**Department of Anesthesiology and Perioperative Medicine Seed Award Application and Guidelines**

**Required Documents:**

1. Cover Page
2. Abstract
3. Proposal and Supporting Documents
4. Checklist

Guidelines for seed award applications are provided below. Please follow them carefully; incomplete applications will not be scored. The SAC will meet to review applications. If revisions are thought to be necessary to achieve a fundable score, the application will be returned to the investigator with the committee's comments after the first review. The PI may then revise the application and resubmit it before the second review, at which time applications will be scored and ranked for funding.

Applications, and any questions, can be sent via email to [SAC@anes.upmc.edu](mailto:SAC@anes.upmc.edu).

Good luck!

Yan Xu, PhD  
Peter Winter Professor of Anesthesiology

Vice Chair of Basic Sciences

Chair, Scientific Affairs Committee

**Department of Anesthesiology and Perioperative Medicine Seed Award | Application GUIDELINES**

**FORMATTING REQUIREMENTS**

Font no smaller than 11-point, Arial or Calibri. Half-1” margins are acceptable.

**COVER PAGE (use template)**

* Give the project a concise, descriptive title.
* List the name, title(s), and address of the principal investigator (PI), co-investigator(s), and faculty sponsor (if the PI is a fellow).
* All persons listed must sign the cover page to verify that they have reviewed and agree with the proposal.

**ABSTRACT**

Briefly summarize the proposal (up to 250 words), including the essential elements of sections A to D, below. Avoid technical jargon. Abstract may be published on the departmental web site.

**PROPOSAL**

* Sections A to K must include the information summarized below.
* Any omissions must be justified.
* **\*Sections A through D may not exceed six single-spaced typewritten pages.**
* Note: Clinical trial protocols may be submitted in an Appendix.

**A. Introduction and Specific Aims**

* State the overall objective and, if appropriate, the hypothesis to be tested.
* Describe specifically what the proposed studies will accomplish.
* One-half page is recommended.

**B. Background Information**

* Briefly sketch the background to this proposal, with selected references.
* Critically evaluate existing knowledge and identify the gaps that the project is intended to fill.
* Describe any preliminary or related studies done by the PI.
* Cite all references by number in the text.
* One or two pages are recommended.

**C. Materials and Methods**

Describe the experimental design, the procedures to be used, and the protocol in sufficient detail to substantiate the accuracy and feasibility of the study. In particular:

1. Describe the material being studied (e.g., patient group, animal model, biopsy specimens). Specify the sample size and show that it is sufficient for statistical analysis.
2. Describe the nature of the studies, including types of measurements, specificity and sensitivity of measurement procedures, and methods of analysis to be used.
3. State clearly how the results of the studies will be evaluated in relation to the hypothesis to be tested if appropriate.
4. Describe how the data will be analyzed and presented. Specify the statistical methods to be used. Be sure that the relation of the tests to the hypothesis or outcome is clear.
5. Discuss anticipated problems in the research.
6. Provide a timeframe for completion of the project.

**D. Significance**

* State why this project is clinically or scientifically important.
* Describe how it relates to the PI's overall research goals.
* One-half page is recommended.

**E. Plans for Future Funding**

How is completion of this project likely to lead to extramural funding in the future?

**F. References**

Arrange and number all references in the order they are cited in the text.

**G. Use of Animal or Human Subjects**

* If research involves animals or humans, state whether or not the protocol has been approved by the Institutional Animal Care and Use Committee (IACUC) or the Institutional Review Board (IRB).
* Funding is contingent on such approval.
* The protocol must be submitted to the IACUC or IRB by the date of funding and approved within 30 days.

**H. Location and Facilities**

Give the specific location where the research will be done and describe the facilities and equipment available for the proposed project.

**I. Research Team Members**

* If the PI is a resident or fellow, a faculty sponsor must be named.
* List all co-investigators and consultants.
* Indicate the time committed for the project by the PI.

**J. Biosketches**

* Biosketches are required for the seed proposal PI(s), faculty mentor, and co-investigators.
  + Instructions and a downloadable template for the NIH biosketch can be found here: <https://grants.nih.gov/grants/forms/biosketch.htm>
  + Note, there are two versions: Non-Fellowship Biosketch AND Fellowship Biosketch. Residents and fellows may use the Fellowship Biosketch if preferred.

**K. Budget Justification and Budget Form**

* Investigators may request up to $10,000 for pilot projects and up to $25,000 for projects with some preliminary data and in preparation for future external funding proposals.
* Using the Excel budget form, itemize all costs of the project.
* Provide a written budget justification. Budgets must be well justified; the SAC will make final recommendations for funding level.

**L.** **Request for Clinical Research Coordinator Support (if applicable)**

* This resource is available for clinical research projects. See the **Investigator Initiated Research (IIR) Tasks/Expenses Worksheet**
* Please contact Amy Monroe, Director of Clinical Research Operations, at [monroeal@upmc.edu](mailto:monroeal@upmc.edu) for assistance with the IIR worksheet
* NOTE: The IIR Form must be included for specific data requested and an estimate of coordinator’s time. Requires Clinical and Translational Research Center (CTRC) approval.

**M. Letters of Support from Co-Investigators and Faculty Sponsor**

* **Note: A letter from a faculty sponsor is required if the PI is a fellow or resident**
  + The letter must contain the following statement: “As the faculty sponsor of (title of proposal) by (PI), I have worked with (PI) in the development of this project and believe that the proposal contains all the elements required to document its feasibility, as summarized in the outline provided by the SAC.”

**CHECKLIST**

* Complete and sign the checklist to assure that the application is complete. The checklist should be submitted along with your application.

**Department of Anesthesiology and Perioperative Medicine Seed Award | Application CHECKLIST**

Check each item below to indicate that it is included in the application and enclose completed check list.

* All items must be included unless a specific reason for omission is given.
* Incomplete applications will not be reviewed.

\_\_\_\_\_Cover page, including investigator signatures

\_\_\_\_\_Abstract (250 words or less)

\_\_\_\_\_A. Introduction and specific aims, including hypothesis to be tested

\_\_\_\_\_B. Background information

\_\_\_\_\_C. Materials and Methods

* Research design (e.g., randomized, blinded, controlled, descriptive)
* Detailed methods (including types of measurements and measurement procedures)
* Data analysis, including statistical methods

\_\_\_\_\_D. Significance

\_\_\_\_\_E. Plans for future funding

\_\_\_\_\_F. References

\_\_\_\_\_G. Use of animal or human subjects

\_\_\_\_\_H. Location and facilities

\_\_\_\_\_ I. Research team members (include mentor, co-investigators, and consultants)

\_\_\_\_\_ J. Biosketches

* Required for PI, faculty mentor, and co-investigators
* Not required for consultants

\_\_\_\_\_ K. Budget Justification and Budget Form (spreadsheet)

\_\_\_\_\_ L. Clinical research coordinator support request (if applicable)

\_\_\_\_\_ M. Letters of support from co-investigators and/or faculty sponsor (if applicable)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Principal Investigator Signature Date**

**Department of Anesthesiology and Perioperative Medicine Seed Award | COVER PAGE**

**Date:**

***(Note: PI and other Senior/Key Personnel signatures required)***

|  |  |  |
| --- | --- | --- |
| PI: | Academic Title: | |
|  | **Project Title:** | |
| Subtotal Direct Costs $ | Animals: Y / N Humans: Y / N Clinical Trial: Y / N | New Investigator:  Early-Stage Investigator: |
|  | | |
| Senior/Key Personnel: | Title and Department/Organization: | Role: (Co-I, Collaborator, Consultant, Faculty Mentor) |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |