

CURE Research Application and Grant Policies and Instructions

January 2023

1. About CURE Childhood Cancer

CURE Childhood Cancer’s mission is to conquer childhood cancer through funding targeted research while supporting patients and their families. CURE invests millions of dollars each year into the most promising childhood cancer research, working to ensure children have the best chance to survive their cancer without sacrificing their future health and quality of life. Simultaneously, our team members meet families at the point of diagnosis and surround them with critical resources to help them navigate this journey including financial support, short-term lodging, travel assistance, meals in the hospital, counseling, and bereavement support. Through this holistic approach, we work tirelessly to provide for the emotional, physical, financial, and educational needs of our patients and their families.

2. Applying for a CURE Research Grant

Applicants may access the online grant applications at CURE’s website, where there is updated information along with answers to common questions. (<https://curechildhoodcancer.org/our-research/for-researchers/>). Applicants may also go directly to the Altum Proposal Central site (<https://proposalcentral.com/GrantOpportunities.asp?GMID=190>). You may also contact CURE staff with questions regarding research grants at research@curechildhoodcancer.org.

See proposalCENTRAL login page for tutorials and additional details about the grant application process. Alternatively, click “Help” or contact ALTUM Customer Service at pcsupport@altum.com or 1-800-875-2562.

Currently, CURE offers two different grants for research in childhood cancer:

- **Translation to CURE award (T2C)** – open to investigators at any stage of their career (Assistant to Full Professor). The award term will be up to 2 years with support of \$150,000 per year in direct costs plus 10% indirect costs (Total award = \$330,000).
- **Early Investigator award (EI)** – open to beginning scientists and physician scientists at the Instructor or Assistant Professor level. Physician scientists (MD or MD/PhD) who are within 5 years of completion of their clinical (or terminal) fellowship training and are beginning to establish a research career may apply as Instructors or Assistant Professors. PhD scientists within 5 years of an initial appointment as a tenure track Assistant Professor are also invited to apply for this award. Eligible applicants may not have R-level funding from NIH at the time of application; however, concurrent R00 or K awards are allowed. An established research mentor is highly recommended but not required. The award term will be up to 2 years with support of \$100,000 per year in direct costs plus 10% indirect costs (Total award = \$220,000). *For the inaugural year of this program, CURE will only fund 2-3 Early Investigator grants.*

New in 2023: CURE applications will utilize a Letter of Intent (LOI) review prior to the full application. This is designed to reduce the administrative burden for both applicants and reviewers. All applicants

must first submit an LOI and be invited to submit a full application. Please see CURE Childhood Cancer site at proposalCENTRAL for instructions. **LOIs must be submitted by FEBRUARY 17, 2023.**

3. Who is Eligible to Apply

Applicants for Research Grants from CURE Childhood Cancer must be full-time faculty at a US-based, nonprofit research institution. Applications will not be accepted from for-profit institutions or federal or state government laboratories (e.g., NIH or National Laboratories).

A single, Principal Investigator (PI) must be designated as fully responsible for the conduct of the project, and a PI cannot hold more than one grant at a time from CURE. CURE will accept only one application from a PI; however, this does not preclude the participation of the PI in secondary roles on other applications or grants.

4. Research Priorities

In granting funds, we give highest priority to projects which are aimed at the 20% of children who are not surviving today's methods of treatments. With that in mind, we seek proposals for research with the potential to significantly improve treatments for pediatric cancers where current options are inadequate. Such studies might include development of novel therapies, characterization of drug resistance, and treatment of relapsed disease.

Examples of research areas may include:

- High risk ALL or relapse ALL
- Acute myeloid leukemia
- Neuroblastoma at stage 4, mycN amplified neuroblastoma
- Wilms tumor anaplastic stage IV or relapse disease
- Metastatic sarcomas (e.g., bone and soft tissue, osteosarcoma)
- Pediatric brain tumors, high risk

In alignment with our strategic goals, Translation to Cure awards (T2C), with anticipated clinical testing or application within the next 2-3 years, will be prioritized. However, highly innovative proposals addressing other significant questions regarding the biology of pediatric malignancies or development of critical model systems are always welcome and will be carefully considered for support.

5. Application Document Format

Application documents may be single- or double-spaced (if single spacing, enter a space between paragraphs). Type size: 12-point Times New Roman or 11-point Arial are the minimum font sizes for the text; 10-point Times New Roman or 9-point Arial font type may be used for figures, legends, and tables. Margins: > 0.5 inches all around unless a form with different margins is supplied.

6. Required Information for Application

a. General Audience Summary

The general audience summary should provide an outline of the proposed research project that can be readily understood by readers without medical or scientific training. This summary should not be a duplication of the structured technical abstract.

Please concisely describe the background which led to these studies, the questions being asked or problems being addressed, and the potential impact on childhood cancer patients. Avoid the use of abbreviations or technical terminology that is not widely understood.

The general audience summaries will be used by CURE staff in communication with donors, the general public, local press, and the Board of Directors to describe investments in research. Thus, it is imperative that the general audience summary be clear, compelling, and informative. Also, since this summary will be used in public communications, it should not contain confidential information.

Examples of good general audience summaries can be found in the appendix.

b. Structured Technical Abstract

The structured technical abstract should provide an outline of the proposed research project and be written for general scientific audiences (e.g., peer review committee members).

Please organize the technical abstract to include the following sections:

- Background
- Objectives/Hypothesis
- Specific Aims
- Study Design
- Potential Patient Impact

c. Assurances and Certifications

The Grantee/Principal Investigator and sponsoring institution agree to comply with any existing or new federal guidelines that affect the research that is supported by CURE Childhood Cancer funding and provide prompt notice of any deviation from such federal guidelines.

i. Animal Use

Every proposal involving vertebrate animals must be approved by an Institutional Animal Care and Use Committee (IACUC) in accordance with the Public Health Service Policy on Humane Care and Use of Laboratory Animals. It is the responsibility of the PI to ensure that IACUC approvals are obtained and maintained throughout the term of the CURE grant. It is further the responsibility of the institution to provide appropriate oversight and immediately report to CURE if protocol approvals relevant to the current CURE grant have lapsed. The signatures of the PI and Institutional Official should be viewed as acceptance of these policies.

ii. Human Subjects

All proposed research projects involving human subjects must be approved by an Institutional Review Board (IRB) at an institution approved by the Office for Human Research Protections (OHRP) of the US Department of Health and Human Services (DHHS). It is the responsibility of the PI to ensure that IRB approvals are obtained and maintained throughout the term of the CURE grant. It is further the

responsibility of the institution to provide appropriate oversight and immediately report to CURE if protocol approvals relevant to the current CURE grant have lapsed. The signatures of the PI and Institutional Official should be viewed as acceptance of these policies. It is highly recommended that PI prepare and submit the relevant human subject protocols to their IRB at the time of application submission to ensure timely approval during the term of the grant. Please note, a no-cost extension will not be granted due to a delay in obtaining IRB approval for the studies.

iii. Biohazard and Recombinant DNA

The PI and Sponsoring Institution acknowledge that all relevant precautions and oversight of projects and processes which may involve biohazards and recombinant DNA are in place based upon NIH guidelines for such work.

iv. Institutional Official and Research Integrity

The signature of the Institutional Signing Official is required at the time of application and binds the institution to application and grant-related policies defined in the Board-approved policies displayed on the CURE Childhood Cancer website.

Research misconduct by a Grantee receiving CURE Childhood Cancer support is contrary to the interests of CURE, the patients and their families we serve, and the best use of donor funds. With their signatures, the PI agrees to follow the Sponsoring Institution's policies as they relate to Research Misconduct and the Sponsoring Institution agrees to provide appropriate oversight.

The NIH defines "Research Misconduct" to mean fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results (Public Health Service Policies on Research Misconduct 42 CFR 93).

d. Project Title

The project title should not exceed 250 characters, including spaces, and should avoid abbreviations as they do not always translate accurately across different formats. If the title exceeds this limitation, it will be truncated in all electronic documents.

e. Principle Investigator

The PI must hold a terminal scientific degree such as MD or PhD (or equivalent), have appointment as a full-time faculty member of a nonprofit research-based institution, and have a track record of publication and funding productivity that demonstrates the project can be accomplished by the investigator. For applications in proposalCENTRAL, some or all of the required information from your Professional Profile may be automatically loaded. If any of the information in your profile is inaccurate or out of date, please stop and update your Profile in proposalCENTRAL before submission of your application.

f. Biographical Sketch

Complete the NIH Biosketch template, following the formats and instructions provided by the NIH. The Biographical Sketch may not exceed 5 pages and should be uploaded as part of the application.

g. Other Key Personnel

Individuals who contribute to the scientific development or execution of a project in a substantive and measurable way (whether or not they receive salaries or compensation under the grant) are considered Key Personnel. The PI is always considered Key Personnel, but do not list them under key personnel on proposalCENTRAL. Other key personnel can include co-investigators, collaborators, and consultants who provide critical expertise or support for the project whether or not they receive compensation from the grant. If the contributions of key personnel are critical for review of the application, please upload a biosketch and letter of collaboration that outlines and confirms their role in the project.

For the Early Investigator Award, the inclusion of a research mentor is highly recommended and should be considered Key Personnel.

h. Research Plan

i. Specific Aims

List the objectives and goals of your proposed research and briefly describe the scientific aims. Limited to 1 page or 3000 characters.

ii. Background, significance, innovation, and potential for patient benefit

Concisely and critically summarize previous work done by you or others which provides the knowledge or technical framework to enable the proposed studies. Highlight both the novelty and innovation of the proposed studies. Specifically state how completion of the specific aims will advance knowledge in pediatric cancer and how this will benefit patients.

iii. Preliminary Studies

Provide results of your prior unpublished research that are relevant to this proposal and substantially contribute to the rationale or feasibility of the proposed studies. Note, the entire application is considered confidential and will not be transmitted beyond the members of the CURE Peer Review Committee.

iv. Research Design

Describe your overall hypothesis, proposed methods, procedures, and data analysis in sufficient detail to permit evaluation by other scientists; include your rationale for approaches and analysis. Explain the project's feasibility and how the experiments proposed will address the Specific Aims. Discuss potential difficulties, pitfalls, and limitations of your proposed methods and provide alternative approaches. The inclusion of experimental timelines or diagrams can be helpful to the reviewers.

v. Literature References for Research Plan

1. Each literature citation should include title, authors, book or journal, volume number, page numbers, and year of publication. There are no page limitations for this section.

i. Detailed Budget

Complete the budget page using the template provided on proposalCENTRAL.

i. Personnel

The names and positions of all key personnel should be listed on the budget page along with the percent effort committed to the project. If an individual has not yet been selected, please list it as a “vacancy.” Salary from the grant may not exceed the NIH salary cap prorated according to the percent effort. Employee fringe benefits should be calculated as a percent of the prorated salary according to the institution’s policies.

ii. Equipment

At this time, the purchase of equipment using funds from a CURE grant is not permitted.

iii. Supplies

Major categories of research supplies should be listed with expected costs. Such categories might include reagents, tissue culture supplies, animals, survey materials, radioisotopes, glassware, enzymes, software, etc.

iv. Travel

Funds for domestic travel to attend US-based scientific conferences may be included in the budget but may not exceed \$2500 per year.

v. Subcontract Costs

If any portion of the proposed research requires that work be carried out by another institution (nonprofit or for-profit), this should be carefully justified in the following section. A detailed budget from the subcontractor should also be included. Subcontract fees may not include indirect costs; subcontracts may only be funded with US-based institutions. Total subcontract costs may not exceed 15% of the annual direct costs for the grant. In the event that a project requires leased equipment, this may be covered under a subcontract.

vi. Indirect Costs

To help defray the institutional costs associated with laboratory and clinical research which cannot be readily associated with individual projects, CURE Childhood Cancer will allow up to 10% of the direct costs (excluding equipment costs) to be included in the grant as indirect costs.

j. Budget Justification

Provide justification for the proposed budget expenditures, including roles of all key personnel listed on the budget page, as well as research supplies and expected travel. Justification for subcontract costs, if requested, should also be provided in this section.

k. Other Support

i. Current Grant Support

The PI should provide a list of current grant and contract funding from all intramural and extramural sources to assist the peer review committee.

For each award, please provide: source of funding, project title, inclusive dates, total direct costs, and an outline of the goals or specific aims. Please clarify any potential overlap.

ii. Pending Grant Support

The PI should provide a list of pending applications for support from all intramural and extramural sources to assist the peer review committee.

For each pending application, please provide: the potential source of funding, project title, inclusive dates, total direct costs requested, and an outline of the goals or specific aims. Please indicate and clarify any potential overlap.

iii. Institutional Support

The PI should provide a description of current institutional support to include granted/remaining start-up funds, salary support, and a description of committed/shared space. ***For the Early Investigator Award, a letter from the Department Chair should be included which describes the institutional commitment to the development of the applicant's career.***

7. Application Submission and Required Signatures

All applications should be submitted electronically through proposalCENTRAL by 11:59pm Eastern Standard Time on the due date. No paper applications will be accepted. Electronic signatures are required from the PI and a designated Institutional Signing Official who can sign on behalf of the institution. These signatures are an indication of agreement to the terms and policies for research grants defined and published by CURE Childhood Cancer.

8. Application Dates, Review, and Notifications

Due dates for submission of applications will be announced in January each year along with updated guidelines and priorities. Announcements and dates can be found at www.curechildhoodcancer.org or on proposalCENTRAL.

Applicants will receive notifications regarding application status through proposalCENTRAL emails. Please ensure that such emails are not filtered out to spam at your institutional firewall.

CURE Childhood Cancer utilizes an independent, confidential, and rigorous peer review system to carefully choose the most meritorious and promising projects for support. Members of the peer review committee are recognized scientific and clinical experts recruited from across the US who generously donate their valuable time to review applications submitted to CURE each year.

Applicants will receive limited, summary feedback regarding the review of their applications. Unfortunately, CURE does not have staff available to discuss the content of the individual reviews.

9. Confidentiality

All applications and reviews are considered confidential and only available to the CURE Peer Review Committee members, and a limited number of CURE staff. All information provided in the applications will be treated as confidential, with the noted exception of General Audience Summaries, which should not include confidential information.

10. Grant Activation

All CURE grants are expected to activate August 1; during the preceding month, grantees will receive additional information regarding activation of the award and a timeline for required reports. After notification of grantees, a press release will be prepared and published by CURE Childhood Cancer.

11. Grants Management

a. Payments

Annual payments will be made by electronic transfer of funds or check prior to August 1 to the designated financial officer at the sponsoring institution. The sponsoring institution is responsible for disbursement of the funds during the term of the award in accordance with the grant budget approved by CURE.

b. Use of Funds

Continued funding or use of grant funds is contingent upon compliance by the sponsoring institution and grantees to policies established by the funding organization. Failure to comply may result in suspension or termination of the grant at the sole discretion of CURE.

CURE shall not be responsible for any expenses incurred prior to the start date of the grant or any amount in excess of the approved grant.

Personnel compensated in whole or in part with funds from a CURE grant are not employees of CURE Childhood Cancer. The sponsoring institution is responsible for issuing appropriate IRS tax filings for all individuals receiving salary or stipend from a CURE grant, and for withholding and paying all required federal, state, and local payroll taxes for such compensation. Any tax consequences are the responsibility of the individual recipient and the sponsoring institution.

Permissible direct costs include salary or stipend and fringe benefits for grantees, the PI, or other personnel dedicated to the approved project with percent effort defined in the grant budget. CURE grant funds cannot be used to cover graduate or undergraduate student tuition or fees, personal computers, membership dues, publication costs, service contracts, books, journals, construction or renovation costs, laboratory or office furniture, relocation expenses, or daycare expenses. Costs associated with foreign travel are also not permissible expenses.

c. Grant Modifications

i. No Cost Extensions

A request for a one-time six-month no cost extension for a 2 year grant should be made in writing 60 days prior to end of the grant term. One-year grants are eligible for a single 3-month no cost extension. Please provide an explanation for the delay in completion of the specific aims (which specific aims remain incomplete and why) as well as an estimate of the funds to be carried over into the no cost period.

INSTRUCTIONS FOR GRANTEES IF THEY NEED TO REQUEST A NO COST EXTENSION:

**LOGIN TO PROPOSALCENTRAL
CLICK ON THE AWARDS TAB
CLICK ON THE AWARD ID FOR YOUR CURE CHILDHOOD CANCER RESEARCH GRANT
CLICK ON THE DELIVERABLES TAB
CLICK “ADD DELIVERABLE”
SELECT REQUEST FOR NO COST EXTENSION FROM THE DROPDOWN AND CLICK ADD
FIND THE DELIVERABLE IN YOUR LIST, COMPLETE THE WEBFORM, AND SUBMIT TO GRANTMAKER
AS FINAL**

ii. Institutional Transfer

At this time, transfer of research grants from CURE Childhood Cancer cannot be permitted. The only allowable exception will be if the change of institution for the PI has occurred prior to the activation date for the grant.

iii. Budget Modifications

Requests for significant budget modifications (>\$10,000) must be submitted in writing along with a brief justification for the alteration.

INSTRUCTIONS FOR GRANTEES IF THEY NEED TO REQUEST A BUDGET MODIFICATION:

**LOGIN TO PROPOSALCENTRAL
CLICK ON THE AWARDS TAB
CLICK ON THE AWARD ID FOR YOUR CURE CHILDHOOD CANCER RESEARCH GRANT
CLICK ON THE DELIVERABLES TAB
CLICK “ADD DELIVERABLE”
SELECT REQUEST FOR BUDGET MODIFICATION FROM THE DROPDOWN AND CLICK ADD
FIND THE DELIVERABLE IN YOUR LIST, COMPLETE THE WEBFORM, AND SUBMIT TO GRANTMAKER
AS FINAL**

12. Scientific Reports

The PI is responsible for the submission of scientific progress reports each year within 60 days after the first and subsequent anniversaries of the start date of the grant. Final reports are due within 60 days after the grant has terminated. Forms for these reports can be found at <https://proposalcentral.com/> under the “Deliverables” tab. Grantees must submit reports in a timely manner. Noncompliance may result in the withholding of payment on all grants at the recipient institution until reports are received.

13. Financial Reports

The Sponsoring Institution agrees to have its financial officer submit the required final financial report detailing how the grant funds were expended during the term of the grant. The report should be submitted within sixty (60) days after termination of the grant. Financial Reports must use the

most current template provided by CURE, and must be submitted through the online portal at <http://proposalcentral.com>.

The Sponsoring Institution agrees to repay any portion of the grant that is not used for the purposes specified in the grant proposal, and in compliance with allowable expenses. The sponsoring institution must return to CURE any unexpended funds remaining from the original grant within 60 days of grant termination.

If a no cost extension is granted, the due dates for the scientific and financial reports will correspond to the new grant termination date.

14. Publications and Acknowledgements

Publications resulting from research supported by CURE Childhood Cancer must contain the following acknowledgment: "Supported by a grant from CURE Childhood Cancer." Financial support by CURE should also be acknowledged by the grantee and the institution in all public communication of work resulting from this grant, including scientific abstracts (where permitted), posters at scientific meetings, press releases or other media communications, oral presentations, and internet-based communications.

Although there is no formal approval process for publications by CURE grantees, it is helpful if you notify us when manuscripts have been accepted for publication. This will allow ample time to coordinate any additional public notifications. If your institution plans a press release involving any of your CURE-supported research, please notify us and facilitate connection with your institutional press office through the research email box at research@curechildhoodcancer.org.

CURE Childhood Cancer provides to the grantee, a limited, revocable, non-transferable license to use the CURE logo in association with your funded work. We request that grantees use it on all scientific posters, PowerPoint presentations, and any other visual presentation about your funded work where CURE is noted as a funding source. The logo may be found at <https://curechildhoodcancer.org/logo-usage/>.

APPENDIX

Examples of General Audience Summaries

“Development of a CNS-penetrant synthetic oleanane triterpenoid for DIPG”

Diffuse intrinsic pontine glioma (DIPG) is a rare type of brain tumor that most often occurs in children 6-8 years of age. Unfortunately, prognosis remains poor as surgery and chemotherapy are not effective. Radiation treatment has been shown to extend life up to 6 months; however, radiation resistance remains a significant clinical challenge. With funding from CURE Childhood Cancer, Dr. John Letterio at Case Western Reserve University is testing synthetic drug candidates, SOTs (synthetic oleanane triterpenoids) which may reduce the tumor’s ability to develop resistance to radiation. SOTs work through blocking inflammatory cells, which are thought to be responsible for radiation resistance. Such co-treatments (radiation + SOTs) could be rapidly advanced in the clinic and provide immediate benefit to children with DIPG.

“Combined molecular targeting to enhance therapy for Group 3 medulloblastoma”

Brain tumors are among the most common cancers in children, and medulloblastoma (MB) is the most common malignant pediatric brain tumor. Overall, about 70% of MBs can be cured by combining treatments with surgery, radiation, and chemotherapy. This means that about one-third of MB variants are resistant to current treatments. Dr. Robert Castellino in the Department of Pediatrics at Emory University School of Medicine has found that children with MB whose tumors show high expression of the proteins MYC or PPM1D have a lower chance of surviving their disease. In preliminary studies in the laboratory, they have shown that combined inhibition of MYC and PPM1D significantly inhibits MB tumor growth. With funding from CURE Childhood Cancer, they will explore how these proteins work together to promote MB growth and how they prevent radiation from killing MB cells. They will use this information to develop and test novel treatments for aggressive MB variants to improve survival for children diagnosed with MB.