

Outline for an R21

Specific Aims: 1 page limit. The Specific Aims do NOT count toward your Research Strategy, which has a 6-page limit.

- Concisely state the goals of the proposed research.
- Summarize the expected outcomes, including impact of research on fields involved
- Succinctly list objectives of proposed research (e.g., to test a hypothesis, create a novel design, solve a specific problem, etc.).

Research Strategy:

Cannot exceed 6 pages

This section includes the following headings: Significance, Innovation, and Approach.

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:

If you are including Preliminary Studies, put this information in the “Approach” Section.

- 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 (<http://www.ehs.columbia.edu/>).