

Child and Adolescent Musculoskeletal Pain Research

Catalyst Fellowships for Early-Career Researchers

Guidance for Applicants

Summary

This document guides you through the preparation and submission of an application for a Catalyst Fellowship in Child and Adolescent Musculoskeletal Pain Research.

Deadline for Submission: 12:00 Wednesday 05 April 2023

Applications must be submitted and approved by all signatories and the application received in its entirety by this deadline. All applications must be submitted via the Medical Research Foundation online grants management system (<https://medicalresearchfoundation.flexigrant.com/>). Paper application forms will not be accepted.

We advise that you prepare your application in good time to allow for your Research Organisation's checks and approvals to take place in accordance with its internal timelines. You will not be able to submit applications after this deadline. We recommend that you submit your application in advance of the deadline so that any technical issues can be resolved in good time.

The Medical Research Foundation is committed to making this application accessible to all by offering assistance where needed. Please do not hesitate to get in touch with the Research Team if you have any questions or concerns about the application or interview processes:

Email: research@medicalresearchfoundation.org.uk Tel: 0207 395 2420

Overview

The Medical Research Foundation, with support from Versus Arthritis, is inviting applications from early-career researchers who are making the transition to research independence to support research that will increase understanding of the mechanisms underpinning child and adolescent musculoskeletal pain, and improve diagnosis, treatment and pain recovery.

Estimates of the impact of pain on the UK suggest that more than a third of the population have been affected by chronic pain. Musculoskeletal pain in children and young people is a significant challenge and remains poorly understood and often poorly managed. Pain in childhood can persist into adulthood and cause continued disability and distress.

Catalyst Fellowship applications within the broad field of child and adolescent musculoskeletal pain research are welcomed from early-career researchers who are seeking to broaden their research experience and develop their own distinct research ideas, with a view of applying for a mid-career fellowship to transition towards research independence at the end of their Catalyst Fellowship. For the purposes of this funding call, research can address musculoskeletal pain in children, adolescents and young adults up to the age of 25. Research areas could include, but are not limited to:

- understanding of the biological mechanisms involved in the development of child and adolescent musculoskeletal pain
- long terms outcomes and potential for change
- treatment and interventions for child and adolescent musculoskeletal pain

To address these areas of research, the Medical Research Foundation and Versus Arthritis recognise the need for interdisciplinary and cross-sector collaborations in musculoskeletal pain research and particularly welcome applications to this scheme that include such partnerships.

The Inclusion of Patient and public involvement and engagement (PPIE) is important in project design and/or over the course of the proposed research, applications that include PPIE are strongly encouraged.

The Funders

Medical Research Foundation

The Medical Research Foundation is an independent charitable foundation. Formed by the Medical Research Council (MRC) over 90 years ago, we grow and nurture people and ideas wherever we see research opportunities with great potential.

Our research projects, including this research on musculoskeletal pain, are only able to take place as a result of the support of our generous donors.

Versus Arthritis

Versus Arthritis was formed in 2018 following the merger of Arthritis Care and Arthritis Research UK. It is the largest charity dedicated to supporting people with arthritis and other musculoskeletal conditions.

The Funding

Applicants may apply for a fellowship of up to £150,000 to support their research, over a maximum of a 2-year period. There will be a total of £2,200,000 available in this competition, which will be split flexibly between the Catalyst Fellowships for Early-Career Researchers and the Career Development Fellowships for Mid-Career Researchers.

Successful candidates will be awarded either a Medical Research Foundation Catalyst Fellowship or a Medical Research Foundation/Versus Arthritis Catalyst Fellowship, and will be informed of this at the point of award.

Additional package of career-enhancing support

The Medical Research Foundation and Versus Arthritis are committed to supporting their Fellows' career progression by providing access to:

- Networking opportunities that will be specifically created to bring together our Fellows working in musculoskeletal pain and wider pain research areas.
- The Academy of Medical Sciences Mentoring Scheme
- Further funding opportunities only open to MRC and Foundation funded researchers (for example, access to the Foundation's Changing Policy and Practice scheme)
- Access to MRC Fellow opportunities

Who can apply

This competition is open to all UK-based researchers at eligible institutions (UK HEIs, Research Council research institutes, hospitals, and other independent research organisations), applicants must hold a PhD, DPhil or MD. Catalyst Fellowships provide personal funding designed to support researchers who are seeking to broaden their research experience and develop their own distinct research ideas. We encourage applicants at this stage of their career to seek a mentor to aid development of ideas.

Applicants will need to demonstrate previous research projects and evidence of outputs, show an

understanding of the contribution of their research to their field and planned a research project that enables the development of research skills. The skills needed to win support in this competition are detailed in the “career stage: exploration” section at <https://mrc.ukri.org/skills-careers/skills-needed-to-win-support/>

It is expected that applicants will be seeking their first substantial grant income as a Principal Investigator. It is not intended to support those who have already secured substantial research funds and/or have already established their own research group (e.g. Senior Lecturers, Professors, MRC and other funders’ Senior Fellows). If you have any questions about eligibility, please contact the research team to discuss: research@medicalresearchfoundation.org.uk

Applicants who do not meet the eligibility criteria will not have their proposal assessed.

Only one application will be accepted per applicant, though individuals can hold more than one Medical Research Foundation or Versus Arthritis grant at any one time. Please contact the Foundation if you currently hold a Medical Research Foundation grant.

Equality, Diversity and Inclusion

The Medical Research Foundation and Versus Arthritis are committed to achieving equality of opportunity for all funding applicants and aims to create an inclusive environment that encourages excellence in research through good equalities practice. Diversity is important to the Medical Research Foundation and Versus Arthritis, and we are working to ensure that the ways in which we fund research embraces a diversity of thought, people, geographical locations and ideas.

We strongly encourage applications from under-represented groups including female and ethnic minority researchers, and researchers with disabilities or long-term health conditions. We will support our researchers and their teams to work flexibly and in a way that meets their personal circumstances. Guidance on the Medical Research Foundation flexible working policies can be found in our [Terms and Conditions](#). Please contact the Research Team if you have any questions about flexible working: research@medicalresearchfoundation.org.uk.

The Medical Research Foundation and Versus Arthritis encourage lead applicants to consider the diversity of the research team, as well as area of expertise, when inviting Collaborators to support their application.

Responsibilities of the Lead Research Organisation and the Principal Investigator

Lead Research Organisation

By submitting an application, a Lead Research Organisation (LRO) indicates their formal acceptance of the proposal, approval of the salaries and resources sought and, if the application is successful, acceptance of the [terms and conditions](#) of a Medical Research Foundation award and the terms and conditions of [Versus Arthritis](#).

Administrative authorities have responsibility for ensuring that salaries and resources cited in the proposal are sufficient to undertake the proposed research, attract sufficiently experienced and skilled staff and represent good value-for-money.

Principal Investigator (PI)

The PI is responsible for the intellectual leadership of the research project and for the overall management of the research. They will be the Medical Research Foundation’s main contact for the proposal. There can only be one PI on a fellowship proposal.

The PI must be based at the LRO at which the award will be administered.

Key dates

- Deadline for submission: 12:00 Wednesday 05 April 2023
- Shortlisting notification: July 2023
- Interview: September 2023
- Funding decision: October 2023

Review and selection

Review and selection process

Applications will be externally peer reviewed and then assessed by an Expert Review Panel, consisting of independent scientific experts in musculoskeletal pain. Applications will be assessed on their scientific quality and impact, and the applicant's suitability for developing their own research ideas and skills. The Expert Review Panel will take into account career stage and contributions of the applicants (with all researchers expected to be early-career, as detailed above) as well as the proposed use of funds. The Expert Review Panel will also consider the potential of the proposed research to lead to future research and funding, impact on musculoskeletal pain research, understanding and scientific progress.

The Medical Research Foundation and Versus Arthritis strongly encourage applications from researchers that have included PPIE. The PPIE section of applications will be reviewed and commented on by patient reviewers (called Research Partners). Research partners will also sit on the shortlisting and final interview Panel alongside the scientific expert review Panel.

Confidentiality

The proposal and any additional details submitted will be sent 'in confidence' to reviewers and the Expert Review Panel. While assessing proposals, our experts may sometimes need to consult with colleagues, in confidence, about individual applications.

Declarations of Interest

If a proposal presents a potential conflict of interest for any of the Expert Review Panel or the Medical Research Foundation or Versus Arthritis Boards of Trustees or teams, the individual with a conflict will not be involved in the discussion of the application and in the decision-making process.

Terms and Conditions of Award

Awards made through this competition will follow standard Medical Research Foundation [Terms and Conditions](#) and Versus Arthritis [Terms and Conditions](#). The Funder's Terms and Conditions spell out the responsibilities of the Principal Investigator and the Lead Research Organisation. The Principal Investigator and the Lead Research Organisation are required to indicate their formal acceptance of the application, their acceptance of the terms and conditions, and the approval of the salaries and resources sought in the application. The Funders may add additional conditions to an award to reflect the particular circumstances and requirements of the funding, or the nature of a particular award. Acceptance of an award constitutes acceptance of both the core conditions and any additional conditions. The Funders reserves the right to vary these Terms and Conditions.

Application guidance notes

The information provided in this section provides guidance on completing the application form on the

Medical Research Foundation online grants management system (<https://medicalresearchfoundation.flexigrant.com/>). Guidance is provided within the system itself and this additional guidance will also be available on our [website](#).

Please clearly label all uploaded files and ensure that all relevant documents are suitable and present.

If you have any questions about any aspects of the application process, please contact a member of the Medical Research Foundation's team.

Email: research@medicalresearchfoundation.org.uk Tel: 0207 395 2420

Completing the online CV section

Lead applicants are required to submit a CV using the Medical Research Foundation narrative CV questions. This is available in the 'My CV' section of each of the lead applicant's user profile once registered for an account with Flexi-Grant.

Applicants are encouraged to provide examples of their impact outside of publications lists, although these should still be provided. Examples such as collaborative working, effective leadership, coaching and mentoring as well as inspiring others are welcomed.

Career progression disruptions and Impact of COVID-19

The COVID-19 pandemic has had a significant and variable impact on researchers' careers across the world. The Foundation is committed to helping mitigate this as much as possible through our grantmaking policies and practices, we are pleased to support the UK Academy of Medical Sciences Cross-funder COVID-19 memory statement as co-signatories, please see [our website](#) for further details.

There is a dedicated space within the 'My CV' form, to detail how your career progression has been impacted by COVID-19. Additionally, guidance will be given to our Expert Reviewers and Panel Members so that they are able to take these impacts on an applicant's career into account when they are making funding recommendations.

Applicants are also provided with space to detail any other career disruptions (e.g. parental leave, ill health) that may have impacted their progression. Please only share details that you are comfortable with being shared with the Panel and do not include identifying information about third parties.

Contribution to knowledge generation

This section can be used to explain how you have contributed to the generation of new ideas and hypotheses and which key skills you have used to develop ideas and test hypotheses. It can be used to highlight how you have communicated your ideas and research results, both written and verbally. It can include a small selection of outputs, with a description of why they are of particular relevance and why they are considered in the context of knowledge generation. Outputs can include (but is not limited to) open data sets, software, commercial, entrepreneurial or industrial products, clinical practice developments, educational products, policy publications, evidence synthesis pieces and conference publications that you have generated. Where outputs have a digital object identifier (DOI) please only include this.

Contribution to the development of individuals

This section can be used to highlight expertise you provided which was critical to the success of a team or team members including project management, collaborative contributions, and team support. It can include your teaching activities, workshops or summer schools in which you were involved (for undergraduates and post-graduates as well as junior colleagues), and the supervision of students and colleagues. It can be used to mention mentoring of members in your field and support you provided to the advancement of colleagues, be it junior or senior. It can be used to highlight the establishment of collaborations, from institutional (maybe

interdisciplinary) to international. It can be used to describe where you exerted strategic leadership, how you shaped the direction of a team, organisation, company or institution.

Contribution to the wider research community

This section can include various activities you have engaged in to progress the research community. It can be used to mention commitments including editing, reviewing, refereeing, committee work and your contributions to the evaluation of researchers and research projects. It can be used to mention the organisation of events that have benefited your research community. It can highlight contributions to increasing research integrity, and improving research culture (gender equality, diversity, mobility of researchers, reward and recognition of researchers' various activities). It can be used to mention appointments to positions of responsibility such as committee membership and corporate roles within your department, institution or organisation, and recognition by invitation within your sector.

Contribution to broader society

This section can include examples of societal engagement and knowledge exchange. It can include engagement with industry and the private sector. It can be used to mention engagement with the public sector, clients and the broader public. It can be used to highlight positive stakeholder feedback, inclusion of patients in processes and clinical trials, and other impacts across research, policy, practice and business. It can be used to mention efforts to collaborate with particular societal or patient groups. It can be used to highlight efforts to advise policy-makers at local, national or international level and provide information through the press and on social media.

Application form question guidance

Section 1: Principal investigator details

As this is a Catalyst Fellowship competition, there can only be one lead/primary investigator. Any other individuals involved in the application can be listed as collaborators in section 3.

Section 2: Lay Case for Support

Please adhere to the word limit for each of the sections.

The lay abstract should be written in a form understandable to members of the public (e.g. current or potential supporters) who are not specialists in the field of pain research. This section may be reviewed by lay and scientific experts.

The lay case for support should be written in appropriate non-technical language. For more information on how to write a clear and informative lay summary please use the following resources:

- [INVOLVE plain English summaries](#)
- [The Plain English Campaign](#)

1. **Lay Title:** The title should be descriptive and in a lay language.
2. **Lay Abstract:** This should outline: the background to the problem; the aims and purposes of your proposal and why they are important; a brief experimental plan; and potential patient benefit.
3. **Background:** Briefly and clearly explain the context of your research, the particular area(s) that your proposal seeks to address and the need for further understanding or treatment options. Please avoid going into great detail of the condition in question unless it is rare.

4. **Hypothesis and aims:** What are the questions you hope to answer and why?
5. **Lay project plan:** Give a brief overview of how you intend to answer your research question(s), including details of what experimental models you will use (e.g. human cells, animal models, clinical samples, patient and/or education research studies).
6. **If awarded, what impact and potential benefit will this application have for those living with Musculoskeletal conditions?** How will the outcomes of your research lead to clinical, patient and/or societal benefits, and what are the likely timescales to benefit? We recognise that, depending on the nature of the research, the applications that we receive can have immediate patient benefit and others increase the knowledge basis for future interventions. In applications where the outcomes directly impact on the quality of life of people with arthritis, this should be clearly detailed in this section. Where benefit is less obvious, for example in basic laboratory research, explain:
 - why this study is necessary to inform a gap in knowledge that will be useful for subsequent translational research?
 - how future research can be built on the findings toward benefit?
 - what are the potential next steps that would be required to get your research findings to clinical intervention?
 - when the benefit might be achieved, with realistic justification of these timelines?

Section 3: Research proposal

Please adhere to the word limit for each of the sections.

The scientific abstract should be written in a form understandable to an academic audience.

Please indicate the key scientific objectives and challenges of the research and any potential medical/clinical implications.

These abstracts will be used for external communications about the award and should therefore not contain specific details of any sensitive information.

Case for Support:

Provide details of the proposed research project. References, diagrams, tables or charts, and justification of samples sizes (including sample size calculations, where appropriate, or a justification for why these have not been included) can be included within the text or as an appendix. The Case for Support and appendices should not exceed 5 A4 pages PDF format (size 12 Arial font).

The detailed Case for Support for the research project should include the following information:

The Medical Research Foundation expects that before work commences on any research, the Principal Investigator will have ensured in collaboration with the lead research organisation that all appropriate regulatory approvals are in place. These could include those relating to human participation, radiation, genetic manipulation, animals, stem cells, personal safety and health and safety.

The Medical Research Foundation expects that research involving animals will comply with [UK regulations](#) and the research is planned and conducted according to the [3Rs](#).

1. **Background** – provide relevant background information that is needed to understand the wider context of your application. Explain the need for research in this area and the rationale of the lines of research planned. Give sufficient details of other past and current research to show that the aims are scientifically justified and to show that the work will add distinct value to what is already

known, or in progress. Justify the research either through its importance for human health, or its contribution to relevant areas of basic biomedical science.

2. **Hypothesis and objectives** – describe the main hypotheses to be investigated, details of the objectives and how they will be achieved.
3. **Study design** – describe the experimental approaches and methodology for the research in detail (for example giving and explaining sample sizes, methods of recruitment and trial designs). It is not necessary to describe each experiment, but sufficient detail is required to show why the research is likely to be competitive.
4. **Timelines and milestones** – give timelines for the research with major milestones and deliverables.
5. **Potential problems and contingency plans** – highlight any potential risks and identify procedures that can be put in place to deal with them.
6. **People** – outline how each of the investigators named in the proposal would work together and outline other major collaborations important for the research. Explain how the award will contribute to the career development of the applicant (early-career researcher). Detail productivity from previous appointments/research funding and demonstrate how the award will promote the applicant's trajectory towards research independence.
7. **Environment** – describe how the scientific or clinical environment(s) in which the research will be conducted will promote the delivery of the proposed research. Explain how the research will benefit from facilities provided by the Research Organisation. Describe any clinical, commercial, or organisational dependencies necessary to support the research, or to help translate it into practice.
8. **Ethics & Research Governance** - describe the ethical issues arising from any involvement of people, human samples or personal data in the research proposal. Give details of how any specific risks to human participants will be controlled, and of any new animal research the funding would be supporting. Describe the ethical review and research governance arrangements that would apply to the proposed research.
9. **Exploitation and Dissemination** – describe plans to disseminate the findings of the research. Is the proposed research likely to generate commercially exploitable results? Other than publication in peer reviewed journals, indicate how any results arising from the research will be disseminated to promote or facilitate take-up by users in the health services.

Gender dimension of research

The Medical Research Foundation expects that applicants will consider the gender dimension of their research proposal. Gender dimension in this instance refers not to the diversity of the research team (which should be considered), but the sex and gender component of the experimental design that involves human participants, animal studies, human and animal tissues, and cell lines.

Sex refers to the biological attributes of humans and animals, such as genes, chromosomes, hormone levels and reproductive organs. Sex can be referred to as male, female and intersex in humans or hermaphrodite in animals

Gender refers to the social and cultural attributes of human behaviour. How individuals refer to gender will vary depending on social and cultural context and this can also vary over time.

Applicants should include the following information:

1. How the biological variable of sex will be taken into account in the experimental design with regards to research methods, data analysis and interpretation, and dissemination of findings.
2. How the socio-cultural variable of gender will be taken into account in the experimental design with regards to research methods, data analysis and interpretation, and dissemination of findings.

3. How the impact of the findings may affect different sex and genders differently

If sex and or gender do not need to be taken into account, applicants will need justify why. For instance, the Medical Research Foundation expects that both sexes of animals will be used in animal experiments as the default, and that cost or previous published data are not sufficient justifications to use only one sex.

Please refer to the [MRC guidance on sex and gender in experimental designs](#).

Collaborators

Collaborators will need to provide a signed declaration on letter-headed paper confirming that they have consented to co-operate in the research project and explaining the role they will play.

Collaborators are required to submit a standard format CV with a maximum length of two pages. If a Mentor has provided support for the application or career development, a Mentor Letter of Support can be optionally included.

Recommended and Excluded Reviewers

Please suggest up to three experts to review the application. These individuals should not be: i) closely associated with the proposed project or any related work; ii) collaborators/co-applicants on any active or recent grants; iii) have published with the lead applicant in the past five years; or, iv) previous mentors/supervisors of the lead applicant. We cannot guarantee that we will approach these experts for an assessment of the applications.

Please provide the names of up to three reviewers that you do not wish to review the application due to potential conflicts of interest.

Data Management Plan

The Medical Research Foundation is committed to ensuring that the knowledge and discoveries which result from our funded research are available freely and immediately to everyone. Data Management Plan (DMP) will be required to detail how you will collect, store, curate, and manage data, including how it will be shared and any open access requirements.

Where substantial data is generated from the research, the DMP will be more in depth and therefore likely to be up to 1500 words long, for studies generating smaller amounts of data, DMPs will be short i.e. 200-500 word in total.

The [MRC Policy and Guidance on Sharing of Research Data from Population and Patient Studies](#) is a useful reference for data relating to studies involving human participation.

Section 4: Use of Animals in Research

The Medical Research Foundation expects that before work commences on any research, the Principal Investigator will have ensured in collaboration with the lead research organisation that all appropriate regulatory approvals are in place. These could include those relating to human participation, radiation, genetic manipulation, animals, stem cells, personal safety and health and safety.

The Medical Research Foundation expects that research involving animals will comply with [UK regulations, regardless of which country the research is carried out in](#), and the research is planned and conducted according to the [3Rs](#).

If the project involves the use of animals, please provide confirmation of personal licences for all members of staff involved in the proposed animal research. In addition, please confirm the relevant project licence covers the proposed work.

Section 5: Human participation and ethical approval

If the project involves the use of human participants and/or organs, tissues or cells relevant to The Human Tissue Act 2004 (England, Wales and N. Ireland) and The Human Tissue (Scotland) Act 2006 in the UK, please detail the relevant ethical approvals.

If ethical approval is required for the research proposal, please provide details of the relevant approvals.

If your research involves the use of human participants and/or organs, tissues or cells outside the UK, please provide details in the relevant questions. Describe how your research complies with relevant UK regulations. Applications involving human participants in countries outside of the UK may be subject to additional ethical implications.

Please see the MRC guidance related to [Human Participants in Research](#) for further direction on research involving human participants in countries outside of the UK.

Section 6: Intellectual property

Please detail any intellectual property that this project will generate, either during or beyond the lifetime of the award. Please include details of any existing background intellectual property that will need to be used and/or modified and plans for ownership of this intellectual property.

If intellectual property is likely to be generated, a letter of support will be required from your departmental IP Manager/Head of Technology Transfer Unit.

Section 7: Funding requested

The full direct costs of research will be met. Direct costs are those that will arise from the conduct of the research project and can be charged as the cash value spent and can be supported by an auditable record. Like all medical research charities, the Medical Research Foundation and Versus Arthritis do not meet the indirect costs of research.

Applications should be costed at today's prices and inflation should not be included.

Applications can include requests for the costs of:

- Lead applicant salary including annual pay-scale increments but excluding predicted annual pay awards and overheads
- Research staff (who will directly support the research proposal) including annual pay-scale increments but excluding predicted annual pay awards and overheads *i.e.* the apprenticeship levy
- Research consumables and minor equipment
- Access charges for specialist equipment or services
- Travel costs of the PI or members of staff travelling between multi-centre research sites or for scheduled collaborator meetings relating to the project.
- Animals and animal husbandry
- Conference travel and subsistence
- Open access publishing costs (up to £8,000 for grant durations of a three-year minimum)
- Research equipment
- Public and Patient Engagement work that is directly relevant to the delivery of the proposed research
- Any other direct costs of the proposed research

Catalyst Fellowships will not fund:

- Any directly allocated costs i.e. estate costs and costs of shared resources such as staff and equipment.
- Any indirect costs necessary for underpinning research but which cannot be allocated to individual projects (including but not limited to bench fees, computing and information support, general maintenance and other infrastructure costs, HR and recruitment costs etc.)
- Patient care, NHS treatment or NHS support costs associated with clinical research, which are met through other sources of funding.
- Generic cost of public engagement in science work
- Other costs associated with dissemination of research findings.

Justify the budget requested and provide details of any costs to be met through other funding sources.

Sections 8-10: Authorisation and Declarations

Authorisations and/or declarations are needed from the following application participants:

- Principal Investigator
- Research Administrator
- Head of Department

Participants should be invited to complete their sections of the application by following the instructions under the participants tab on the Application Summary page. Please check which email address they would like to use, as they may already be registered on Flexi-Grant and mistakes may lead to a delay in processing the application.

Applicants can keep track of the progress of submission completion status on the Application Summary page. Applicants can issue a reminder email to the invited participants through the participants tab on the Application Summary page. If the instruction email from the Medical Research Foundation has not been received please: a) double check the accuracy of the email address supplied on the application form; b) advise the intended recipient to check their spam filters/junk folders; c) contact the Medical Research Foundation with an alternative email address for the recipient. The Medical Research Foundation is happy to help where possible but cannot be held responsible for automated emails that are not received due to address errors or spam filters.

All declarations must be signed by the appropriate persons prior to the submission of the application. It is the applicant's responsibility to ensure that approval of the application by the Lead Research Organisation is completed before the closing date.

Principal Investigator

The Principal Investigator is required to report any conflicts of interest and is required to declare that they will abide by the Funder's Terms and Conditions and will be actively engaged in the proposed research.

Research Administrator

A Research Administrator at the Lead Research Organisation should be invited to approve the application ("Administrative Authority"). They must be someone with delegated authority at the Lead Research Organisation, where the award will be held. This may be someone within the research office, Faculty administration, or other administrative or management role. The approver must be someone with the authority to confirm that the potential award can be hosted within their organisation and assure the proposed budget is appropriate and eligible for the scheme.

Head of Department

The Head of Department must provide a statement of support and authorise the application confirming that the potential award can be hosted within their organisation and that there is the capacity to deliver the proposed research. The Head of Department should state how the applicant will be supported to focus on their proposed research, for example by being released from competing duties such as teaching or administrative commitments. Additionally, they should provide details of the resources that the department will commit to the applicant should the application be successful.

Before inviting the Head of Department to participate in completion of the application form, applicant is advised to ensure that their Head of Department is willing and available to provide a confirmation of support prior to the deadline. Incomplete confirmations will mean that an application cannot be submitted and will be deemed ineligible.

It is the responsibility of the lead applicant to inform the Head of Department of the deadline and liaise with them to ensure that they have received their invitation with instructions to participate in completion of the application.

Application submission

If you have any questions about any aspects of the application process, please contact a member of the Medical Research Foundation's team: research@medicalresearchfoundation.org.uk Tel: 0207 395 2420.

Appendices

Scoring Range for Peer Reviewers

Score Indicators	Score
Exceptional – Top international programme, or of exceptional national strategic importance	
■ Scientific Quality and Impact – Crucial scientific question or knowledge gap or area of strategic importance to the UK – Original and innovative; novel methodology and design – Potential for high health and/or socioeconomic impact ■ Scientific Leadership – Outstanding potential for research leadership (broad contribution to knowledge generation, engagement with wider research community, development of individuals) – Excellent research environment (team, facilities, collaborators) ■ Justification of Resources – Potential for high return on investment (resources requested, likelihood of project delivery, anticipated knowledge generation) – Appropriate staff time allocated to deliver project (Principal investigators and co-investigators) ■ Other: Ethical and/or governance issues are fully considered	6
Excellent – Internationally competitive and leading edge nationally, or of national strategic importance	
■ Scientific Quality and Impact – Crucial scientific question or knowledge gap or area of strategic importance to the UK – Original and innovative; novel methodology and design – Potential for high health and/or socioeconomic impact ■ Scientific Leadership – Excellent potential for research leadership (broad contribution to knowledge generation, engagement with wider research community, development of individuals) – Excellent research environment (team, facilities, collaborators) ■ Justification of Resources – Potential for high return on investment (resources requested, likelihood of project delivery, anticipated knowledge generation) – Appropriate staff time allocated to deliver project (Principal investigators and co-investigators) ■ Other: Ethical and/or governance issues are fully considered	5
Very High Quality – Internationally competitive in parts	
■ Scientific Quality and Impact – Crucial scientific question or knowledge gap or area of strategic importance to the UK – Robust methodology and design (innovative in parts) – Potential for high health and/or socioeconomic impact	4

■ Scientific Leadership – Very good potential for research leadership (broad contribution to knowledge generation, engagement with wider research community, development of individuals) – Very good research environment (team, facilities, collaborators) ■ Justification of Resources – Potential for significant return on investment (resources requested, likelihood of project delivery, anticipated knowledge generation) – Appropriate staff time allocated to deliver project (Principal investigators and co-investigators) ■ Other: Ethical and/or governance issues are fully considered	
High Quality	
■ Scientific Quality and Impact – Worthwhile scientific question or knowledge gap or a valuable scientific resource – Methodologically sound study – Potential for significant health and/or socioeconomic impact ■ Scientific Leadership – Good potential for research leadership (good contribution to knowledge generation, engagement with wider research community, development of individuals) – Good research environment (team, facilities, collaborators) ■ Justification of Resources – Potential for significant return on investment (resources requested, likelihood of project delivery, anticipated knowledge generation) – Appropriate staff time allocated to deliver project (may be scope strengthen management of the project) ■ Other: Ethical and/or governance issues are well considered	3
Good Quality	
■ Scientific Quality and Impact – Worthwhile scientific question or knowledge gap or a valuable scientific resource – Methodologically sound study but areas require revision – Likelihood of successful delivery ■ Scientific Leadership – Appropriate potential for research leadership (scope to strengthen contribution to knowledge generation, engagement with wider research community, development of individuals) – Appropriate research environment (scope to strengthen team, facilities, collaborators) ■ Justification of Resources – Potentially more limited return on investment (resources requested, likelihood of project delivery, anticipated knowledge generation) – Resources broadly appropriate to deliver the proposal ■ Other: Ethical and/or governance issues are adequately considered	2

Poor Quality	
■ Scientific Quality and Impact – Poorly defined question – Methodologically weak study – Limited likelihood of new knowledge generation ■ Scientific Leadership – Poor research leadership potential ■ Justification of Resources – Potentially poor return on investment ■ Other: Ethical and/or governance issues are not adequately considered	1
Ineligible for funding	0

Scoring Range for Expert Review Panel

Score Indicators	Fundable
10. Exceptional – Top international proposal or of exceptional national strategic	
■ Quality – Highly original and innovative – Novel methodology and design – Excellent potential for research independence (broad contribution to knowledge generation, engagement with wider research community, development of individuals). – Excellent team, environment, and collaborators are amongst the best in a broad field) ■ Impact – Crucial scientific question or knowledge gap – Potential for high health and/or socioeconomic impact – Internationally unique resource of value to many disciplines ■ Productivity – Potential for high return on investment – Very high likelihood of successful delivery (risks well managed) ■ Other: Ethical and/or governance issues are fully considered	Fundable
9. Excellent – Internationally competitive and leading edge in most areas	
■ Quality – Original and innovative – Novel methodology and design – Excellent potential for research independence (broad contribution to knowledge generation, engagement with wider research community, development of individuals). – Excellent team, environment, and collaborators are amongst the best in a broad field) ■ Impact – Crucial scientific question or knowledge gap – Potential for high health and/or socioeconomic impact – Internationally significant resource of value to many disciplines ■ Productivity – Potential for high return on investment – Very high likelihood of successful delivery (risks well managed) ■ Other: Ethical and/or governance issues are fully considered	Fundable

8. Very High Quality – Internationally competitive and leading edge nationally	
■ Quality – Original and innovative – Robust methodology and design (innovative in parts) – Excellent potential for research independence (broad contribution to knowledge generation, engagement with wider research community, development of individuals). – Excellent team, environment, and collaborators are amongst the best in a broad field) ■ Impact – Crucial scientific question or knowledge gap or area of strategic importance to the UK – Potential for high health and /or socioeconomic impact – Resource of value to many disciplines ■ Productivity – Potential for significant return on investment – Very high likelihood of successful delivery (risks well-managed) ■ Other: Ethical and/or governance issues are fully considered	Fundable
7. High Quality – Leading edge nationally and internationally competitive in parts	
■ Quality – Innovative – Robust methodology and design (innovative in parts) – Strong potential for research independence (board contribution to knowledge generation, engagement with wider research community, development of individuals). – Very good team, environment, and collaborators are amongst the best in a broad field) ■ Impact – Key scientific question or knowledge gap or area of strategic importance to the UK – Potential for significant health and/or socioeconomic impact – Valuable scientific resource ■ Justification of Resources – Potential for significant return on investment – High likelihood of successful delivery ■ Other: Ethical and/or governance issues are well considered	Fundable
6. High Quality – Leading edge nationally, but not yet internationally competitive	
■ Quality – Methodologically robust study – Potential for research independence (broad contribution to knowledge generation, engagement with wider research community, development of individuals). – Good team, environment, and collaborators from a broad field – Potential for research independence (track record, team, environment, and collaborators)	Fundable

■ Impact – Worthwhile scientific question or knowledge gap – Justifiable scientific resource – Potential for reasonable health and/or socioeconomic impact ■ Productivity – Resources appropriate to deliver the proposal – High likelihood of successful delivery ■ Other: Ethical and/or governance issues are well considered	
5. Good Quality – Nationally competitive	
■ Quality – Methodologically sound study but areas require significant revision – Research independence potential reasonable (reasonable contribution to knowledge generation, engagement with wider research community, development of individuals). – Team, environment, and collaborators not optimal – Poorly defined question ■ Impact – Worthwhile scientific question with potentially useful outcomes – Moderate likelihood of contributing to new knowledge generation ■ Productivity – Resources broadly appropriate to deliver the proposal – Good likelihood of successful delivery ■ Other: Ethical and/or governance issues are adequately considered	Not fundable
4. Potentially Useful – With significant weaknesses	
■ Quality – Methodologically sound study (approach or study design requires significant revision) – Research independence potential not optimal (low contribution to knowledge generation, engagement with wider research community, development of individuals). – Environment not optimal ■ Impact – Contains potentially useful ideas but requires major revision – Moderate likelihood of successful delivery ■ Productivity – Resources inappropriate to deliver the proposal – Unlikely to significantly contribute to new knowledge generation ■ Other: Ethical and/or governance issues are not adequately considered	Not fundable
3. Potentially Useful – With major weaknesses	
■ Quality – Question poorly defined – Methodologically weak study – Poor research independence potential/environment ■ Productivity – Unlikely to contribute to new knowledge generation	Not fundable
2. Poor quality science, bordering on unacceptable	Not fundable

1. Unacceptable quality or has serious ethical concerns	Not fundable
0. Ineligible for funding	Not fundable

Scoring criteria for Research Partners

Research partners will evaluate the applications according to the following criteria:

- Clarity of the language used for a lay audience
- Relevance of the proposed research
- Involvement of patients and the public (to date and proposed)
- Quality of proposed work
- Patient benefit and the impact of the proposed work for people with musculoskeletal conditions
- Value for money