Child Health Research Institute

University of Nebraska Medical Center

Children's NEBRASKA

CHRI Grant Application Guide

The below are documents and information that will assist in a successful grant submission to the Child Health Research Institute. The application will have upload opportunities for each of the documents/sections described below.

To have a complete application be sure to:

1) Ensure you are a CHRI member or apply for membership
2) Review these instructions below
3) Review the budget restrictions & guidelines
4) Review the award requirements and expectations
5) Ensure if your study involves the CHRI Pediatric Research Office resources, you have worked with Matthew VanOrmer on the proposal for feasibility.
6) Fill out the CHRI online grant submission form and upload applicable documents per the instructions by the applicable deadline (PCRG grants are rolling).

Font must be Arial Narrow, Arial, or Times New Roman and size 11 for all documents. Captions may be no smaller than size 8 font. References and are not counted again the page limitations. ***You may remove the CHRI header from the templates to have a better idea of your page limits and use the space better.**

Required Documents / Sections:

NIH Biosketch(es)

(https://grants.nih.gov/grants/forms/biosketch.htm)

- Principal Investigator(s)
- Key Personnel – Co-Investigator(s), Collaborator(s) and Biostatistician(s)
- Biosketches are uploaded in the budget section

Please use the *CHRI Research Plan and Required Sections Template* for the Following Sections in Blue:

Research Plan (3-page limit for Mini-Grant; 5-page limit for all other CHRI/PCRG Grants)

- Hypothesis: Provide a clear and testable predictive statement or proposition about the possible outcome of the proposed research.
- Specific Aims: List succinctly the specific objectives of the research proposed (e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology).
- Background/Preliminary Data: Provide preliminary data to show that your proposed research is possible and that your ability to carry out the proposed research is credible.
- Experimental Design/Methods: Describe the experimental design and methods proposed and how you will achieve robust and unbiased results. Include how the data will be collected, analyzed, and interpreted, as well as any resource sharing plans as appropriate. If the project is in the early stages of development,

describe any strategy to establish feasibility, and address the management of any high-risk aspects of the proposed work.

- Statistical Analysis: Should support the proposed research plan and clearly demonstrate steps necessary for reproducibility of results. Describe the number of subjects or animals needed based on power calculations. Consider subject dropouts in estimating enrollment. We strongly recommend consultation with a statistician as needed.
- Potential Pitfalls/Alternatives: Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.
- References should include the PubMed Central ID (PMCID) whenever possible. It is recommended that investigators use EndNote whenever possible given its functionality to 'Cite While You Write' and its ability to pull publication information directly from online databases. EndNote is available to UNMC faculty, staff, and students here.

Significance to Pediatrics and Innovation of the Research (One Page Limit)

- Explain the importance of the problem or critical barrier to progress that the proposed project addresses.
- Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more pediatric fields. Describe how the concepts, methods, technologies, treatments, services or preventative interventions that drive this field will be changed if the proposed aims are achieved.
- Describe innovative aspects of the research for advancing the field.

Future Directions (One Page Limit)

- Discuss how the proposed study fits in research plans for the investigators and their organizations beyond the project period. Possibilities include specific plans to leverage pilot data for extramural funding, to sustain new practices or services in the clinic or lab, to establish productive interdisciplinary collaborations, or to acquire transformative skills.
- **Special note for PIs who are trainees (e.g., students, residents, fellows):** Please address how the project will advance your career goals, confer specific new skills, provide a hands-on introduction to research, etc.

Resources and Facilities (One Page Limit)

- Describe how the scientific environment in which the research will be done contributes to the probability of success (e.g., institutional support, physical resources, and intellectual rapport).

Please use the Provided Templates for the Relevant Supplemental Sections:

Vertebrate Animal Section (if applicable)

If live vertebrate animals are involved in the project, address each of the following criteria:

- Description of Procedures: Provide a concise description of the proposed procedures to be used that involve live vertebrate animals in the work outlined in the Research Plan. The description must include sufficient detail to allow evaluation of the procedures.
    - Identify species, strains, ages, sex, and total numbers of animals to be used in the proposed work.

- Justifications: Provide justification that the species are appropriate for the proposed research. Explain why the research goals cannot be accomplished using an alternative model.

Human Subjects and Clinical Trial Information (if applicable)

If human subjects are involved in the project, address each of the following criteria:

- Abstract of the Research Protocol: Can be copied from Section II.1 of the UNMC IRB application. The summary should include title of the protocol, a brief description of the purpose of the study, interventions and evaluations, and follow-up.
- Accrual Location: Where will the subjects be recruited? Please include the specific clinical location (where applicable) at UNMC, Children's Hospital and Medical Center, Boystown, or other provider locations.
- Total Number of Subjects Needed: This should include the number of subjects needed to complete the research, as well as the hypothesized number of subjects to be consented. Typical screen failure rates range from 15% to 50% percent depending on eligibility criteria.
- Age Range: What age range will the subjects be at the time of recruitment?
- Inclusion Criteria: Can be copied from Section II.9 from the UNMC IRB application.
- Exclusion Criteria: Can be copied from Section II.10 from the UNMC IRB application.

Letters of Support (if applicable – no template)

- Letters should be included as necessary to demonstrate the support of collaborators and other significant contributors included in the grant application.
- All Trainees who are a PI on the grant must have a letter from their faculty Mentor or Division Chief to ensure sufficient time is available to carry out the project.
- Combine all letters of support into a single PDF file.

Review Criteria

The CHRI Grant Review Committee will review grant applications for scientific merit, feasibility, and impact. Review criteria will include scoring for significance, innovation, research approach, investigator/resources, collaborative potential, sustainability, and potential for future external funding. An overall impact score will be assigned to each grant application. All applicants will receive a summary of the Committee's review. Applicants will be permitted to resubmit a revised grant application in a subsequent cycle that addresses the reviewers' concerns.