



#### Today's programme

- 1. Academy of Finland
- 2. September 2017 call
- 3. Horizon 2020: funding opportunities
- 4. Application process
- 5. Statistics
- 6. Research impact and scientific reporting
- 7. Academy of Finland international policy for 2017–2021
- 8. Open science
- 9. Time for questions

## Ask & Apply 2017



## Ask & Apply provides information about the Academy of Finland's September 2017 call

- We're improving the application process
  - Academy Research Fellow call text
  - Collecting experiences of the call (webropol survey to all applicants)
- We're developing the review process
  - Rating & ranking pilot project
- Please feel free to contact us
  - We value your feedback and ideas





# ACADEMY OF FINLAND

#### ask& apply

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### **Academy of Finland in a nutshell**



#### What we do



We draft science policy lines and statements, engage in science policy debate

We fund framework conditions for research and research environments (infrastructures and university profiling) We review funding applications, make funding decisions

We do scientific and research foresight and impact analysis

- State of Scientific Research in Finland
- impact assessment
- foresighting

We influence European and Nordic science policy





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## Key figures: funding, applications and success rates



### **Decision-making at the Academy**



	Mini	FINNISH GOV	/ERNMENT Science and Culture		
	BOARD OF	THE ACADEMY OF	FINLAND		
Finnish Research Infrastructure Committee	RESEARCH COUNCILS Chair, 10 members			Strategic Research Council	
Chair, 15 members	Research Council for Biosciences and Environment	Research Council for Culture and Society	Research Council for Natural Sciences and Engineering	Research Council for Health	Chair, 8 members

**GENERAL SUBCOMMITTEE** 





# SEPTEMBER 2017 CALL



### **Science-driven funding**



In 2012–2016, the number of applications for non-targeted funding grew by some 40%.



### **Our main funding instruments**



#### **Academy Project funding**



- Our main funding opportunity
- Promotes the quality and diversity of research and its capacity for regeneration by providing funding for scientifically ambitious research
- Granted to leading-edge researchers and research teams for:
  - salaries
  - materials and equipment
  - travel
  - international collaboration
  - Granted for four years



#### **Academy Project funding**

- Science-driven
- Bottom-up
- The research councils' web pages provide more information on science policy principles and guidance for applicants:
  - Research Council for Biosciences and Environment
  - Research Council for Culture and Society
  - Research Council for Natural Sciences and Engineering
  - Research Council for Health



#### **Funding for research posts**



#### **ACADEMY RESEARCH FELLOWS**

- have successfully been engaged in scientific research and publishing after earning their doctorate
- are qualified for advanced research tasks or other expert tasks
- carry out independent scientific work
- provide teaching and supervision in their field
- receive funding for five years
- mobility requirement



## Mobility required to be eligible to apply

- Mobility is of particular importance to early-career researchers in improving the quality of their research and supporting their career development.
- Apply for funding
  - for a post in a research environment **other** than the one in which you worked while completing their doctoral thesis

#### OR

 in the same research environment, provided that you have at least six months of work experience from some other organisation after PhD completion.

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• Real mobility benefits your career development

### Academy Research Fellows – feedback from research councils



- Career planning is important
- International mobility after PhD completion is highly recommended
- Independence crucial



## **Funding for research posts**

#### **POSTDOCTORAL RESEARCHERS**

- have recently earned their doctorate, are gaining qualifications as professional researchers
- carry out their own research plan, supervise thesis writers
- eligibility: primarily no more than four years since doctorate
- receive funding for salary and research costs
- are granted funding for three years
- postdoctoral period abroad possible (2 + 1 years)
- mobility requirement



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#### OR

- in the same research environment, provided that you have at least six months of work experience from some other organisation after PhD completion.
- **Real mobility** benefits your career development

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### Postdoctoral Researchers – feedback from research councils

- Career planning is important
- International mobility after PhD completion
  - Importance of the mobility plan
- Clear aim to gain independent position



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## **Funding for research posts**

#### **CLINICAL RESEARCHERS**

- Initiated by Research Council for Health in 2006, now available from all research councils
- The aim is to promote clinical research careers and to encourage medical doctors and other researchers working in clinical practice to engage in research
- Funding for part-time salary (20–50%) and research costs
- At least 50% in clinical practice doing patient work
- Are granted funding for four years
- No limitations for academic age, funding terms or mobility



## Clinical researchers – feedback from Research Council

- The nature of clinical work must be well described, even though it is not covered by the Academy of Finland
- Mobility is a bonus but not required
- Remember to describe your methods in sufficient detail (power calculations, statistical analysis, etc., if relevant)





## DEVELOPMENT RESEARCH ACADEMY PROGRAMME

#### Themes of the call

- 1) Reinforcing developing countries' economies (employment, livelihoods)
- 2) Strengthening better-functioning societies (wellbeing, health, education, human rights)
- 3) Food security, biodiversity, environmental health and sustainable use of natural resources



### **Schedule and funding**

- Call opens 1 September 2017
- Deadline 16 October 2017
- Scientific evaluation in November–December 2017
- Funding decisions in January 2018
- Funding period 1 February 2018–31 January 2022
- Total funding volume = €6 million
- Four-year research projects will be funded
- Maximum Academy funding for a single project is €600,000 and for a consortium project €1,000,000 for four years



#### **Additional information**

- Programme Manager Mikko Ylikangas, +358 295 335 143, mikko.ylikangas@aka.fi
- Science Adviser Riitta Launonen, +358 295 335 059, riitta.launonen@aka.fi
- Project Officer Erika Lempiäinen, +358 295 335 101, erika.lempiäinen@aka.fi
- Programme memorandum available at <u>www.aka.fi/kehitystutkimus</u> > EN





## ACADEMY **PROGRAMME FOR** ARTIFICIAL **INTELLIGENCE IN** PHYSICAL **SCIENCES AND** ENGINEERING **RESEARCH (AIPSE)**

#### **Objectives of the programme**

- identify novel application areas and collaboration opportunities of artificial intelligence (AI) in physical sciences and engineering, and support the innovative utilisation of existing methods
- support research renewal and scientific breakthroughs in Alrelated physical sciences and engineering research
- promote new forms of collaboration between researchers
- harness data for productive use and actively utilise open data

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### Schedule, funding and contacts

- Call opens 1 September 2017
- Deadline 27 September 2017
- Funding period 1 January 2018–31 December 2021
- Total funding volume = €7 million
- Funding for research projects of up to four years
- Maximum Academy funding for a single project is €500,000 and for a consortium project €1,000,000 for four years
- Contact: Programme Manager Tommi Laitinen, +358 295 335 057, tommi.laitinen@aka.fi





### **Upcoming Academy Programme**

#### "Media and Society" Academy Programme

- multidisciplinary research approaches
- knowledge, analyses and innovations to respond to the rapidly emerging developments of today's society, political culture and media landscape
- First call scheduled for April 2018





## HORIZON 2020: FUNDING OPPORTUNITIES

## **Horizon 2020 funding opportunities**



I Excellent Science	II Industrial Leadership	III Societal Challenges
<ol> <li>European Research Council (ERC): frontier research</li> <li>Future and Emerging Technologies (FET)         <ul> <li>a) Open</li> <li>b) Proactive</li> <li>c) Flagships</li> </ul> </li> <li>Marie Skłodowska-Curie Actions: training, career development and mobility for researchers</li> <li>Research infrastructures</li> </ol>	<ol> <li>Leadership in Enabling and Industrial Technologies         <ul> <li>1.1 ICT</li> <li>1.2 nanotechnology</li> <li>1.3 materials</li> <li>1.4 biotechnology</li> <li>1.5 manufacturing and processing</li> <li>1.6 space</li> </ul> </li> <li>Risk finance: loans and equity funding</li> <li>Innovation in SMEs</li> </ol>	<ol> <li>Health, demographic change and wellbeing</li> <li>Food security, sustainable agriculture and forestry, marine, maritime and inland water research and bioeconomy</li> <li>Secure, clean and efficient energy</li> <li>Smart, green and integrated transport</li> <li>Climate action, resource efficiency and raw materials</li> <li>Europe in a changing world: inclusive, innovative and reflective societies</li> <li>Secure societies – protecting freedom and security of Europe and its citizens</li> </ol>
Also: Science with an	d for society, Spreading excellence	e and widening participation
IV J	oint Research Centre (JRC), exc	I. nuclear
	Nuclear research: EURATOM	



#### **European Research Council**

The ERC supports excellence in frontier research through bottom-up, individual-based, pan-European competition.

Budget €13 billion (2014–2020), €1.9 billion/year



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#### **Marie Sklodowska-Curie Actions**

Individual Fellowships (IF)	<ul> <li>Applicant is an individual researcher together with host organisation</li> <li>From Europe to any country, from any country to Europe</li> <li>For experienced researchers: PhD degree or at least four years of research experience after MSc</li> </ul>
Co-funding of regional, national and international programmes (COFUND)	<ul> <li>Co-funding of (national) doctoral and fellowship programmes (max 50%)</li> <li>Applicant is a single organisation or a network that has existing doctoral or fellowship programmes</li> <li>Open recruitment of doctoral students, international peer review of fellowships</li> </ul>
Innovative Training Networks (ITN)	<ul> <li>Funding for doctoral training networks</li> <li>Applicants academic or non-academic sector actors based in different countries</li> <li>Open international recruitment of doctoral students</li> </ul>
Research and Innovation Staff Exchange (RISE)	<ul> <li>Short-term exchange of existing staff members (max. 12 months/person)</li> <li>Salaries not covered, only travel and subsistence costs</li> <li>Intersectoral and international (third countries) cooperation</li> </ul>



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#### **More information on EU calls**

#### **EUTI website for Horizon 2020**

- <u>www.tekes.eu/horisontti-2020</u> (in Finnish)
- <u>www.tekes.eu/en/horizon-2020/basics</u> (in English)

#### National contact points (NCPs) at the Academy of Finland

www.aka.fi/fi/tiedepoliittinen-toiminta/kansainvalinentoiminta/eurooppa/horisontti-2020/akaktemian-horisontti-2020-ohjelman-kansalliset-yhteyshenkilot

NB! Academy funding can be used for writing EU applications.







#### Would you like to know what is in the next Horizon 2020 Work Programme and which calls will open in the autumn?

The Horizon 2020 Info Day will be held on **2 October 2017** in Helsinki. The day is dedicated to upcoming Horizon 2020 calls.

The NCPs will present the Work Programme and decode the call texts for you, going through every detail and even the small print. The aim is to provide a clear picture of what's coming, what the call texts mean and what the applicants should focus on.

More information and registration: @eutifi | www.tekes.eu

www.tekes.eu/ajankohtaista/euti-tapahtumat/ncpeiden-h2020-hakuinfo





# APPLICATION PROCESS
### **Application processing – Who does what?**



### **Applications**

### **EVALUATION PROCESS**

Science advisers search for reviewers and form panels

Panel members write preliminary review reports

Final review reports are completed at the panel meeting Reviewers assess the quality of the research plan, the competence of applicants and the quality of research collaborations

An individual expert gives a supporting review to the panel An individual expert gives a review to the decision maker

> Research councils make the decisions

The decisions are based on the applications, the reviews and science policy objectives



## **Criteria used in reviewing applications**

Competence of the applicant or research team

International and national collaborative contacts, researcher mobility

Scientific quality and innovativeness of the research plan

Feasibility of the research plan

Quality and strengthening of the research environment

reviewers each year

foreign nationals

**95**%



### Our review criteria are openly available

- Knowing what will be reviewed helps you to write the research plan
- See our guides for reviewers: <u>www.aka.fi/en/review-and-funding-decisions/how-applications-are-reviewed/guides-for-reviewers</u>



### The role of peer review and open competition

International peer review compares the quality of research to the international level in the field concerned.

Allows us to support the best research projects.

Helps us identify new research topics and novel initiatives.

#### Examples of the quality of Academyfunded research:

- Practically all Finnish-based ERC grantees have or have had Academy funding.
- Publications produced in 2011–2014 in projects funded under the Academy Project scheme score 1.39 on the top 10 index – average score for Finnish publications is 1.06.

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### **Criteria for funding decisions**





### ASSESSMENT OF SCIENTIFIC QUALITY

### **RESEARCH POLICY OBJECTIVES**

- foster multi- and interdisciplinary research
- concentrate research into larger programmes
- contribute to research internationalisation
- advance the research careers of women and young people
- promote gender equality in research





# STATISTICS

### **Development of Academy funding commitments**



In 2012–2016, the number of applications for non-targeted funding grew by some 40%.



## Academy funding in 2016, by instrument



Research projects and programmes 43%

### **€179.2**m

- Academy Project funding
- Centre of Excellence
  programmes
- Academy Programmes and international collaboration
- ICT 2023 programme

#### Strategic research 13%

### €**55.5**m

- SRC programmes
- SRC matching funds for Horizon 2020

Research environments and framework conditions 16%

### **€66.3**m

- Research infrastructures
- University research profiles

International membership fees, international programmes 5%

### **€22.8**m

- Infrastructure membership fees
- International programming

**Researchers** 22% **€92.6** m

- Academy Professors
- Academy Research Fellows
- Postdoctoral Researchers
- Researcher mobility

\*Plus an additional €2.8m for funding for support functions of research funding.



## Academy funding in 2016, by site of research





Government research institutes 10% €42.5m

Foreign research organisations 0.3% €1.3<sub>m</sub>

**Other sites\*\*** 2% **€7.9**m

International membership fees, international programmes 5% €22.8m

\*Plus an additional **€2.8**m for funding for support functions of research funding. \*\*Includes e.g. universities of applied sciences, other research institutes and businesses.





## RESEARCH IMPACT AND SCIENTIFIC REPORTING

### **Five perspectives of impact**

World views, culture and human understanding Public services and societal functions Economy and commerce Health and welfare The environment and natural resources

- Separate heading for impact that manifests itself in other ways
- The perspectives have been selected to guarantee a sufficient coverage of the various manifestations of impact in society
- Our objective is not to steer research towards a specific target impact; nor will we rank different kinds of impacts in any particular order
- The purpose of the framework of perspectives is to give structure to and improve the comparability of researchers' assessments. This is important as we use the data also to form a clearer overall picture of Academy-funded research





# The impact of research (application stage and reporting stage)

- Researchers are asked to assess the broader impact of the research project both at the application stage and in the research report.
- At the application stage, researchers are encouraged to deliberate on how their research is linked to more widespread interconnections also beyond the scientific community. No changes since 2016.
- In the scientific report, submitted upon project completion, researchers are asked to assess the outcomes of the research as well as the potential for further impact.



### **Publicity**



- As a rule, research reports are **public documents**.
- The guidelines on our website at <u>www.aka.fi/reporting</u> will be specified during August 2017 in this respect.





you should position your research in relation to the broader scientific community

Anssi Mälkki Johtava tiedeasiantuntija Suunnittelu ja johdon tuki -yksikkö

http://www.aka.fi/tutkimuksen\_vaikuttavuus

http://www.aka.fi/impact

https://www.youtube.com/watch?v=pZ6wKCHugmA

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## Additional information on impact and reporting

### **Application stage**

- <u>Research plan guidelines</u>
- Impact beyond academia Q & A

### **Reporting stage**

- www.aka.fi/reporting
- <u>Guidelines for scientific reporting</u> (PDF)
- <u>Guidelines concerning impact beyond academia</u> (PDF)





## ACADEMY OF FINLAND INTERNATIONAL POLICY FOR 2017–2021



## Academy of Finland's international policy (1/2)

- 1. We promote the internationality of research to further strengthen the quality, impact and renewal of science and research in collaboration with research organisations and other actors
- 2. We develop our funding opportunities to provide more effective support for increasingly diversified internationality
- 3. We encourage international researcher mobility
- 4. We enhance the international competitiveness and attractiveness of Finnish research environments





## Academy of Finland's international policy (2/2)

- 5. We stress the importance of multinational funding cooperation
- 6. We work with other relevant actors to increase the international visibility of Finnish research, improve the international opportunities of Finnish researchers and promote responsible research

The new international policy of the Academy of Finland for 2017–2021: <u>Quality, impact and renewal in</u> <u>international cooperation</u>



### **Resources spent on promoting internationality**

Estimate of the Academy's annual funding for promoting international engagement and cooperation in research in 2016. Our total funding budget in 2016 was approx. €420m.

Funding instrument	Estimate (euros)
Project, research programme, research career and CoE funding (incl. strategic research programmes) (25% estimate)	75,200,000
Research infrastructures and strengthening of university research profiles (25% estimate)	48,700,000
International funding cooperation (e.g. ERA- NETs and NordForsk research programmes), mobility grants and SRC matching funds for Horizon 2020	17,500,000
Total	141,400,000

# Funding granted by Academy research councils in 2012–2015, by nationality

Table 2. Applications and funding granted by funding instrument and nationality in 2012–2015: Academy Project, Academy Research Fellow, Postdoctoral Researcher. Source: Academy of Finland funding database.

	N	Finnish	Other nat.
Academy projects	217	86 %	14 %
Academy research fellows	67	82 %	18 %
Postdoctoral researchers	103	77 %	23 %

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Finnish researchers and foreign researchers apply for and are granted funding in **roughly the same ratio.** 





# OPEN SCIENCE





www.aka.fi/avoin\_tiede

www.aka.fi/en/funding/responsible-research/open-science

https://www.youtube.com/watch?v=Bvg3CNsBeWo

## **Open science: applying for funding**



www.aka.fi/en/funding/responsible-research/open-science/

### **Open science in applications**



- The proposed actions to advance open science are described in the application:
  - Research plan (publication plan & description, justification, collection, use of material & ethical issues)
  - Separate data management plan (management, storage, access, opening, rights of the research data, or brief account if no data at all)
- Research organisations and research infrastructures are expected to support open access publishing, open research data **and** methods.
- Further open science methods and processes may be part of the actual research plan methodology and feasibility.
  - For example: open lab books, citizen science



## What's new in the September 2017 call?

- Call deadline is on Wednesday 27 September 2017 at 16.15 local Finnish time.
- We require open access publishing in high-quality journals as well as open data
- Site of research must be in Finland, applicant must have close connection with Finland
- European Code of Conduct for Research Integrity has been revised
- Updated guidelines on application appendices
- Research council policies available on our website
- Professors not eligible to receive Academy Research Fellow funding
- Summary of the main new points: <u>September 2017 call: What's</u> <u>new?</u> (follow the updates too)





# **THANK YOU!**

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