

Suggested worksheet and outline for aims and research strategy.

Aims and Proposal Outline – R01 or Other Independent Grant Application

Your Name: Your Academic Title: Your Email Address: Project Title: Mentors with Academic Titles, and Email Address:
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<u>Overall Research Question (or Goal)</u>
What is the overall research question you are trying to answer?

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<u>Specific Aims with Corresponding Hypotheses*</u>
Specific Aim – what are you proposing to study? Hypothesis – what is your expected finding?

Aim 1. Hypothesis 1. Aim 2. Hypothesis 2. Aim 3. Hypothesis 3. Etc.

<u>Significance</u>
Does the project address an important problem or a critical barrier to progress in the field? Is there a strong scientific premise for the project? If the aims are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? State in outline form.

1. 2. 3. Etc.

<u>Innovation</u>
Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel? State in outline form.

1. 2. 3. Etc.

<u>Approach</u>
How will you do it? What are the strategies, methods, and analyses you will use to accomplish your aims? How will your experiments prove or disprove your hypotheses?

Study Design (brief statement of design):

Subjects • Eligibility (inclusion/exclusion) criteria <input type="checkbox"/> • Sampling design (how are you getting your subjects) <input type="checkbox"/>

Variables

<ul style="list-style-type: none"> • Exposure variable(s) and Outcome(s) <input type="checkbox"/> • Covariates (adjustment variables)
Potential problems, pitfalls, and alternative strategies with the study design <input type="checkbox"/>
Duration of proposed study including recruitment, enrollment, and conduct of visits
Statistical plan (For each aim, describe the statistical procedures and techniques you will apply to address your main hypotheses).
Sample size justification (Give a power/precision justification for the sample size you will use).

*Each of your hypotheses should clearly state the exposure variables and outcomes.