Instruction for Research Plan
Jeane B. Kempner Scholars Application

This section is to be completed by the applicant, not the sponsor. This proposal will be of paramount importance in evaluating your request for a scholar’s award. The following guidelines from the Public Health Grant application are suggested as a format for this portion of the application. However, page limits are maximums and a concise presentation of the proposed program is requested.

The Research Plan consists of the following items (1 – 6), as applicable. Begin each section of the Research Plan with a section header (e.g., Introduction, Specific Aims, Research Strategy, etc.).

The Research Strategy, Section 3, is composed of three distinct sections – Significance, Innovation, and Approach. Note the Approach section also includes Preliminary Studies.

Section 2-3 combined must not exceed 5 pages, including tables and figures.

1. Introduction to Application (Resubmission Applications only)
2. Specific Aims (do not exceed 1 page)
3. Research Strategy (Significance, Innovation and Approach)
4. Bibliography and References Cited/Progress Report Publication List
5. Protection of Human Subjects (if applicable)
6. Vertebrate Animals (if applicable)

1 Introduction (Resubmission Applications only)
Describe how the application has been amended in response to the Reviewers’ comments. Do not exceed 1 page.

2 Specific Aims
State concisely 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.

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.

Specific Aims are limited to one page.

3 Research Strategy
Organize the Research Strategy in the specified order and using the instructions provided below. Start each section with the appropriate section heading—Significance, Innovation, Approach. Cite published experimental details in the Research Strategy section and provide the full reference in the Bibliography and References Cited section (item 5.5.5).

Follow the page limits for the Research Strategy in the Table of Page Limits, unless specified otherwise in the FOA.

(a) Significance
- Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.
- Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad 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.

(b) Innovation
- Explain how the application challenges and seeks to shift current research or clinical practice paradigms.
- 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).
- Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation or interventions.

(c) Approach
- Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted as well as any resource sharing plans as appropriate.
• Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.

• 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.

• Point out any procedures, situations, or materials that may be hazardous to personnel and precautions to be exercised.

If an applicant has multiple Specific Aims, then the applicant may address Significance, Innovation and Approach for each Specific Aim individually, or may address Significance, Innovation and Approach for all of the Specific Aims collectively.

As applicable, also include the following information as part of the Research Strategy, keeping within the three sections listed above: Significance, Innovation, and Approach.

• **Preliminary Studies for New Applications.** For new applications, include information on Preliminary Studies. Discuss the PD/PI's preliminary studies, data, and/or experience pertinent to this application. Preliminary data can be an essential part of a research grant application and help to establish the likelihood of success of the proposed project.

• **Progress Report for Renewal Applications.** For renewal applications (previously funded applications seeking a second year of support), provide a Progress Report. Summarize the specific aims of the previous project period and the importance of the findings, and emphasize the progress made toward their achievement. Explain any significant changes to the specific aims and any new directions including changes resulting from significant budget reductions. A list of publications or manuscripts accepted for publication, meeting abstract and other printed materials, if any, generated during the previous year of support should be included as appendix.

4 **Bibliography and References Cited/Progress Report Publication List**

(a) **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 in preparing any section of the application.

*The references should be limited to relevant and current literature.* While there is not a page limitation, it is important to be concise and to select only those literature references pertinent to the proposed research.

(b) **Progress Report Publication List.** For Renewal applications list the titles and complete references to all appropriate publications, manuscripts accepted for publication, patents, and other printed materials that have resulted from the project since it was last reviewed competitively.

5 **Protection of Human Subjects**

Refer to Part II of the NIH PHS 398: [Supplemental Instructions for Preparing the Protection of Human Subjects Section of the Research Plan](#) if the proposed research will involve human subjects. Do not use the protection of human subjects section to circumvent the page limits of the Research Strategy.

6 **Vertebrate Animals**

If vertebrate animals are involved in the project, address each of the five points below. **This section should be a concise, complete description of the animals and proposed procedures.** While additional details may be included in the Research Strategy, the responses to the five required points below must be cohesive and include sufficient detail to allow evaluation by peer reviewers.

If all or part of the proposed research involving vertebrate animals will take place at alternate sites (such as project/performance or collaborating site(s)), identify those sites and describe the activities at those locations.

Although no specific page limitation applies to this section of the application, be succinct. Failure to address the following five points will result in the application being designated as incomplete and will be grounds to defer the application from the peer review round. Alternatively, the application's impact/priority score may be negatively affected.

If the involvement of animals is indefinite, provide an explanation and indicate when it is anticipated that animals will be used. If an award is made, prior to the involvement of animals the grantee must submit to the Kempner Fellowship awarding office detailed information and verification of IACUC approval. If the grantee does not have an Animal Welfare Assurance then an appropriate Assurance will be required.

The five points are as follows:
1. Provide a detailed description of the proposed use of the animals for the work outlined in the Research Strategy section. Identify the species, strains, ages, sex, and numbers of animals to be used in the proposed work.

2. Justify the use of animals, the choice of species, and the numbers to be used. If animals are in short supply, costly, or to be used in large numbers, provide an additional rationale for their selection and numbers.

3. Provide information on the veterinary care of the animals involved.

4. Describe the procedures for ensuring that discomfort, distress, pain, and injury will be limited to that which is unavoidable in the conduct of scientifically sound research. Describe the use of analgesic, anesthetic, and tranquilizing drugs and/or comfortable restraining devices, where appropriate, to minimize discomfort, distress, pain, and injury.

5. Describe any method of euthanasia to be used and the reason(s) for its selection. State whether this method is consistent with the recommendations of the American Veterinary Medical Association (AVMA) Guidelines on Euthanasia. If not, include a scientific justification for not following the recommendations.

Do not use the vertebrate animal section to circumvent the page limits of the Research Strategy.