

# Promoting physical activity in older age

Application deadline: 18 October 2012, 4pm

## Summary



Despite widespread recognition of the physical and mental health benefits of physical activity at all ages, activity levels commonly decline in older age, whilst the prevalence of sedentary behaviour increases.

The cross-Research Council **Lifelong Health and Wellbeing (LLHW) programme is offering £5.5M** to support interdisciplinary research into the physiological effects and behaviours associated with physical activity and sedentary behaviour in older adults, which will inform the future development of effective interventions to motivate and sustain activity in this target population.

## Background

There is a large body of research demonstrating the widespread health benefits of physical activity including enhanced cardiovascular, metabolic, musculoskeletal and respiratory function and improved mental health and wellbeing. Health gains can be achieved at any age and exercising early in life or throughout adulthood can confer primary and secondary preventative effects against chronic conditions. In addition sedentary behaviour is an independent risk factor for ill health and is associated with all cause mortality and reduced function.

Despite the acknowledged benefits derived from being physically active, levels of activity commonly decline with age and lack of physical activity in older adults is frequently compounded by long periods of sedentary behaviour.

Studies on physical activity have largely been carried out on athletes, children and people under 60. Older people are at risk of multiple co-morbidities and have more sedentary lifestyles yet there is a relative dearth of evidence that specifically focuses on the specific impacts of activity in this age group. Developing a greater understanding of physiological effects and behaviours associated with activity and inactivity in older adults will inform the future development of more effective interventions to motivate and sustain activity in this growing demographic.

## Funding partners

This call is issued under the auspices of the LLHW programme and is **led by the Medical Research Council** on behalf of:

- Arts and Humanities Research Council
- Biotechnology and Biological Sciences Research Council
- Economic and Social Research Council
- Engineering and Physical Sciences Research Council
- Chief Scientist Office of the Scottish Government Health and Social Care Directorates
- National Institute for Health Research
- Health and Social Care Research & Development Division
- Public Health Agency, Northern Ireland
- National Institute for Social Care and Health Research, Wales

LLHW aims to support multidisciplinary research targeting factors over the life course that are major determinants of health and wellbeing in older age. Promoting physical activity in older age was highlighted as one of the key priority areas in the '**Strategy for Collaborative Ageing Research in the UK**' (see external links) published in 2010, by the Research Councils, in partnership with the UK Health Departments.

## Scope

We invite interdisciplinary research proposals which focus on the following three areas:

- **Physiological effects of activity and sedentary behaviour on older people's health**

Includes understanding physiological mechanisms and research assessing: the benefits of different types and levels of activity on physiological systems, including cardiovascular, respiratory, metabolic, musculoskeletal, neurological and neuromuscular systems, and cognitive function in later life; levels of sedentary behaviour that have adverse effects on these systems and a harmful impact on health; the amount and type of physical activity that can mitigate these adverse effects in older populations. Physiological systems may be studied individually or using a systems approach to understand the whole body effects of active and inactive behaviours in later life.

- **Understanding the determinants of physical activity and sedentary lifestyles in later life**

Includes research on the relationships between determinants that influence an individual's likelihood of being physically active or sedentary such as health status and socio-economic, cultural and environmental factors. Consideration of how these factors can be modified and/or utilised to achieve positive and sustained behaviour change in older populations. Integration of interdisciplinary evidence on the benefits of different types and levels of activity and determinants of activity levels to better understand how positive, sustained behaviour change can be achieved.

- **Measurement of activity and inactivity in older populations**

Includes research on more accurate and validated measures of physical activity and inactivity specifically in older adults, user centred design of devices and systems to more effectively monitor activity levels, interpretation and analysis of measurement data, development and linkage of objective measures to self-reported measurements, and validation of measures to link to health outcomes enabling interpretation of data in this target population.

## Remit

LLHW is seeking to harness existing UK research expertise in physical activity, behavioural and sensing/measurement science to make a significant contribution to the evidence base in ageing research. High quality innovative proposals must address at least one of the areas of demonstrated research need and should add value to current investments in the area.

Proposals must be multidisciplinary or interdisciplinary in nature and will not usually be appropriate for support through existing funding routes of individual Research Councils. We particularly encourage applications that cross the remit of more than one funder.

For the purposes of this call, older age and later life refers to 60+ years of age and proposed research must specifically address this target population. 'Sedentary behaviour' refers to behaviours where sitting or lying is the dominant mode of posture and energy expenditure is very low.

A range of experimental approaches from basic physiological studies and technological design to behavioural research can be used to address the priority areas within the call. We strongly encourage use of population and cohort studies and involvement of users and stakeholders in the research.

## Exclusions

This call is focussed on prevention of ill-health and maintenance of health and wellbeing in older populations. Rehabilitation studies that are focussed on recovery from stroke, coronary events and other medical incidences are outside the scope of this call.

The sole use of animal models is excluded from the call, although we welcome studies that translate understanding of the effects of physical activity from animal models in humans.

### Alignment to other funding opportunities

This call is aligned with other funding opportunities investigating physical activity in older populations currently available through the EPSRC and the NIHR Public Health Research Programme. Applicants should identify the most appropriate initiative to apply for funding.

- [Design for Wellbeing: Ageing and Mobility in the Built Environment \(external link\)](#)  
This EPSRC-led call, issued under the auspices of the LLHW programme, seeks to support research to investigate ways in which better design of the built environment can facilitate and enable mobility, physical activity and physical connectivity of older people within the community.
- [NIHR Public Health Research Programme \(external link\)](#)  
This programme has funds available to support primary research and evidence synthesis that demonstrates which interventions targeted at older populations could help maintain and increase physical activity.

### Funding

Approximately £5.5M is available to support research arising from this call. Applicants may apply for **up to £1M (80% FEC)** for a **maximum three year period**.

Funds may be requested to support the costs of research, including investigator and research staff time, experimental studies, analysis of population and cohort data and equipment. It is anticipated that **proposals submitted would not involve intervention development or evaluation**. If the proposed research does include an intervention, the intervention costs must be supported by the provider/sponsor.

Applicants may **not** request funds to support studentships as part of their research grant. Applicants could propose other forms of capacity building in their application although applicants should note that this is not the primary aim of this call.

We expect host institutions to contribute towards the cost of any capital items or equipment over £10,000. We expect applicants to follow the principles set out in RCUK's efficiency guidelines (see external links), including the current guidance on equipment requests. For full details of what costs may be included in your application please refer to the MRC applicant handbook (available below).

### Project partners

We strongly encourage collaborations with users, service providers, stakeholder organisations and government departments. Organisations not included in RCUK's list of eligible research organisations will not be eligible to receive funds.

We advise applicants considering establishing a collaboration with an industrial partner(s) to refer to the guidance on MRC Industry Collaboration Awards (MICAs) (see external links).

### Networking

We are keen to encourage collaboration and knowledge exchange between Research Council-funded investments relating to physical activity and the ageing agenda. **Applications should include costs of up to £10k in their proposals for networking activities and meeting attendance.**

## Eligibility

This call is led by MRC on behalf of LLHW and therefore MRC funding and eligibility rules apply.

For information on the eligibility of organisations and individuals to receive funding through this call, see the MRC applicant handbook (available below).

If you are normally eligible for MRC, AHRC, BBSRC, ESRC or EPSRC funding you will be eligible to apply to this call. See the RCUK website for a list of eligible organisations (see external links).

## How to apply

Submit your application through the Research Council [Joint electronic Submission \(Je-S\) system](#) to MRC.

All applications must be costed and approved by the relevant institutional authority before submission.

## Application downloads

- [Application guidance \(external link\)](#)
  - [Applicant handbook \(external link\)](#)
  - [Frequently asked questions \(external link\)](#)
- 

## Assessment

Depending on the volume of bids received, the funders may wish to undertake a triage of proposals prior to external peer review whereby applications will be considered on their fit to the scope of the call and scientific excellence by an expert scientific panel. Proposals considered to fall outside of the scope of this call or not worthy of further consideration for support on quality grounds will be rejected at this time without recourse to peer review **see remit section above**.

Applications being considered further will be subject to external peer review and assessed by an independent panel of scientific experts. Anonymised reviewer comments will be available for comment by the applicant. Funding recommendations made by the panel will be considered by the LLHW funders who will make the final funding decisions.

Feedback from the assessment panel will be made available to all applicants.

## Selection criteria

Scientific excellence is the primary criterion and is essential. Within the excellent proposals, the funders may make a strategic decision on which proposals to support in order to maximise the value of available funds.

Proposals should demonstrate their fit to the following assessment criteria:

- Scientific excellence – proposals should demonstrate an innovative, interdisciplinary research agenda and potential to generate new knowledge
- Fit to the aims of the call
- Expertise of the applicants and research team

- Impact – the potential to inform future interventions to promote physical activity in older age, as well as broader scientific, economic and social impact and the appropriateness of plans to achieve impact
- Robust management structure and appropriate use of resources
- Added value to existing Research Council and health department investments

### Additional grant conditions

In addition to the standard terms and conditions for grants, successful applicants will be required to apply the terms and conditions of the LLHW programme.

### Key dates

<b>Call open for applications in Je-S</b>	17 September 2012
<b>Deadline for full proposals</b>	18 October 2012, 4pm
<b>Potential triage of proposals</b>	November 2012
<b>Commissioning panel meeting</b>	March 2013
<b>Decisions to applicants</b>	By end March 2013

### External contact

Dr Katie Finch, MRC programme Manager for Lifelong Health and Wellbeing  
[llhw@headoffice.mrc.ac.uk](mailto:llhw@headoffice.mrc.ac.uk)  
 tel: 01793 416350

### Contact

Louisa Jenkin  
[louisa.jenkin@bbsrc.ac.uk](mailto:louisa.jenkin@bbsrc.ac.uk)  
 tel: 01793 413352  
 fax: 01793 413234