



The Children's Health and Discovery Initiative (CHDI) and the Triangle Center for Evolutionary Medicine (TriCEM) announce a request for research proposals that investigate and positively impact child health and the trajectory of health into adulthood. Proposed activities should focus on evolutionary medicine, broadly interpreted to involve research that uses evolutionary and ecological perspectives to understand and treat disease in humans. Examples could include: developmental origins of health and disease; childhood asthma and other allergies; the microbiome and health; the ecology and evolution of infectious diseases of children; social determinants of child health and development; mental health; and origins and treatment of childhood cancers.

## **I. Purpose**

The intent of this RFP is to support pilot studies that integrate the missions of CHDI and TriCEM. Proposals will be chosen to receive funding of up to \$40,000 (direct costs only). The proposed research should be able to be accomplished within one year, and serve as a pilot project for external grant submission. An additional \$10,000 may be awarded upon submission of an external grant application. Please note that the research team for each proposal must include Project Leaders from both the Duke School of Medicine and from Duke University (including Trinity College of Arts and Sciences, Nicholas School of the Environment, Sanford School of Public Policy, and the Pratt School of Engineering).

### **Proposals should be organized as follows:**

1. Title (80 characters max)
2. Name and contact information for Project Leaders
3. Project Abstract (250 words max)
4. Public Summary (250 words max) – written for the public
5. Research Proposal
  - Introduction and Goals – A statement of the question being addressed and a concise review of the concept and the literature to place the project in context, including evolutionary perspectives.
  - Proposed Activities – This should include a clear statement of specific data (include citations or URLs), methods, or analytical tools that will be required for the project.
  - Participating Fields and List of Proposed Participants – We encourage groups that go beyond existing collaborations and that include multiple disciplines and graduate students. Named individuals should be committed to participating in the project if funded. For each participant please include explicit information about career stage and discipline.
  - Rationale for CHDI/TriCEM support – How does this research advance the missions of CHDI and TriCEM?
  - Outcomes – Proposals should include a clear statement about the expected outcomes of the project and how this will provide preliminary data/results for securing additional funding.
  - Future directions and plans for external grant submission
6. Budget and budget justification
7. Proposal timeline

## II. Details

- Application Submission Deadline: **September 12, 2018**.
- Proposals should not exceed four single-spaced (11-pt type) pages. Please also include a current CV or NIH-style biosketch for all PIs.
- Funding: Each award will consist of up to \$50,000 (direct costs only) with an expected start date of December 1, 2018 and ending on November 31, 2019. Funding will be released in two phases: the first as an initial award of up to \$40,000, and the second as an additional award of up to \$10,000 **after** submission of an external grant. Please note that the project budget should be designed to reflect the two phases of funding, with one budget for the \$40,000 and another for the secondary \$10,000, which can be adjusted upon application for those additional funds. The budget and budget justification should reflect the need for the **maximum amount of support requested**.

## II. Proposal Preparation

1. Email indication of Intent to Apply addressed to [Jillian Hurst](#) and [Charles Nunn](#) (optional)
2. Consultations with members of the CHDI or TriCEM are available upon request.

## III. Selection Process and Review Criteria

1. Application Submission: A Review Committee comprised of researchers from CHDI and TriCEM will perform a detailed review of the applications. The Review Committee will consider the following criteria when reviewing applications and assigning an overall score:
  - Overall impact
  - Significance
  - Investigators
  - Innovation
  - Approach
  - Environment
  - Fulfills missions of CHDI and TriCEM
2. Potential for future funding: The proposed pilot work should collect preliminary data or develop tools that will lead to a competitive proposal submitted to an external funding agency. All proposals must specify how data and/or resources generated by the pilot study will contribute to submission of a grant application, including specific funding opportunities that the Project Leaders plan to pursue.
3. Funds will be released when all IRB, animal use, and institutional approvals are obtained (as applicable).

## IV. Application Procedure

CHDI and MEDx use the MyResearchProposal online application software to submit applications.

- To apply visit <http://bit.ly/myresearchproposal>, click on “Create New User” (or log in if you already have an account). Proposals must be submitted to the system by only one of the Principal Investigators.
- A step-by-step user’s guide for applying via the MyResearchProposal software is available - Please review the guide [here](#).
- Enter Access Code “**TRICEM**” and follow the instructions.

Proposal sections (except the Abstract and Public Summary) will be uploaded as individual PDF files. The application sections are:

- Abstract: The abstract is a summary of the proposal for use by review committee members, CHDI, and TRICEM (250 words maximum. Please include a brief introduction, the aims, and the expected outcomes).
- Public Summary: The public summary should describe the research in terms suitable for a lay audience. (250 words maximum)
- Research Proposal (4-page limit, including tables and figures. Use 1-inch margins, single line spacing, and font no smaller than Arial 11. References do not count towards the 4-page limit.) The research proposal should address the following:
  - Introduction and Goals – A statement of the question being addressed and a concise review of the concept and the literature to place the project in context, including evolutionary perspectives.
  - Proposed Activities – This should include a clear statement of specific data (include citations), methods, or analytical tools that will be required for the project.
  - Participating Fields and List of Proposed Participants – We encourage groups that go beyond existing collaborations and that include multiple disciplines and graduate students. Named individuals should be committed to participating in the project if funded. For each participant please include explicit information about career stage and discipline.
  - Rationale for CHDI/TricEM support – How does this research advance the missions of CHDI and TriCEM?
  - Outcomes – Proposals should include a clear statement about the expected outcomes of the project and how this will provide preliminary data/results for securing additional funding.
  - Future directions and plans for external grant submission
  - References (please note that references do not count towards the 4-page limit and should be included at the end of the research proposal PDF)
- Budget with Budget Justification using [PHS 398](#) Form Pages 4 and 5 (Page 5 is for the Budget Justification section only and you may use more pages as needed. Combine all pages into a single PDF with no page limit).
- Proposal timeline detailing the project milestones and deliverables
- Human and/or Animal Subjects: Institutional Review Board (IRB) or Institutional Animal Care & Use Committee (IACUC) approval **is not required prior to submission but will be required prior to funding**. Briefly describe any human and/or animal subject issues. (For example, if human subjects are involved, provide a description of their involvement and characteristics. Describe the sources of materials that will be obtained from human subjects as part of their study participation. Provide assurance that the project will be reviewed and approved by the Duke IRB and comply with HIPAA. If vertebrate animals are to be used, provide a description of the

proposed use of the animals in the work. Projects involving animal subjects must be reviewed and approved by the Duke IACUC. There is no page limit to this section, but it should be as brief as possible.)

- NIH Biosketches or CVs for key members of the research team (as a single PDF).

## V. Budget Guidelines

Please note the following during budget preparation:

1. No indirect or overhead costs may be included; the awardees receive direct costs only.
2. Grant funds may be budgeted for
  - salary support for students (including prorated tuition remission), post-docs and research support personnel. (Salary for research staff and students must reflect actual institutional based rates supplied to you by your grants managers or business office.)
  - travel necessary to perform the research
  - small equipment, subcontracts, research supplies and core lab costs, or
  - other purposes deemed necessary for the successful execution of the proposed project
3. Grant funds may **not** be included in the budget
  - salary support for the PI or faculty collaborators
  - foreign components, as defined in the NIH Grants Policy Statement
  - effort for post-doctoral trainees or fellows that are already on training grant equivalents
  - capital equipment
  - office supplies or communication costs, including printing
  - meals or travel, including to conferences, except as required to collect data
  - professional education or training
  - computers or audiovisual equipment
  - manuscript preparation and submission, or
  - indirect costs (The indirect rate is 0% for all direct costs, including subcontracts. You and/or your grants manager will be responsible for working directly with your subcontractor to obtain a final budget to include with your final budget.)

Awarded funds must be used to conduct the proposed research. CHDI/TriCEM reserves the right to revoke funding in the event it is determined that funds were not spent in accordance with the approved proposal without prior notification and approval.

## VI. Terms of the Award

### A. Approvals Required Prior to Funding Start Date

Prior to receiving funds, research involving human subjects must have appropriate approvals from the Duke IRB. If the research includes animals, the appropriate IACUC animal research forms must also be approved before the project's start date. Failure to pursue approval and notify CHDI/TriCEM of the outcome in the requested timeframe may result in cancellation of funding.

## **B. Project Execution**

Investigators agree to submit a brief interim report (6-months after project start), a brief report at the end of the funding period, and a detailed written report 12 months after the conclusion of the funding period that includes applications for or acquisition of additional funding, submitted or published manuscripts, presentations, invention disclosures, and other outcomes. CHDI and TriCEM may terminate and reallocate residual funds for any team failing to submit required written reports in a timely manner. Proposed aims of funded projects may be changed, added, or deleted during the funding period, pending Investigator and CHDI and TriCEM review and agreement. Projects must complete in the 12-month period; no-cost extensions are not permitted.

Investigators will meet with CHDI and TriCEM before release of funds to review project plans and ensure projects are ready to start by December 1.

## **C. Post-Award Reporting**

CHDI and TriCEM track significant events resulting from the funding. Any significant events should be included in the final project report, and CHDI/TriCEM will contact investigators annually to determine if any significant events have been achieved as a result of this award. Examples include:

- Abstracts/presentations, manuscripts, published guidelines
- Additional funding
- Regulatory meetings and filings
- Initiation of clinical studies
- Improved diagnosis or treatment of disease
- Implementation in clinical practice and community
- Translation of models to other geographical areas
- Translation of models to other therapeutic areas
- Clinical outcomes in practice and communities
- Agreements with partners and strategic collaborators to translate the research
- Commercialization (e.g. new intellectual property, license, commercial partnerships, or start-up company)
- Direct-to-consumer interactions (e.g. apps)

When requested, all awardees will be expected to provide updates of publications and other successes that originated from the award.