Applications should be in Arial 11-point font with one-half inch margins. Each application must contain the following items in the order outlined below:

1. **SUMMARY SHEET (Completed in the application portal)**

2. **PROJECT DESCRIPTION/ SPECIFIC AIMS PAGE (1 page)**

   This description is meant to serve as a succinct and accurate description of the proposed work when separated from the application. State the application’s broad, long-term objectives and specific aims, making reference to the health relatedness of the project. Describe concisely the research design and methods for achieving these goals. Avoid summaries of past accomplishments and use of the first person.
   
   a. State the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved.
   b. List 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.

3. **RESEARCH PLAN (maximum 6 pages)**

   The research plan typically contains 1 to 1½ pages for the background/significance and innovation sections, and the remainder is used to describe the approach.

   **Background & Significance:**
   
   a. Provide sufficient background so scientists who are not experts in your field understand the medical/scientific problem you will be studying
   b. Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses. Describe what is known, what is not known, and the rigor of prior research.
   c. Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.
   d. Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.

   **Innovation:**
   
   a. Explain how the application challenges and seeks to shift current research or clinical practice paradigms.
   b. Describe any novel theoretical concepts, approaches or methodologies, instrumentation, or intervention(s) to be developed or used, and any advantage over existing methodologies, instrumentation or intervention(s).
   c. Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.

   **Approach:**
   
   a. You may include preliminary data (generally not more than 1 page) that support the premise of your work or demonstrate feasibility of your approaches.
   b. Describe overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Unless addressed separately, include how the data will be collected, analyzed, and interpreted.
   c. Describe the collaborative element of the study design and how this will contribute to success.
d. 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.
e. Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.

4. PLANS FOR SUBMISSION FOR A FEDERAL OR FOUNDATION GRANT AND TIMELINE FOR SUBMISSION.

- Provide a ½-1 page summary of anticipated plans for grant application, including expected timelines and funding source/grant type.

5. BIBLIOGRAPHY AND REFERENCES CITED

- Provide a bibliography of any references cited in the Research Plan. Each reference must include names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. Include only bibliographic citations. Follow scholarly practices in providing citations for source materials relied upon preparing any section of the applications. The references should be limited to relevant and current literature. While there is not a page limitation, it is important to select only those literature references pertinent to the proposed research.

6. BUDGET

- Complete the budget form and provide complete justification for each requested item.
- The justification has a 1-page limit.
- Funds are to be used primarily for supplies and technical support. PI salary/fringe and major equipment are not allowed.
- Proposals cannot exceed $20,000 in total direct costs. No indirect costs are to be included.

7. BIOGRAPHICAL SKETCHES

- Provide a NIH format biographical sketch for both principal investigators, co-investigator, and all key personnel in a single PDF file with the corresponding PI’s biosketch first. Each biosketch should not exceed 5 pages in length and should follow current NIH guidelines.

8. ASSURANCES AND COMPLIANCE

- Approved protocols are required for this application. Please indicate if your proposal will include: human subjects, animals, recombinant DNA (rDNA), lasers, x-ray machines, irradiators, or radioactive materials.
- For all of the above with the exception of irradiators, please include the protocol number under which approval for research on the item(s) is being applied.
- Attach IRB or IACUC approval letter.