How to Write Strategic Grant Proposals for Research Collaborations

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Introduction

Grant proposals are a type of business proposal.

- Leadership
  - Guides the science
  - Manages the project personnel/budget
  - Liaises with the funder
- Experience/expertise
- Risk/reward
Introduction

Challenges of having multiple PIs in a research proposal:

- Shared guidance of the science
- Shared management of project personnel/budget
- One or more contact PIs (control issue)
Introduction

Shared leadership and management can lead to the following issues:

- Team cohesion – multiple labs probably not co-located
- Conflicting styles – meeting regularly may help
- Communication between PIs (and potentially other lab personnel)
- Supporting entities – institutional support, collaborators
- Authorship
- Conflict resolution
Model: The NIH R01 Application

What is the Multiple PD/PI Model?
Why is the model used?
When is it allowed?
Who can be a PI on a multi-PI project?
Where does the money go?
Model: The NIH R01 Application

How
Writing Strategy for the NIH Multiple PD/PI Plan

• Risk/reward balance from perspective of funder
• Multi-PI review process/multi-PI plan audience
• Plan content
Model: The NIH R01 Application

NIH Multiple PD/PI Plan Content

- Rationale
- Governance and organizational structure
  - communication plan
  - decision-making plan
  - conflict resolution
  - resource allocation

- Responsibilities
  - scientific
  - technical
  - administrative
Model: The NIH R01 Application

NIH Multiple PD/PI Plan Content

• Letters
  • collaboration
  • support
• Change of personnel in a multi-PI Plan
Specialized Programs of Research Excellence (SPORE)

SPORE, housed under the Translational Research Program (TRP) at NCI, promotes collaborative, interdisciplinary translational cancer research – needs NCI pre-approval.

The SPORE supports:

• Work between basic and clinical scientists to support prevention, diagnosis, and treatment of cancer

• Specific organ site, group of highly related cancers, or common mechanism/theme in cancer

• Rapid and efficient movement of basic scientific findings to clinical settings

• Biological basis for observations made in patients with or in populations at risk for cancer.

• Human end-point(s) within the 5-year funding period.
Specialized Programs of Research Excellence (SPORE)

Model for SPORE

• At least one Program Director/Principal Investigator
• Team concept (multiple project leaders; multiple core directors)
• Basic science and clinical expertise are both required
• Collaborations
• Special pilot study programs
• Involvement of patient advocates
• Who can be a PI on a SPORE application
• Where the money goes
• Interaction of projects with cores is key
Specialized Programs of Research Excellence (SPORE)

Writing a strategic multi-PI plan for SPORE

- Keep risk/reward balance from funder’s perspective always in mind
- Overall (only Collaborations part is scored)
  - Overall SA, significance, innovation, approach
  - Horizontal Collaborations
  - Vertical Collaborations
Specialized Programs of Research Excellence (SPORE)

Administrative Core (Scored)

- Leadership and chain of authority
- Advisory boards
- Administrative and data management
- Succession plan
- Integration of shared resources cores within SPORE and the Institution
- Core resource allocation
- Institutional commitment
- Planning and evaluation activities
- Conflict resolution (money, publications)
- Cancer patient population
- Patient Advocacy Program
Specialized Programs of Research Excellence (SPORE)

Scientific Projects, Cores, Developmental Research Program (DRP), Career Enhancement Program (CEP) (Scored)

- Overall SA, significance, innovation, approach
- Admin Core and Biospecimen/Pathology Core required
- DRP and CEP include pilot grant application within the SPORE – focus on minority recruitment

**Emphasize cross-talk between Projects and Cores**
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Letters of Support

• Required
  • Top institutional authority (dean of research)
  • Cancer center director
  • Advisory board members

• Highly recommended
  • Department heads
  • Offices of women’s career and faculty diversity and development
  • Scientific collaboration
  • Patient advocates
What is the Dual PI Model?
Who can be a PI on a dual PI project?
Why is the model used?
When is it allowed?
Where does the money go?
How
Writing Strategy for the Dual PI Leadership Plan

• Risk/reward balance from perspective of funder
• Dual-PI review process/dual-PI plan audience
• Plan content
PCORI Dual PI Leadership Plan (cont’d)

- People and Places template
- Leadership template
  - Describe the governance and organizational structure of the leadership team and the research project;
  - Delineate the administrative, technical, scientific, and engagement responsibilities for each PI and the rationale for submitting a dual-PI application;
PCORI Dual PI Leadership Plan (cont’d)

- Leadership template (cont’d)
  - Discuss communication plans and the process for making decisions on scientific and engagement direction; and
  - Describe the procedure for resolving conflicts.
PCORI Dual PI Leadership Plan (cont’d)

• Letters
  o collaboration
  o support
Multi-Investigator Research Awards (MIRA)

The CPRIT MIRA supports:

• Innovation in cancer research and, specifically, in enhancing the potential for medical or scientific breakthrough in preventing or curing cancer

• Highly integrated programs of collaborative and cross-disciplinary research among Texas investigators
Multi-Investigator Research Awards (MIRA)

Only Texas institutions and investigators may apply.

Similar team concept with multiple project leaders and multiple core directors.

Expertise isn’t as specific as that of NCI SPORE (clinical vs. basic science).

Collaborations are encouraged (collaborators may or may not reside in Texas, but cannot receive funding).
Multi-Investigator Research Awards (MIRA)

Characteristics

• Synergy between projects
• Leadership (Overall PI, Co-PIs leading Projects)
• Projects (minimum 3, maximum 5)
• Cores (minimum Administrative, maximum 4)
• Slightly different writing requirements (eg, Abstract and Significance, Layperson’s Summary)
Questions?