

## Cardiology Fellow Research Proposal Form

Principal investigator:

Email address:

Pager:

Faculty mentor:

Email address:

Office phone number:

*Complete the project outline using single-spaced type and 12-point font.*

### **Project Title:**

### **Research Question:**

Provide a *one to two sentence* description of the question to be addressed.

### **Hypothesis:**

Provide a *one sentence* statement of the primary hypothesis to be tested.

### **Background and Statement of Problem:**

Briefly state why the research question is important and outline the evidence that forms the basis for the study hypothesis. (1 to 2 paragraphs with up to 5 key references.)

**Study Design:**

Indicate the type of study proposed (e.g., retrospective analysis, prospective observational study, RCT, case-control study, prospective randomized trial).

**Methodology:**

Briefly describe your experimental methods. This will vary depending on the study design and whether the study involves basic research or human subjects. If appropriate, provide details about how subjects will be identified and recruited, the nature of the control group (if any), the proposed intervention (if any), what data will be collected (including information about important confounding variables), and the duration and nature of follow-up. (In most cases, 3-5 paragraphs will be sufficient.)

**Fellow's Role:**

Describe the fellow's role in the project and indicate how participation in this study will contribute to advancement of career goals. (2-3 sentences)

**Outcomes:**

Briefly define the primary and secondary outcomes (i.e., dependent variables) and describe how and when each will be measured. (1 paragraph)

**Setting:**

Describe where the project will take place (laboratory, hospital wards, clinic, medical records, etc.).

**Study Population (if applicable):**

Briefly describe the available patient population (volume of patients or procedures per month or year) and time frame of recruitment.

**Data Analysis:**

Briefly summarize the data collection format (e.g. Excel spreadsheet, SAS dataset, etc.) and how the data will be analyzed, including how potential confounding variables will be addressed. (1-2 paragraphs)

**Sample Size Estimation:**

What is the anticipated effect size for the primary outcome variable? How many subjects will need to be studied to have 80% power ( $\beta=0.20$ ) to detect a difference of this magnitude with  $\alpha=0.05$  (p-value < 0.05)? (1 paragraph; Note that a discussion of power analysis is required; obtain statistical consultation if needed.)

**Relationship to Ongoing Studies:**

What is the relationship of this study to other ongoing or recently completed projects (if any)?

**Study Timeline and Key Milestones:**

Provide an estimate of the study duration and timing of key milestones.

Total study duration, including start and completion dates:

Completion of literature search and draft protocol:

IRB submission:

Completion of data collection:

Completion of data analysis:

Completion of abstract / manuscript:

**Budget:**

Do you anticipate that this project will require financial support for supplies, data collection, computer software, statistical analysis, etc.?

If so, please indicate what resources will be available to support your project (e.g., discretionary or grant funds provided by your mentor; plan to submit a grant application).

**References:**

Provide a list of no more than 10 pertinent references to support the background and design of your proposal.

**Mentor Letter:**

Provide a brief statement from your mentor indicating that he/she has read and supports your proposal.

**Signatures:**

Fellow Signature:

Date:

Mentor Signature:

Date: