

HEALTH FROM COHORTS AND BIOBANKS (COHORT)

Academy Programme 2017–2020 Programme memorandum



Background

Finnish health promotion research has achieved a very high international standard in the past 10–15 years. A crucial asset has been its access to high-quality research datasets, including cohort data collected from different population groups, which have provided important evidence on the health effects of lifestyle factors. Coupled with frontline methods and excellent basic research, these data sources represent a major strength of Finnish health promotion research. The emergence of biobanks has opened the possibility to analyse detailed genetic and biological data at population level. Given the common genetic ancestry of the Finnish people, these data are extremely valuable and hold great international appeal because they mean it is possible to study multifactorial traits and diseases in a genetically homogeneous population. The translation of genetic information to the benefit of patients in clinical drug trials, for instance, requires highly detailed health information about genetic carriers, which in turn requires accurate identification of disease phenotypes in research data or registers.

Progressive legislation and a supportive public opinion have been central to the development of key research infrastructures in Finland. However, despite an abundance of resources, their effective use is still hampered by a lack of cohesion and coordination: originally created in researcher-driven projects to address specific questions, the datasets available are narrowly focused on individual research interests. Translating cohorts, basic research and clinical data into population-level health effects will require closer integration of relevant infrastructures and research in this field, among other things by pooling cohorts (e.g. joint research questions) and complementing existing data (e.g. joint sampling) so that they can serve a wider range of users. The Academy Programme *Health from Cohorts and Biobanks* (COHORT) can have a pioneering role in developing ways to promote the integration of population cohorts (in this programme birth cohorts). It can also promote the collection of biobank samples on the principle that "every patient is a research patient", whereby biobank samples are collected, with consent, from all central university hospital patients upon admission. Such projects are already underway in individual hospitals, but closer coordination and universal applicability would add great value for purposes of public health research.

This pilot programme provides funding for new kinds of researcher-driven projects that are not supported through the Academy of Finland's existing funding instruments or other sources of competitive funding, and that have both concrete short-term goals for research integration and longer-term goals that require commitment on the part of the host organisation and that will facilitate the continuity of integration.

At a national level, the pilot programme supports the Academy's strategic objective for the regeneration of science as well as the Strategic Research Council's programme Health and the Changing of Lifestyles. It elevates individual cohorts into a national resource and supports researcher networking, promoting the translation of research to a new level and optimising the national impact of research. Furthermore, the pilot programme supports the objectives and implementation of the health sector growth strategy for research and innovation, the genome strategy and the eHealth and eSocial strategies. The experiences drawn from the pilot programme can also provide a useful reference for programmes in other fields.



Objectives

This Academy Programme is intended to pilot a new programme concept. Rather than awarding funding to projects built around new research hypotheses, the purpose is to facilitate the integration of projects with basic funding already in place. The aim is to increase cooperation between different research partners and especially different levels of research (e.g. basic research, clinical research, public health research and health service systems research), which through scientific regeneration will contribute to enhancing the impact of research in this area. Finland is a small country in terms of its population base, but coupled with a high standard of scientific research this means we are uniquely placed to conduct population-level health research. The COHORT programme can elevate Finnish research to a position of international prominence and so strengthen our country's international appeal.

The theme selected for the pilot programme centres around research using Finnish birth cohorts. The aim is to create greater cohesiveness and synergy among researcher-driven, multidisciplinary consortia working with the same sets of cohorts. They may involve biomedical research, clinical patient research or public health research aimed at identifying and understanding basic mechanisms of disease aetiology, for instance. Consortia will be invited to submit plans detailing a) practical steps through which cohorts can be linked together for greater coherence, and b) how the resulting cluster of cohorts can be used as effectively as possible to integrate clinical and public health research.

<u>For research to able to reform and regenerate itself</u>, the programme will pool existing birth cohorts studied by research teams into larger datasets. The pilot programme will contribute to regenerating research and to facilitating new research by bringing together existing lines of inquiry and by integrating different methodological approaches.

<u>The programme will enhance the impact of research</u> by promoting more efficient and diverse research uses of birth cohorts: the simultaneous use of multiple approaches and methods will produce new, comprehensive and increasingly applicable information that can be used to develop better methods of diagnosis and treatment, to strengthen the health sector business and generally to promote public health and health-related political decision-making. The programme will support the effectiveness of national biobanks.

Implementation

This programme will provide funding for integration initiatives that are beyond the reach of other Academy funding instruments and other sources of competitive funding. Access to funding for these purposes may have been hampered by organisational structures or boundaries, or by the absence of a clear organisational locus for the proposed activities.

Since the call is not intended to provide funding for research projects built around research hypotheses, which are funded through Academy Projects, for instance, it is crucial that the projects concerned have adequate basic research funding in place for the duration of the period for which additional funding is being sought. Therefore, the research plans submitted by applicants will need to describe not only the proposed integration measures, but also how the actual research conducted in the projects is funded.

The programme call process, funding decisions and coordination will be charged to the steering group of the Academy Programme pHealth (Personalised Health – from Genes to Society), the programme subcommittee and



the programme manager(s). The programme volume is five million euros. Funding will be awarded for a maximum term of four years. Academy funding for a single consortium may not exceed 800,000 euros.

Funding is available to consortia only. The call has two stages. The deadline for the first-stage letters of intent is Wednesday 27 April 2016 at 16.15. The shortlisted projects will be announced by 24 June 2016. The most important decision criterion is the innovativeness of proposals regarding the integration of cohort research.

Since the pilot programme is aimed at delivering long-term permanent solutions for the integration of cohort studies, research plans in the full, second-stage applications must include a joint letter of support from the host organisations concerned, detailing how their intend to support and promote integration upon the expiry of Academy funding.

The deadline for the second call stage is Wednesday 21 September 2016 at 16.15. Based on a peer review of the applications and the steering group's recommendations, the programme subcommittee will announce its funding decisions in late 2016 so that funding for the projects will commence on 1 January 2017.