Division of Research Updates
&
Demystifying Proposal Writing

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July 8, 2020

Agenda

- FM faculty Research interest updates and needs assessment
- On writing a research proposal – start with a pilot
- Next round of pilot project application timeline
- Discussion

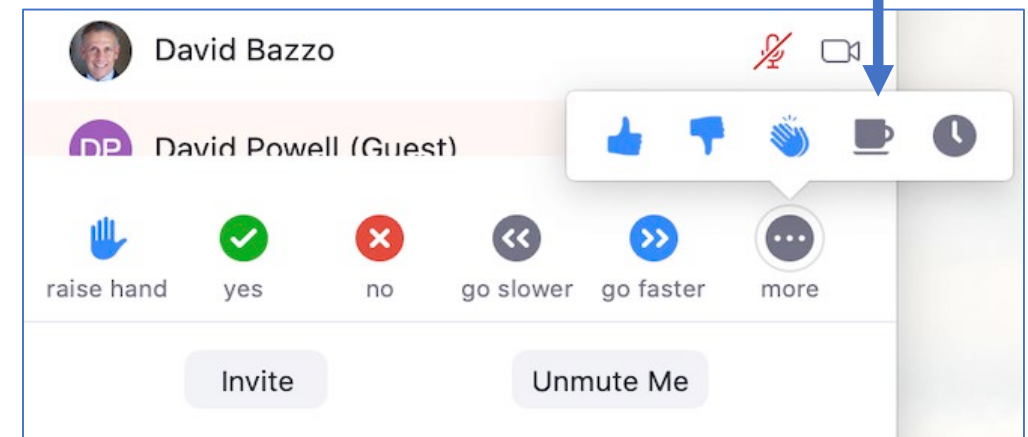# Research Interest and Needs Assessment

Update faculty research profile

https://medschool.ucsd.edu/som/fmph/divisions/family-medicine/research/Pages/Research-Interests.aspx

Guide planning

https://ucsd.co1.qualtrics.com/jfe/form/SV_2uAM16gb6un4f8V

When done, show the cup under "Participants"

Writing a Research Proposal

Start with a pilot

DFM Faculty Meeting

What a finished product looks like

- https://grants.nih.gov/grants/funding/phs398/398_forms.pdf

Parts of an Application

- Abstract/summary – 30 lines
- Research plan
  - Specific aims – 1 page
  - Significance
  - Innovation
  - Approach - how it will be conducted.

6 pages

| draft | edit | Get cold reader feedback | edit | submit |
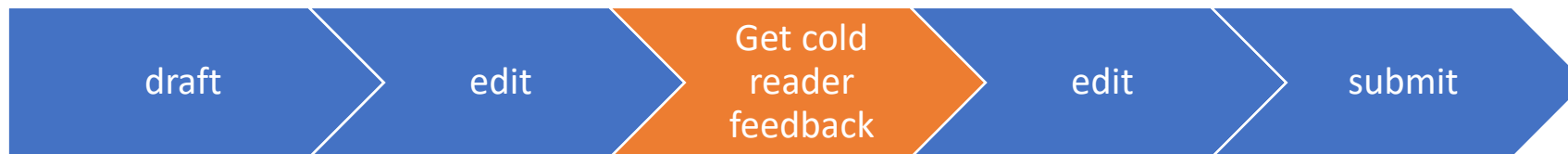
Specific Aims

1. Start with an overview:
   a) State the goal of your project
   b) State your hypothesis
   c) Summarize the rationale and significance of your project

2. List specific aims:
   a) Each one should be specific and focused.
   b) Each one should test the hypothesis.
   c) As a whole they should synergize (but <u>not</u> be co-dependent on one another)

3. End with important information your project will uncover:
   - 1-3 sentences

Example

The pilot will accomplish two **specific aims**:

1. To characterize current ACP documentation practices and evaluate the sequential impact of several components of the Palliative Care Program, multiple chronic conditions (MCC), and other patient and care team characteristics on ACP documentation.

> Hypothesis 1a. The staged implementation of the Palliative Care Program increases the percentages of vulnerable elders with accessible and actionable ACP documentations over time.

> Hypothesis 1b. The number, type, and severity of MCC are associated with the likelihood that ACP is documented in the vulnerable elders' EHR.

2. To identify barriers and facilitators of ACP conversations and ACP documentation, including the role of MCC, using in-depth interviews with healthcare team members in primary care, oncology, pulmonology, and cardiology who are outliers (in both directions) with respect to ACP documentation.

Research Plan - Significance

1. Summarize the pivotal work before yours.
   a) Strive for balance and completeness
   b) Include any controversies and discrepancies your project will address

2. State the key scientific questions that remain and why they need to be answered.

3. Summarize what you propose to do to answer one of these questions or fill an important gap in our understanding.

4. Explain how the research will improve scientific knowledge, technical capability, clinical practice, or health services.

Research Plan - Innovation

1. Explain how your project is innovative and will add significantly to existing knowledge.

2. Don't assume that your reviewers will understand why your project is innovative.

Research Plan - Approach

For each specific aim, describe:

a. methods (with an explanation for why you chose them)

b. preliminary data (if available, not required)

c. a description of any samples (including size, inclusion/exclusion criteria, sampling approach, and proof you have access to them)

d. measures (and any conceptual frameworks for them)

e. data collection process (including a description of collection procedures and validation methods)

f. data management plan (including procedures for data entry, auditing, security and quality control)

g. data analysis plan (including descriptions of approach, software used, validation methods, and theoretical underpinnings);

h. study limitations (including potential sources and consequences of bias and strategies to minimize bias; also any confounding variables and strategies for addressing them);

i. expected results and their interpretation;

j. strategies for addressing potential problems.

The Budget

- Maximum: $30,000/year for 1 year

- Match the scope/size of the project
  - Beware of promising to do a 5-year project with the budget of a 1-year project

- Preferred priority:
  - Release time for PI's scholarly activity
  - 10% time

What do reviewers look for

- **Overall Impact**

- **Scored Review Criteria**
  - **Significance**
  - **Investigator(s)**
  - **Innovation**
  - **Approach**
  - **Environment**

Impact	Score	Descriptor	Strengths/Weaknesses
High Impact	1	Exceptional	Strengths
	2	Outstanding	
	3	Excellent	
Moderate Impact	4	Very Good	
	5	Good	
	6	Satisfactory	
Low Impact	7	Fair	
	8	Marginal	
	9	Poor	Weaknesses

Score	Descriptor	Additional Guidance on Strengths/Weaknesses
1	Exceptional	Exceptionally strong with essentially no weaknesses
2	Outstanding	Extremely strong with negligible weaknesses
3	Excellent	Very strong with only some minor weaknesses
4	Very Good	Strong but with numerous minor weaknesses
5	Good	Strong but with at least one moderate weakness
6	Satisfactory	Some strengths but also some moderate weaknesses
7	Fair	Some strengths but with at least one major weakness
8	Marginal	A few strengths and a few major weaknesses
9	Poor	Very few strengths and numerous major weaknesses

Minor Weakness: An easily addressable weakness that does not substantially lessen impact
Moderate Weakness: A weakness that lessens impact
Major Weakness: A weakness that severely limits impact

Contents of the proposal

- Face Page (NIH Format- [template](#))
- Abstract/Project Summary (up to 30 lines)
- Specific Aims (One Page)
- Research Plan (Six-Page maximum; Does not include References or Human Subjects)
- Human Subjects Section (If applicable)
- Biosketches for Key Personnel [(NIH format)](#)
- Detailed Budget Page**
- Facilities & Administrative/Indirect Costs Checklist ([template](#))
- Budget Justification

   Note: Budget of up to $30,000 for the pilot project should be used mainly for salary release for the PI to conduct the pilot research project

- https://medschool.ucsd.edu/som/fmph/divisions/family-medicine/research/Pages/Division-of-Family-Medicine-(DFM)-Pilot-Project.aspx

A few Fillable pdf forms

What	Where	By Whom
Form Page 1: Face Page	https://grants.nih.gov/grants/funding/phs398/fp1.pdf	Staff (Maddy/Daisy)
Form Page 2: Summary, Relevance, Project/Performance Sites, Senior/Key Personnel, Other Significant Contributors, …	https://grants.nih.gov/grants/funding/phs398/fp2.pdf	Staff (Maddy/Daisy)
Form Page 3: Research Grant Table of Contents	https://grants.nih.gov/grants/funding/phs398/fp3.pdf	Staff (Maddy/Daisy)
Form Page 4: Detailed Budget for Initial Budget Period	https://grants.nih.gov/grants/funding/phs398/fp4.pdf	Fund manager
Continuation Format Page	https://grants.nih.gov/grants/funding/phs398/continuation.pdf	PI & research team

DFM Faculty Meeting

Next round of pilot application timeline

	Key dates (Tentative)
Letter of Intent due	Sept 1, 2020
Invitation for full proposal sent	Oct 1, 2020
Full proposal due	Dec 1, 2020

https://medschool.ucsd.edu/som/fmph/divisions/family-medicine/research/Pages/Division-of-Family-Medicine-(DFM)-Pilot-Project.aspx

Additional resources

- https://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/write-your-application.htm#What%20Peer%20Reviewers%20Look%20For

- https://medschool.ucsd.edu/som/fmph/divisions/family-medicine/research/Pages/DFM-Monthly-Research-Meetings.aspx