several spells; the two longest spells must equal at least six months. Deviations from this general rule are possible only on special grounds.

Here, 'research environment' refers to the research team or community in which the researcher works. The research environment is often located within a single organisation (i.e. the site of research), but it may also extend to several sites.

The 'mobility requirement' mentioned above is automatically met in cases where the applicant applies for funding for a research post in a research environment other than the one in which they worked while completing their doctoral degree.

The duties of an Academy Research Fellow include (without separate compensation) supervision of thesis and dissertation writers and teaching associated with their own research.

The funding towards the salary of an Academy Research Fellow is determined according to a monthly salary of 5,000 euros.

The salary of an Academy Research Fellow may also be co-funded, where appropriate in terms of supporting the researchers career advancement. This requires that the externally funded salary part has been allocated to research tasks or other tasks in support of the researcher's career, such as tasks that are part of the university's tenure-track system¹. The guidance value for the Academy's contribution to the researcher's salary costs (see above) is 70 per cent, unless there are reasons for a higher contribution. For those who have received funding from the European Research Council (ERC) the corresponding contribution is 50 per cent. The Academy's salary funding that is freed as a result of salary co-funding can be used for other research costs, which are justified separately.

The funding for a research post as Academy Research Fellow is granted for five years. A person may be granted funding for one five-year term only. The funding is granted to cover costs of setting up a research team, research costs, costs of international collaboration and mobility and other research costs.

¹ A career system where the university, based on a review system, commits itself to offering a researcher a permanent position after the researcher has reached a certain level.

3.1.3. Funding for research post as Postdoctoral Researcher

A 'Postdoctoral Researcher' funded by the Academy of Finland is a talented researcher who has recently completed a doctorate. The funding provides the researcher with an opportunity to increase their qualifications for important researcher or expert positions. Postdoctoral Researchers have established effective national or international collaborative networks.

Postdoctoral Researchers conduct full-time research according to their research plan. In addition, the Academy recommends that Postdoctoral Researchers provide supervision of thesis and dissertation writers and teaching associated with their own specific field (cf. section 1.3.2).

Those eligible to apply for funding for a Postdoctoral Researcher post are researchers with up to four years of experience since PhD completion, or up to eight years if they have obtained their doctoral degree simultaneously with medical specialist training.

The Postdoctoral Researcher's site of research is an organisation based in Finland through which the funding is channelled and paid. During the funding period, the Postdoctoral Researcher may work abroad for periods of varying durations, for example at foreign universities.

If an application for funding for a research post as Postdoctoral Researcher concerns the same research environment where the applicant worked while completing their doctoral degree, the applicant must have at least six months of research experience from another research environment or research-supporting experience from another sector since PhD completion. The experience may have been gained over several spells; the two longest spells must equal at least six months. Deviations from this general rule are possible only on special grounds.

Here, 'research environment' refers to the research team or community in which the researcher works. The research environment is often located within a single organisation (i.e. the site of research), but it may also extend to several sites.

The 'mobility requirement' mentioned above is automatically met in cases where the applicant applies for funding for a research post in a research environment other than the one in which they worked while completing their doctoral degree.

In the review of applications, particular attention will be paid to the international dimension of the research plan. In addition to salary funding, Postdoctoral Researchers may be granted funding to cover necessary costs of research and international collaboration.

The funding for a research post as Postdoctoral Researcher is granted for three years. A person may be granted funding for one three-year term only.

3.1.4. Funding for research post as clinical researcher

The Academy of Finland funds part-time research by physicians and other researchers engaged in clinical practice. The aim is to promote clinical research careers in cooperation with, for example, university hospitals, and to encourage medical doctors working in clinical practice to engage in research



so that they can continue pursuing their research career while in specialist training, alongside clinical practice.

Those eligible to apply are medical doctors with a doctoral degree working in clinical practice or some other healthcare professionals with a doctoral degree engaged in clinical practice. Funding will not be granted to full-time university researchers.

The funding is granted towards salary costs to support part-time research (20–50% of working hours) by clinical researchers. They must also agree the working-time arrangements in advance, particularly if the research and the clinical work will be conducted at different sites. In addition to salary costs, the Academy may also provide funding for research costs. The Academy's funding contribution comes to no more than 70% of the total costs of the research post as clinical researcher. The total cost estimate presented in the application must include the applicant's salary and research costs. Typically, the funding for a research post as clinical researcher is granted for four years. The research council concerned decides annually on the budget for this funding scheme.

3.2. Funding for research projects

3.2.1. Academy Project funding

A research project funded under the Academy of Finland's 'Academy Project' funding scheme is built around a research plan of the highest possible scientific quality and ambition level. The research plan is carried out by a high-level research team or a consortium made up of several teams.

The Academy Project funding scheme is designed to promote the quality and diversity of research, scientific impact and impact beyond academia as well as science self-renewal. The aim is to attain internationally as high a scientific standard of work as possible and to support scientific breakthroughs and top-tier international research collaboration. The funding is granted primarily to teams of researchers with doctoral degrees.

Academy Project funding primarily covers the project's direct costs (e.g. research team's salary, publishing and other research, travels, national and international collaboration, researcher training abroad, and preparation of international projects). (For information about the salary of the principal investigator, see section 1.3.1.1 above.)

Academy Project funding is usually granted for four years.

The conditions stated above in this chapter also apply to targeted Academy Project funding (see below). The following two restrictions apply to Academy Project funding only.

If applicants have ongoing Academy Project funding or funding for a research post as Academy Professor or Academy Research Fellow, they can be granted Academy Project funding only for very special reasons.

Directors, vice directors and team leaders of Academy-funded Centres of Excellence cannot receive Academy Project funding during the first three years of the CoE term.



3.2.1.1. Targeted Academy Project funding

Before a call is opened, the Board of the Academy or a research council may decide to target the Academy Project funding for a fixed-term and on a one-off basis or to target the funding at a research field or purpose determined by the research council in advance. The call may be implemented as a joint call between several research councils or funders. It may also be connected to research programmes coordinated by other organisations. The funding decisions are made either by a research council or by a subcommittee appointed by the Board. After the funding period has ended, the Academy can evaluate the outcomes and added value of the targeted funding.

3.2.2. Centre of Excellence Programme

A Centre of Excellence (CoE) is a research community that is already at rather than striving for the international cutting edge of research in its field. CoEs may consist of one or more research teams working closely together under a joint research plan.

The units selected by the Academy of Finland as CoEs are scientifically first-rate research communities that have capacity for renewal and high societal impact. The CoE programmes contribute to the renewal of science by supplying new research topics, new methods and approaches, and new research teams. Thanks to the long-term funding provided in collaboration with CoE host organisations, the funding instrument effectively works as an incentive for risk-taking and new initiatives in research.

The Academy of Finland selects CoEs to be funded based on international reviews and science policy objectives. The CoE term is eight years. There are three primary review criteria: scientific quality of the research plan, contribution to science renewal, and scientific impact. The eight-year term is split into two parts (5 + 3 years).

The centres go through a full scientific evaluation after the first four years. The outcome of the evaluation will determine the level of funding for the last three years of the CoE term – the funding may increase, remain the same, or decrease. The Academy may also decide to cease funding entirely after the first five years, if the CoE has failed to achieve the objectives set in the research plan.

The CoE programme will be evaluated upon its completion.

3.2.3. Academy Programme funding

Academy Programmes are research programmes funded by the Academy of Finland. They are thematic, target-oriented and coordinated bodies of research projects that are aimed at supporting scientific regeneration, producing high-quality research knowledge on a specific theme and increasing scientific and societal impact. The topics for Academy Programmes are science-driven, and emerge from key research needs that have been identified through foresighting. Academy Programmes are designed to support multi- and interdisciplinary research, promote networking between researchers and provide platforms for long-term international research cooperation. The programmes are planned and executed in close consultation with the scientific community and other Academy stakeholders. In connection with Academy Programmes, the Academy often organises joint calls with other Finnish and foreign research funding agencies.



Academy Programme funding cannot be applied for by a person who has participated in the planning of the programme to an extent likely to give them a comparative advantage over other applicants. This condition also applies to members of preparation or steering groups or permanent experts for the programme concerned.

The Board of the Academy of Finland decides on the start-up and financial resources of new Academy Programmes. When making its decisions, the Board considers the programme objectives and the necessary conditions for science renewal. Academy Programme funding is usually granted for at least four years

The Board's decision is followed by the appointment of a steering group, which will prepare, manage, monitor and evaluate the programme. The steering group consists of members of the Academy's research councils and representatives of other funding organisations. The steering group and the programme manager, who is employed at the Academy's Administration Office, oversee programme coordination.

Based on the letters of intent, a subcommittee appointed by the Academy Board will decide which applicants will be asked to submit full applications and which projects will be funded.

The Academy Programme, its goal attainment and its results will be evaluated upon completion.

3.3. Funding for framework conditions for research and research environments

3.3.1. Funding for research infrastructures

The Academy of Finland provides funding for the acquisition, establishment or strengthening of nationally significant research infrastructures that promote scientific research. Research infrastructures refer to a reserve of research facilities, equipment, data and services enabling research and development, promoting research collaboration and reinforcing research and innovation capacity. Research infrastructures may be based at a single location (single-sited), scattered across numerous sites and organisations (distributed), or provided via a virtual platform (virtual).

The aim of the Academy's research infrastructure funding is to upgrade the quality and improve the renewal, competitiveness and interdisciplinary approach of Finnish research. Another aim is to increase the appeal of Finnish research environments and boost the national and international collaboration of Finnish universities, research teams and researchers. The aim is also to support researcher training and the creation and application of scientific knowledge and intellectual capital.

The applicant is a university or some other research organisation. The funding call may be either non-targeted or targeted at specific objectives and/or applicants.

Joint projects between several organisations must have one responsible party; the mutual responsibilities of the parties as regards activities and financial matters are presented in the application. In joint projects, the parties must conclude a written agreement on the use, ownership and location of the research infrastructure, even for the time after the funding period.



The Academy's research infrastructure funding is primarily intended to cover investment costs (acquisition of equipment and systems and creation of services) at the construction phase and significant upgrading of existing infrastructures. The funding cannot be used for research infrastructure maintenance costs. Permanent operating expenses should mainly be covered by funding from host organisations. Funding for salary costs is granted only in special cases, however, taking into account differences specific to individual research fields and infrastructures. The funding is granted for a maximum of five years.

An applicant who has ongoing Academy funding for research infrastructures may be granted funding for the same infrastructure only for very special reasons.

3.3.2. Competitive funding to strengthen university research profiles

Among the key development themes of the Finnish research system are the stronger profiling of Finland's universities into distinct areas of strength and the increased distribution of work and collaboration between them. The Finnish Government's public finances plan for 2015–2018 includes the gradual transfer over 2015–2019 of 50 million euros of central government finances earmarked to universities for allocation through the Academy of Finland.

The purpose of this funding opportunity is to support and speed up the strategic profiling of Finnish universities to improve the quality of research. The funding is fixed-term and may be granted to support Finnish universities in strategically profiling their research into 'profiling areas' and in making deselections associated with the profiling. In their applications, universities are asked to provide an overall picture of their plans for profiling and distribution of work.

Based on their own strategies, the universities will set out concrete plans for how they intend to improve the quality and impact of their research. In the plans, the universities describe the selections and deselections they intend to make, and provide a clear schedule for these measures. The applications should also include a description of how the universities intend to distribute work between and collaborate with other Finnish universities, universities of applied sciences, research institutes, hospital districts and other relevant actors. The applications must also include cost estimates.

The funding is applied for by universities, each university with its own application.

The applications are reviewed by a panel of international experts convened by the Academy of Finland. Representatives of university management will be called in to be interviewed by the panel. As part of the process, universities are given an opportunity to comment on the questions that will be addressed in the review beforehand. The review focuses both on a university's overall action plan and on how significant, concrete and realistic each individual profiling measure is. The review panel will also rank the applications.

In preparing and making the funding decisions, the Academy will consider the relationship between the funding applied for, the planned profiling measures and the universities research funding as a whole. It will also take into account the universities' interim reports on previously funded profiling measures.



3.3.3. Flagship Programme

The aim of the Academy of Finland's Flagship Programme is to pool together expertise from different fields in Finland to form high-level research and impact clusters that will further contribute to increasing the quality and impact of Finnish research. A flagship is an effective mix of cutting-edge research, impact in support of economic growth or society, close connections to the business sector and society at large, adaptability, and a strong commitment from host organisations. Flagships are high-quality, high-impact competence clusters that work in flexible ways, simultaneously running several projects and other activities. During the flagship term, the clusters will make significant progress and make good use of the flagship funding to systematically improve and expand their activities.

The funding earmarked for the Flagship Programme comes to 25 million euros in 2018 and 25 million euros in 2019.

The funding may be applied for by universities or government research institutes, or by consortia formed by such organisations. The flagships to be funded will be selected based on both scientific excellence and major growth-related or other impact. The funding will be granted for eight years.

The host organisations of the flagships must be prepared to make a significant, steadily increasing investment in supporting the flagships. In addition, flagships are required to have secured a significant amount of national and international funding; their activities can also be supported by funds received from companies, the public sector or non-profit organisations. When applying for flagship funding, all available resources and resource plans must be clearly described in the research and impact plan, as they will be taken into account in the review.

The applications will be reviewed by peer review panels, supported by statements from individual reviewers. In addition, key people from the flagship candidates will be interviewed. The flagships will go through an interim evaluation after their first two years of operation. The outcome of the evaluation will determine the level of funding for the rest of the flagship term – the funding may increase, remain the same, or decrease. The Academy may also decide to cease funding entirely after the first four years, if the flagship has failed to achieve the objectives set in the research and impact plan.

3.4. Special funding for international research cooperation

The Academy of Finland utilises the opportunities provided by the European Research Area (ERA) actively and in a variety of ways to support Finnish research. The Academy also promotes research cooperation in the Nordic context and with select countries outside Europe, such as the US, Russia and Japan and research and funding organisations in Asia and Latin America.

The Academy has three forms of funding dedicated to promoting internationality. The Academy co-funds thematic calls together with other Nordic countries (through NordForsk) and in collaboration with the EU Commission and other EU Member States (particularly through ERA-NETs). The Academy also supports international networking and shared use of research infrastructures by paying membership fees to international organisations (e.g. CERN, EMBL, IIASA, EUI) and by funding researchers' participation fees to those organisations. Finally, the Academy has signed bilateral



agreements that allows it to support Finnish researchers' work abroad and grant funding to invite foreign researchers to Finland (these are called 'mobility grants').

3.4.1. Funding decisions concerning co-funded research programmes

When an agreement-based joint call forms part of an Academy Programme, the funding decisions are usually taken by the subcommittee appointed for the Academy Programme. The subcommittee will follow the Academy's general funding principles, unless the agreement stipulates otherwise. When a joint call is implemented by an Academy research council, the funding decisions are taken by the research council.

In the case of NordForsk programmes, the funding decisions are taken by the NordForsk Board; a representative of the Academy of Finland sits on the NordForsk Board. As for the NORFACE and HERA programmes, the funding decisions are taken by the decision-making bodies of the programmes.

If an EU-funded programme requires that part of the project costs be covered with national funding, the Academy will contribute funding to these costs according to its general funding principles. This rule applies to those EU programmes where the Academy's participation has been decided by the Academy Board (e.g. BONUS, the joint Baltic Sea research and development programme).

4. BACKGROUND INFORMATION

The Board of the Academy of Finland has set out the above-mentioned guidelines for the Academy's research councils, the Finnish Research Infrastructure Committee, the subcommittees and the Administration Office pursuant to section 4 of the Finnish Act on the Academy of Finland. If necessary, the Administration Office can issue more detailed regulations, guidelines and announcements on applying for funding, using and paying funds, and reporting on the use of funds.

The following acts, regulations, guidelines and other documents are considered in the granting, use, payment and supervision of funding:

- Act on the Academy of Finland (922/2009), including amendments, Decree on the Academy of Finland (979/2009)
- Universities Act (558/2009) including amendments
- Administrative Procedure Act (434/2003)
- State Budget Act (423/1988) and Decree (1243/1992) including amendments
- Act on Equality between Women and Men (609/1986)
- Act on the Right in Inventions Made at Higher Education Institutions (369/2006)
- Act on the Right in Employee Inventions (656/1967)
- Act on the General Requirements for Funds Granted for Financial Activities (429/2016)
- Act on the Openness of Government Activities (621/1999)
- Act on Discretionary Government Transfers (688/2001)
- Farmers' Pensions Act (1280/2006)
- Act on Public Contracts (348/2007)
- Non-Discrimination Act (1325/2014)

- Commission Regulation (EC) No 1407/2013 on the application of Articles 87 and 88 of the EC Treaty to de minimis aid
- Commission Regulation (EU) No 651/2014 declaring certain categories of aid compatible with the internal market in application of Articles 87 and 88 of the EC Treaty
- state budget for 2017
- performance agreement between the Academy of Finland and the Ministry of Education, Science and Culture
- performance agreements of the Academy's research councils
- Personal Data Act (523/1999)
- Copyright Act (404/1961).

The following documents or decisions in principle approved by the Academy Board are also considered:

- Transfer of Grants ("Money follows researcher"), EUROHORCs, (17 Nov 2004)
- decision on the application of the Act on the Right in Inventions Made at Higher Education Institutions at the Academy of Finland (14 Nov 2006)
- Academy of Finland International Policy (23 Feb 2017)
- decision on outlining Finland's national strategy for Centres of Excellence in research (22 Sep 2009)
- Academy of Finland Rules of Procedure (1 Jul 2014)
- Academy of Finland Equality Plan for 2017–2018 (15 Dec 2016)
- Academy of Finland Strategy (26 Nov 2015)
- decision on adherence to good scientific practice in Academy-funded research (15 Jan 2013)
- Academy of Finland research funding budget for 2017
- memorandum on disqualification.

In addition, the following documents and decisions are considered:

- Commission Recommendation of 11 March 2005 on the European Charter for Researchers and on a Code of Conduct for the Recruitment of Researchers
- Calculation of total costs, co-funding based on total costs Accounting of total costs and financing jointly financed activities based on total costs. Ministry of Finance Working Papers, 9/2007
- *Open science and research leads to surprising discoveries and creative insights: Open science and research roadmap 2014–2017*. Reports of the Ministry of Education, Science and Culture, Finland 2014:21
- *Finland, a Land of Solutions: Strategic Programme of Prime Minister Juha Sipilä's Government 29 May 2015*. Government Publications 10/2015
- Guidelines on Open Access to Scientific Publications and Research Data in Horizon 2020.

