**** *E.W. “Al” Thrasher Award***

***General Instructions***

### INSTRUCTIONS FOR SUbmission of THE Proposal

Only proposals invited after acceptance of a Concept Paper will be considered. Each section has a specified page limit. **Do not** exceed the number of pages specified in each section of the proposal. Applicants may use a Calibri, Arial, Palatino Linotype or Georgia typeface and a font size of 11 points or larger. Do not adjust the margins.

Some of the pages in the proposal contain tables, and all the normal table commands apply. You may adjust the size of each cell to fit your needs.

The completed proposal should be returned as a Word document in an e-mail attachment to Allison F. Martinez: MartinezAF@ThrasherResearch.org. Please confirm that the Fund has received your application. If the file contains multiple images and/or graphics, it may be too large to be transmitted as an e-mail attachment. Typically 10MB or less should transmit without problems. In some cases, neither the sender nor the intended receiver is notified of the failure. Signed copies of the first two pages should be returned electronically.

### Instructions for Study Content pages

### Administrative Information

Each application may have only one Principal Investigator. This individual will be responsible to the Thrasher Research Fund for the scientific and/or technical work of the project. The Principal Investigator is also responsible for grant-related correspondence and expenditures. Additional individuals who are responsible for the scientific and/or technical work of the project may be listed as Co-Investigators. If the submitted grant includes study sites outside the Principal Investigator home country, applications **must** include co-investigator(s) from each country included as a study site. Capacity building and buy in from local leaders and clinicians is critical to our mission for improving child health and the application should reflect that.

Where applicable, the Institutional Review Board (IRB) approval, Animal Welfare Assurance and proof of registration with [ClinicalTrials.gov](http://www.ClinicalTrials.gov) or an equivalent, must be received prior to any disbursement of funds. These documents are only required if the study is funded although inclusion may assist in the review process.

The project period may not exceed three years. Provide approximate start and end dates for the project. If funded, the actual start date will be determined through consultation with the Fund. The study must begin within one year of the award notification date or the award will be withdrawn.

**Protection of Human Subjects Assurance/Certification/Declaration**

*Investigational New Drug*

If the proposed study requires submission of an IND application according to U.S. Food and Drug Administration (FDA) guidelines, confirmation of the IND should be received from the FDA **prior** to submitting the application to the Thrasher Research Fund. Include with this application all written correspondence with the FDA relating to the IND in a separate document. [Click here](http://www.fda.gov/Drugs/DevelopmentApprovalProcess/HowDrugsareDevelopedandApproved/ApprovalApplications/InvestigationalNewDrugINDApplication/default.htm) for IND application instructions. If eligible for an IND exemption according to [21 CFR 312.2b](http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?fr=312.2), provide proof of the IND waiver from the FDA. For projects outside of the United States, a country equivalent of the FDA IND is required.

Examples of research requiring an IND may include studying an unapproved drug, or an approved product for a new indication or in a new patient population. **If you have questions about whether an IND is needed, please contact the Fund.**

*Health and Human Services (HHS) Assurance Status*

Contact your supervising institution to determine HHS Assurance Status. The Assurance identification number is the supervising institution’s Federal-wide Assurance number (FWA). If your institution does not hold a FWA, HHS Assurance may be obtained by visiting the [HSS website](http://www.hhs.gov/ohrp/assurances/assurances/file/index.html) and applying for a FWA.

*Institutional Review Board*

If funded, Institutional Review Board (IRB) approval must be received from each participating institution and study site prior to any disbursement of funds.

### Scientific Summary

Summarize the proposal’s objectives and specific aims, making reference to how the project relates to pediatric health, and describe concisely the methodology for achieving these goals. The abstract serves as a succinct and accurate description of the proposed work when separated from the application. You may use or modify the Scientific Summary from your Concept Paper. **Do not exceed one page**.

### Structured Summary

The Structured Summary is to consolidate key elements of the Scientific Summary in an easily referenced list. It is acceptable to copy and paste relevant information directly from the Scientific Summary. Limit each response on the Structured Summary to a single sentence unless otherwise noted. **Do not exceed one page**.

### Hypothesis(es) and Specific Aims

### State concisely the hypothesis(es) to be tested and the specific aim(s) of the project. Do not exceed one page.

### Thirteen pages may be allocated between the Background and Significance, Supportive Preliminary Data, Experimental Design and Methodology, and Human Subject sections. Page recommendations are provided under each section. No section should be omitted.

**Parent or Co-Funded Studies (if applicable)**

The purpose of this section is to detail the hypothesis, aims, study design, and current progress of a parent study which your proposal will rely on for samples or enrollment or additional funding received for additional sites or hypothesis and aims. Descriptions of the parent study should be limited to this section, so that all other pages of the Concept Paper can focus solely on the portion of the work requiring support from the Thrasher Research Fund. **One page is recommended.**

* Background- Describe the purpose and include additional background if it differs from the Scientific Summary.
* Hypothesis and Aims- State each hypothesis of the parent/Co-funded project and briefly describe the related aims.
* Design- As applicable, include the following information (can be in paragraph form rather than a list):
	+ Design of the study (e.g. randomized controlled trial, case-control, prospective cohort, cross sectional etc).
	+ Study subjects, including major inclusion/exclusion criteria
	+ Sample size
	+ State the primary outcomes and how they will be measured
* Progress of Parent/Co-funded study- Describe the progress of the study to date, including anticipated starting and ending dates, and enrollment status.
* Parent/Co-funded Study Funding- Describe parent study funding source(s) for the proposed project. Including grant title(s), dollar amount(s) and clinical trial registration (if applicable).

### Background and Significance

Summarize what is already known about this child medical problem and the research gaps the project will attempt to address. Describe the potential contributions of the research to children’s health both specifically to the population being studied and how the research may be generalized to other populations or health problems. Discuss the pathway by which the findings may become clinically relevant. **One to two pages are recommended**. Include literature references in the Literature References section provided.

### Supportive Preliminary Data

Include both research conducted by the investigator(s) or published data by others that leads to the present proposed research project. **One to three pages are recommended**. Include literature references in the Literature References section provided.

### Experimental Design and Methodology

This section should include information pertinent to your specific study. Please include any other relevant information that is not requested below as the general guidelines cannot cover the specific details of each proposal. Include information that will be necessary for the reviewers to determine the scientific merit of the proposal. **Seven to ten pages are recommended**. Include literature references in the Literature References section provided. As applicable, address the following:

*Study Design*

* State the study design (observational/interventional, prospective/retrospective, randomized, blinded, open-label, cohort, case series, case-control, natural history, etc.).
* Rationale for the study design
* Describe the study site(s).
* Describe the population to be studied
	+ inclusion and exclusion criteria
	+ sources of participants
	+ recruitment plans
* Describe the control group, justifying why this population would serve as an appropriate control.
* Describe the intervention(s).
* Provide a rationale for the proposed study drug dosing, including drugs used off label as well as investigational new drugs, in the target population as well as supporting information for the selected dose. Supporting information could include, but is not limited to, PK/PD modeling and simulation studies, preclinical data showing dose ranging and efficacy, and literature data from adults and children. Pharmacokinetic analytic approach: type of analysis (e.g. non-compartmental, population PK, physiologically-based PK, etc), software, model development and evaluation, covariate selection (if applicable), simulations (if applicable).
* Describe measurements and data to be collected.
* Describe the plan for recruitment, enrollment and retention of the proposed sample size within the projected timeline of the study. Include resources, facilities and staff available to the researcher. Cite the number of patients expected to meet inclusion criteria at each site, the expected “drop-out” rate, and any other potential limitations that may affect enrollment or retention.

*Statistical Analysis*

Instructions: The main goal of this section is to describe the sample size power calculations and statistical analytic approach. Try to summarize each point into two sentences or less for items discussed elsewhere in the application. This is not a standalone document, and therefore, it is not necessary to replicate large portions of the protocol, which should instead be clearly referenced.

* Statistical Analysis
* Please describe:
* Study design: observational/interventional, prospective/retrospective, randomized, blinded, open-label, cohort, case series, case-control, natural history, etc.
* Rationale for study design
* Study population
* Primary, secondary, and exploratory endpoints
* Inclusion/exclusion criteria
* Screening and recruitment: sources of participants, recruitment plans
* Study procedures and assessments (e.g. schedule of events): efficacy, safety, laboratory, etc
* Intervention or Primary Predictor variable:
* Data collection: platform, types of data collected (e.g. demographics, genetic, biometric, etc), use of common data models.
* Sample size: power calculations for primary endpoint and other endpoints as needed
* Statistical analytic approach: descriptive statistics, randomization scheme, safety/efficacy analyses, statistical methods, intention to treat, adjustment for multiple outcomes, approach to missing data, software used, data integration plans, etc.
* Pharmacokinetic analytic approach (if applicable): type of analysis (e.g. non-compartmental, population PK, physiologically-based PK, etc), software, model development and evaluation, covariate selection (if applicable), simulations (if applicable).

*Methodology*

* Discuss the procedures and protocols to be used to accomplish **each specific aim** of the project.
* Include a detailed description of the statistical analysis plan to be used for **each specific aim** of the study.
* Describe how potential confounders will be measured and controlled for in the analysis.
* Discuss potential difficulties and limitations and proposed alternative approaches to achieve the specific aims.
* Provide a timeline for the major components of the study.

### Human Subjects/Investigational New Drug

Discuss the potential ethical concerns with the design or conduct of the study. If applicable, describe the precautions to be taken, including comments on the planned use of an Institutional Board Review or comparable ethics board, a Data Safety Monitoring Board, and the informed consent/ assent protocol to protect human subjects within the proposed study.

If the study involves the administration of a medication, provide IND approval and FDA correspondence, an IND waiver, or a justification why an IND is not required. **One page is recommended**.

### Literature References

There is no page limitation on references.

### Collaborative Arrangements

List all collaborators, describe their role in the study, and include a letter of support from the collaborators either at the end of the application or as a separate document. Provide an explanation of any project-related programmatic, financial, and administrative arrangements made between the Supervising Institution and any collaborating organizations. Describe the role of co-investigators and consultants participating on the study. There is no page limitation.

### Other Support

For the Principal Investigator, key co-investigators and collaborators named on the budget pages, list the title, start and end dates, source of funding, and yearly amounts of all state, federal, commercial, and private funding support. Include this information for active grants, proposals under review, and proposals being prepared for submission. Indicate the percentage of effort for investigators in each project. Discuss any potential overlap with this application. There is no page limitation.

#### Budget Justification

See Budget Worksheet instructions below to compose the budget. Provide within the application an explanation and justification for each requested category of the budget. Include supporting letters where appropriate. Please note that the budget should be consistent with the budget amount proposed in the approved Concept Paper. All exceptions must be cleared by the Fund.

**Biographical Sketch**

Provide a current CV or NIH biographical sketch for the Principal Investigator and key co-investigators and collaborators, including the biostatistician. [Click here](https://grants.nih.gov/grants/forms/biosketch.htm) for the general NIH biosketch template, instructions and sample.

**Reviewer Information**

Provide the names of four persons who have the expertise and competency to review your proposed project. Describe in three sentences the reasons why this individual was selected as a potential reviewer for the proposed study. State any present or past relationship with them. When recommending reviewers, avoid any basis for potential conflicts of interest or concern regarding peer reviewer objectivity. Conflicts of interest include but are not limited to previous mentors, co-authors, and collaborators.

###  Instructions for BUdgeT WorkSheet

### \*\*Retroactive payments are not allowed prior to the start date of the project\*\*

**Use the Detailed Budget Excel document to complete the budget. Provide justification for the budget within the proposal application. Please note that the budget should be consistent with the budget amount proposed in the approved Concept Paper. All exceptions must be cleared by the Fund.**

### Personnel

List the names and positions of all professional and nonprofessional personnel involved in the project who would receive Fund support. While the practice is not encouraged, investigators in need of salary support for a specific project may apply for modest support (no more than 20 percent, based on a 40-hour work week). Indicate the percentage of time and hours per week on the project for all personnel. List the dollar amounts for combined salary and fringe benefits for each individual.

The Fund limits the maximum salary upon which an individual can request salary support. The maximum amount will be based on the [NIH guidelines](http://grants.nih.gov/grants/policy/salcap_summary.htm) for salary support. The Fund’s maximum rate for year 1 will be equivalent to the NIH maximum for the year in which the application was submitted. The Fund will allow a maximum increase of 2% in each of the subsequent years of an application for individuals at the NIH maximum salary.

The Fund does not pay tuition or fees for students supported as part of the application.

### Consultant Costs

Provide the name, institutional affiliation, and cost of consultants who have agreed to participate in the project. A consultant is an individual that provides professional advice or services on the basis of a written agreement for a fee. A consultant is not normally an employee of the supervising institution and should provide services that are clearly outside the scope of the consultant’s salaried employment.

### Supplies

Itemize supplies such as glassware, chemicals, radioisotopes, medical supplies and animals. If animals are involved, state how many are to be used, their unit purchase cost, and their unit-care costs.

### Travel

Itemize all travel. Indicate the number of trips, the destinations, the individuals for whom funds are needed, and the purpose of the travel. Conference travel is only for reporting the results of Thrasher-funded research and is rarely allowed during the first year of a multi-year grant. The number of conferences for which support is approved, and the number of travelers, will be evaluated on a case-by-case basis.

### Patient Care Costs

These costs are directly related to the patient, such as a hospital stay and testing.

### Other Expenses

Itemize other expenses not previously listed. Include items such as communication expenses, postage, printing of publications, shipment costs, and participant incentives. Include outside laboratory services.

### Indirect Costs

The Fund will participate in the payment of indirect costs up to an amount of seven percent of the yearly grant budget excluding equipment allocations. When collaborating institutions receive a portion of a grant award, indirect cost payments will be shared proportionately, based on the division of the award amount. Indirect costs paid to the collaboration institution should be included on the budget page for contractual costs. The Excel budget sheets automatically include seven percent indirects in each category other than equipment. If indirects cannot be collected on a specific item or category, adjust the cells and formulas to remove the indirects from the calculated totals.

### Equipment

Purchase of major equipment (items over $4,000) is strongly discouraged and rarely funded. Equipment purchased with money awarded by the Fund shall be the property of the Fund, which has authority to determine the disposition of the equipment at the conclusion of the project after consultation with the Principal Investigator.

### Contractual Costs

Contractual arrangements are for major support services, such as additional project sites. These must be itemized on the separate budget pages designated for these costs. If you need to add more than one contractual cost worksheet, adjust the cells and formulas accordingly. Additional project sites will split the indirect costs proportionally with the supervising institution.

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| **Thrasher Research Fund*****Project Application*****Administrative Information** |
| **Title** (Limit the title to 100 characters including spaces.)  |
| **Principal Investigator** (Name and address) | **Co-Investigator(s)** [Name(s) and institution(s)] |
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| Telephone |
| E-mail |

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| **Human Subjects?** If yes, complete the enclosed Protection of Human Subjects form. | IRB Approval |
| [ ]  Yes [ ]  No | [ ]  Included [ ]  Pending [ ]  NA |
| **Animals Used?** If yes, document compliance with Animal Welfare Assurance laws. |  Approval Status |
| [ ]  Yes [ ]  No | [ ]  Included [ ]  Pending [ ]  NA |

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| **Project Period** The entire project may not exceed 3 years.  |
| Approximate start date (month and year) | Approximate end date (month and year) |
| Total Budget Request |
| $  |
| **Performance Site(s)** | Indicate where the work described in the “Experimental Design and Methodology” section will be performed. Provide specific organization names and their location. |
| Organization name and address | Organization name and address |
| **Supervising Institution** | Name the *one* organization that will be legally and financially responsible and accountable for the use and disposition of any funds awarded on the basis of this application |
| Supervising institution name and address | Name of Financial Contact Phone Email   |
| **Official Signatures for Supervising Institution** |
| We, the undersigned, certify that the statements herein are true and complete to the best of our knowledge and that facilities are available for the proposed research. We will comply with the Thrasher Research Fund's Conditions of Grant and requirements for reporting that are in effect at the time of the award. |
| Name and title of principal investigator | Signature | Date (mm/dd/yy) |
| Name and title of department chairman, if applicable  | Signature | Date (mm/dd/yy) |
| Name and title of official from supervising institution | Signature | Date (mm/dd/yy) |

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| **Protection of Human Subjects IND/Assurance/Certification/Declaration**Thrasher Research Fund |
| **Policy** A research project involving human subjects sponsored by a U.S.-based institution that is not exempt from HHS regulations may not be funded unless an institutional review board (IRB) has reviewed and approved the activity in accordance with Section 474 of the Public Health Service Act as implemented by Title 45. Part 46, of the Code of Federal Regulations (45 CFR 46-as revised). The applicant institution must submit certification of IRB approval to the Thrasher Research Fund unless the applicant institution has designated a specific exemption under Section 46.101(b) that applies to the proposed research project. Institutions with an assurance of compliance on file with HHS that covers the proposed project should submit certification of IRB review and approval with each application. In the case of institutions that do not have an assurance of compliance on file with HHS covering the proposed project, certification of IRB review and approval must be submitted within 30 days of the receipt of a written request from HHS for certification. Documentation of IRB approval from all project-related participating institutions must be included. |
| **Title of Application**  |
| **Principal Investigator**  |
| **Investigational New Drug Application** |
| **Food and Drug Administration required information** In accordance with 21 CFR 312, if an application is made to HHS requiring certification and involving use of an investigational new drug or device, additional information is required. Thirty (30) days must elapse between date of receipt by FDA of Form FDA-1571 and use of the drug, unless the 30-day delay period is waived by FDA (21 CFR 312.40 b.2). |
| **Sponsor name**  |
| **Drug name**  |
| **Date of end of 30-day expiration or waiver** | **Number issued**  |

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| **HHS Assurance Status** |
| [ ]  This institution has an approved assurance of compliance on file with HHS which covers this activity. | Assurance identification number      | IRB identification number      |
| [ ]  No assurance of compliance which applies to this activity has been established with HHS, but upon request the applicant institution will provide written assurance of compliance and certification of IRB review and approval in accordance with 45 CFR 46. |
| **Certification of IRB Review or Declaration of Exemption** |
| [ ]  This activity has been reviewed and approved by an IRB in accordance with the requirements of 45 CFR 46, including its relevant subparts. This certification fulfills, when applicable, requirements for certifying FDA status for new investigational drug or device. |
| **Date of IRB approval or Pending**: [ ]  Pending  | [ ]  Full Board Review [ ]  Expedited Review |

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| [ ]  This activity contains multiple projects, some of which have not been reviewed. The IRB has granted approval on condition that all projects covered by 45 CFR 46 will be reviewed and approved before they are initiated and that appropriate further certification will be submitted. | [ ]  Human subjects are involved, but this activity qualifies for exemption under 45 CFR 46.101(b) in accordance with paragraph\_\_\_\_\_\_ [insert paragraph number of exemption in 46.101(b), 1 through 5], but the institution did not designate that exemption on the application. |

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| The official signing below certifies that the information provided on this form is correct and that the supervising institution assumes responsibility for assuring required future reviews, approvals, and submissions of certification. As determined by the Supervising Institution, the authorizing official may be from the offices of sponsored grants, contracts or the administrating school/department such as the Dean or Chair. |
| **Supervising Institution Official** |
| Name | Telephone |
| Address | Email |
| Title of official |
| Signature of official | Date |

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| **Scientific Summary** (Do not exceed one page) |

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| **Structured Abstract** (Do not exceed one page) |

Describe the medical problem as it relates to children

State the incidence/prevalence of problem in children

Background that will lead to the research gap (*may use 2 sentences*)

State the primary research gap this study will address

Hypotheses (*one sentence per hypothesis*)

Specific Aims (*one sentence per aim, maximum 3 for the lay summary*)

Study design

Describe study population or sample material

Sample size/power of primary endpoint

Assuming the project is successful, state the next step moving down the pathway to clinical applicability

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| Hypothesis(es) and Aims (Do not exceed one page)  |
| A. Hypothesis(es) to be Tested |
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| B. Specific Aim(s) of the Project |

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| **Parent or Co-Funded Studies (if applicable)** (See General Instructions for page limitations/recommendations) |

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| **Background and Significance** (See General Instructions for page limitations/recommendations) |

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| **Supportive Preliminary Data** (See General Instructions for page limitations/recommendations) |

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| **Experimental Design and Methodology** (See General Instructions for page limitations/recommendations) |

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| **Human Subjects/Investigational New Drug** (See General Instructions for page limitations/recommendations) |

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| **Literature References**  |

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| **Collaborative Arrangements** |

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| **Other Support** |

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| **Budget Justification** |

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| **NIH Biographical Sketch** ([Click here](http://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-032.html) for the general NIH biosketch template, instructions and sample) |

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| **Reviewer Information** |
|  Name and Degree | Institution |
| Relationship to Investigator  | Email |
| Describe in three sentences the reasons why this individual was selected as a potential reviewer |
|  Name and Degree | Institution |
| Relationship to Investigator | Email |
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