

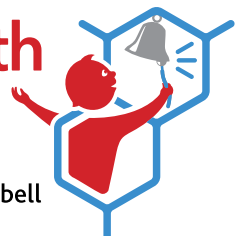


Research Strategy

2022 - 2027

**Children with
Cancer UK**

Helping children and young
people with cancer to ring the bell



Introduction

At Children with Cancer UK, our vision is a world where every child survives cancer.

We are dedicated to improving survival of all childhood (0 – 14 yrs. old) and young adult (15 – 24 yrs. old) cancers. Over the past thirty years, we have witnessed dramatic improvements in the survival of some paediatric and young person's cancers, yet there are still cancers which have a fatal prognosis. We rely on the generosity of the public to invest in research. As the UK's leading charity dedicated to childhood cancer research, we are proud of our contribution to the ongoing breakthroughs which have saved and improved thousands of young lives.

Research Aims

Our research programme is designed to progress our principal aims. First, we wish to develop improved treatments so that more patients are cured with less toxic side effects. Second, we wish to better understand how cancer develops so that one day we may be able to prevent it.

Research Philosophy

Children with Cancer UK is the leading national children's charity dedicated to the fight against childhood cancer. Children, young people, and their families are vital to the research we fund; we therefore urge all applicants to ensure representatives from patients and the public are actively involved from an early stage in research projects. As a charity we are committed to working in partnership with patients and the public, we recognise the valuable insight this involvement can provide.

Children with Cancer UK values its strong and established partnerships with others in the paediatric and young adult cancer community. We seek opportunities to collaborate with organisations which share our vision of helping children and young people in their journey with cancer including other charities, government funders, cancer organisations and universities. We recognise the value of working with others to share experience, minimise costs and thereby maximise the efficient use of charitable funds. Our current partnership with the Association for Medical Research Charities (AMRC), the National Cancer Research Institute (NCRI) and the Children and Young People with Cancer Coalition (CYPCC) have demonstrated the power of what we are able to achieve when our efforts are united.

We also encourage collaboration among the researchers we fund. For example, we have core-funded the Children's Brain Tumour Drug Delivery Consortium and co-funded INSTINCT, a network across three of the UK's leading paediatric neuro-oncology centres working to improve treatments for patients with high-risk childhood brain tumours.

We understand the need to invest in early-career researchers. In future, we hope to support the next generation of clinician scientists and research leaders, champion their long-term career progression through our fellowship and clinical studentship programmes and prepare them to make substantial contributions to improving outcomes for children with cancer.



As a charity, our funding programme has paid particular attention to supporting promising and innovative research areas to provide proof of concept studies which complement the funding of major clinical trials. These studies are usually small in scale but often are essential in enabling researchers to go on to develop proposals for major trials. We have successfully 'seed-funded' research projects that have been a springboard for much wider investigations, leading to discoveries that will ultimately change our understanding of children's cancers and how to cure them. Children with Cancer UK will continue to champion these efforts and has both supported and co-funded important elements of major, ground-breaking clinical trials and significant projects which have considerably contributed to better outcomes for young patients.

Since 1995, Children with Cancer UK has invested in epidemiological research aimed at identifying possible causes of cancer. We have contributed substantial funding to set up the Childhood Leukaemia International Consortium (CLIC) which aims to promote investigations of the role of environmental and genetic risk factors in various sub-types of leukaemia among children. We have also helped to establish a central data collection centre at the International Agency for Research on Cancer (IARC, part of the World Health Organization) from research studies conducted in 12 countries. The ultimate goal of these on-going studies is to identify practicable approaches to cancer prevention.



Current Research Priorities



Development of more effective treatments

In spite of the impressive, improved prognosis for cancer in children and young people seen over the last 50 years, survival has recently plateaued. Moreover, many of those cured suffer significant side effects. We believe that more targeted, less toxic treatment options including immunotherapies and tailored treatments which target cancer-specific molecular changes are an important area for research investment.



Early identification and mitigation of treatment related toxicity

We support clinical and laboratory research aimed at improving survival and quality-of-life.

Toxicity of therapy is an increasingly prominent cause of both short- and long-term morbidity and mortality as there are now more second and subsequent lines of therapy if initial treatment is unsuccessful. We support research seeking to improve understanding of the mechanisms of toxicity which may be used to design future treatment strategies that maintain efficacy yet reduce early and/or late toxicity as well as identifying genetic and other factors which might be used to mitigate this risk.



Promotion and dissemination of research findings to achieve maximum research impact

Our hope is to remove some of the barriers faced by researchers when attempting to share the efforts of their work. We support a new open access publication platform developed by AMRC and its partners called AMRC Open Research. This will help researchers, but also assist clinicians accessing such publications, in order to facilitate the optimal management of the patients they are caring for.



Identification of improved diagnostic and prognostic biomarkers

Accurate diagnosis and disease monitoring are central to the development of more effective, less toxic stratified therapies. Strong support for this approach is seen in the application of cytogenetics and MRD in leukaemia's and molecular classification of medulloblastoma, which were previously only research tools but are now firmly embedded as 'standard-of-care' in routine clinical practice. The development of similar approaches in other tumour types is an important area for future research.



Understanding cellular and molecular oncogenesis

Basic cellular and molecular biology research holds the key to understanding the mechanisms through which cancer develops and by implication the development of new therapies. Over the next five years, Children with Cancer UK will continue to support such studies but will give priority to those deemed by our Scientific Advisory Panel (SAP) and Board of Trustees to have a clear translational benefit in the short term.



How we fund research

We welcome all applications which are aligned with our research priorities and objectives as outlined above. We primarily fund, but are not limited to funding, basic laboratory, prospective epidemiological and pre-clinical and clinical research studies. The type of grant and funding we offer will vary within any given grant call and will be determined by both our income and the identified need within the wider research landscape. However, we are committed to supporting:

- Pilot grants (including to support MPhil Studentships as a platform for PhD studentships)
- Project Grants
- PhD Studentships
- Fellowships
- Clinical trials

The full details of the timeline, remit, rationale and eligibility criteria for the call, and the size and types of grants available to applicants, are detailed in tender documents, application forms and guidance notes that are published at the call launch. Project Grants, Fellowships and PhD Studentships Awards are usually annual calls, with a two-stage application process.

The Board of Trustees make the final decision regarding the allocation of funding following recommendation from the SAP and PPI representatives. Both the SAP and Board of Trustees are mindful of recommendations received from government bodies and medical research charities whilst developing the remit of each funding call, to ensure that we can identify and respond to areas of unmet need and have the flexibility to react to current circumstances.

Stage 1

The first stage is submission of a short preliminary application giving an outline of the proposed research – the aims, methods, and the credentials of the research team. Preliminary applications undergo initial internal triage to check that forms are completed



correctly, and the proposed research is within the scope of the call. Preliminary applications are then reviewed by the SAP. The most promising applications are taken through to the second stage.

Stage 2

Applicants are invited to submit a detailed proposal. Short-listed Fellowship and Studentship applicants will also be interviewed. Trustees of the charity make the final decisions, based on advice from the SAP and the amount of funding available.

We will no longer be accepting ad hoc grant applications and encourage all applicants to submit an application during the yearly funding calls. We expect to fund at least 50% of applications that progress to Stage 2.

Who will we fund?

Proposals for all grant types must be submitted by a UK academic institution (university, hospital or research institute). We will consider funding international collaborations only where the principal investigator is employed at a UK research institution. The principal investigator will be held responsible for managing the grant, both scientifically and financially, and will be our point of contact. If that is not possible or practical, then please contact us for specific permission to apply.

Peer review

The detailed research proposals are reviewed by external experts, from the UK and/or overseas, selected according to their relevance to the proposed research. External reviewers are asked to assess the detailed research proposals against the following criteria:

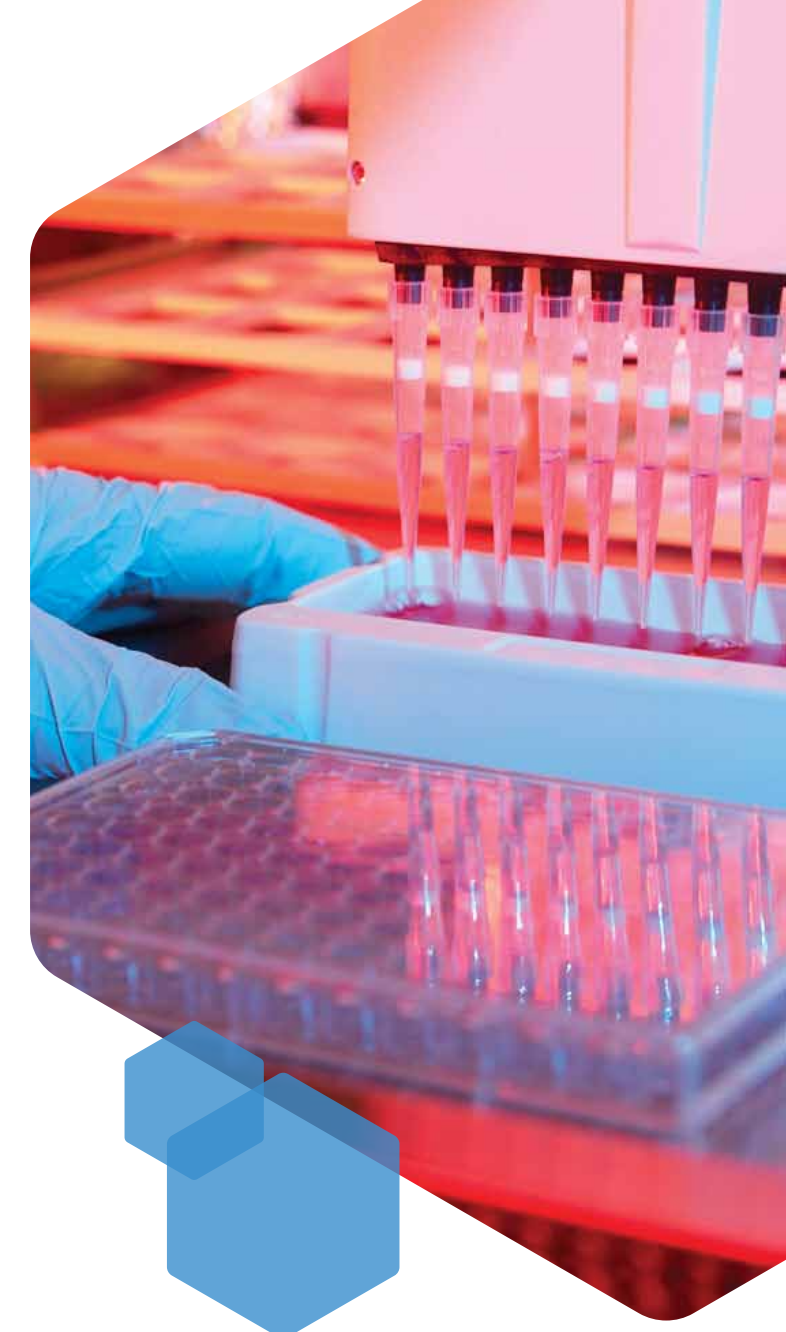
- The importance, originality, and relevance of the project
- The study design, including the likelihood of achieving decisive results, and whether the timeline is realistic, the methods are appropriate, if there is sufficient statistical power, etc
- The credibility and justification of the financial request
- The ability of the research team to carry out the proposed work
- Whether the use of animals, if applicable, is adequately justified and aligns with the NC3Rs guidelines for Replacement, Reduction and Refinement
- Whether there are any likely major obstacles that the research team may encounter
- Each external reviewer provides written comments and an overall score, commenting on the originality, importance, design and costing of the proposal. Feedback will be provided to applicants following review by members of the SAP.

How do we support successful grant holders?

The grant can only commence once the Grant Award Letter has been signed by all parties and returned to us. Grants must be started within 12 months from the date on your award letter.

Requests for payment should be delivered according to the award letter in line with the grant budget. Payments will only be made once the award letter has been fully signed and a grant start date has been confirmed.

Throughout the term of the grant, it is vital that we receive reports detailing the progress of the grant and



the impact of the research. Unless specified in the award letter, progress reports must be provided annually, with a final report due within three months of the end of the grant. We will support requests to adjust the existing grant budget when required. Continuation of funding is dependent upon the completion of satisfactory progress reports. Failure to submit reports on time will jeopardise the continuation of the Grant.

When will the charity review the research strategy?

We aim to review our research strategy every 3-5 years. Further enquiries can be made at research@childrenwithcancer.org.uk

Children with Cancer UK

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Registered Charity Number: 298405.

Inaugurated by Diana, Princess of Wales.

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