



# Writing a Compelling Grant Application

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***Essentials of Embedded Pragmatic Clinical Trials***

# Learning goals

- Identify elements of a compelling ePCT application
- Tips on NIH matchmaking



## Important things to know

- Online resources are available for the development of pragmatic trial grant applications
- NIH has new policies and forms related to clinical trial grant applications
- Some things, such as milestones and safety monitoring, may be negotiable around the time of an award

# National Institutes of Health



National Institutes  
of Health

- NIH is made up of 27 institutes and centers, or ICs
- ICs award >80% of the NIH budget each year
- Each IC has a budget and a director, and typically their own review for large trials

# Find the right NIH program official

## IC mission and priorities:

- Focus on a specific disease area, organ system, or stage of life
- Use Matchmaker tool in NIH RePORTER for suggestions
- Talk to program officials
- Consult your mentor and colleagues

# NIH RePORTER matchmaker tool



## Matchmaker

Enter abstracts or other scientific text to find potential Program Officials, ICs, and review panels for your research. ?

15,000 characters left

- Similar Projects  
 Similar Program Officials

Reset

Search

- Use draft of specific aims
- Email query to program official rather than call (we telework and attend meetings)

# Matchmaker results (example)

NIH RePORT RePORTER FAQs API Sign In

## Matchmaker Results

Top 500 Projects

Background: Multimorbidity, the co-occurrence of two or more chronic diseases, is more common than having a single chronic disease, especially among persons age 65 years and older. The routine measurement of multimorbidity can facilitate a better understanding of potential causes and interactions and promote more effective treatment and improved outcomes. Objectives: To present a multimorbidity research framework and identify gaps in the research

Export Search

Projects Program Officials

### Filters

- Active Projects
- Fiscal Years
- Agencies
- Activity Codes
- Program Officials
- Study Sections

#### Institute/Center

#### Activity Code

#### Study Section

T Act Project	Year	Sub	Principal Investigator(s)/ Project Leader(s)	Organization	Fiscal Year	Admin IC	Funding IC	FY Total Cost by IC	Similar Projects	Match
<b>Hopkins Center to Promote resilience in persons and families living with multiple chronic conditions (the PROMOTE Center)</b>										
5 P30NR018093-03	8804		CAMPBELL, JACQUELYN CUTLER	JOHNS HOPKINS UNIVERSITY	2020	NINR		\$37,600	<a href="#">View</a>	674
<b>Patient-Centered Care for Older Adults with Multiple Chronic Conditions: Research and Mentoring Program</b>										
5 K24AG056578-04			BOYD, CYNTHIA MELINDA	JOHNS HOPKINS UNIVERSITY	2020	NIA	NIA	\$187,938	<a href="#">View</a>	661

- This can help to connect you with the most appropriate PO(s)
- Prepare agenda and questions, to productively interact!
- Program officer can recommend a study section or two

# Find the right FOA

- Request for Application (RFA)
  - For specific areas of science where more research is needed, and applications are encouraged for investigator-initiated research in this specific area of science
- Notice of Special Interest (NOSI) and Program Announcement (PA, PAS, PAR)
  - For an area of scientific interest for one or more ICs where investigator-initiated research is needed

# NIH scientific contacts

**NCCIH** Robin Boineau

**NCI** Erica Breslau

**NHLBI** Larry Fine

**NIA** Marcel Salive

**NIAAA** Brett Hagman

**NIAID** Clayton Huntley

**NIAMS** Chuck Washabaugh

**NICHD** Sue Marden

**NIDA** Sarah Duffy

**NIDCR** Dena Fischer

**NIDDK** Pamela Thornton

**NIMH** Jane Pearson

**NINDS** Robin Conwit

**NINR** Jeri Miller

**ODP** Carrie Klabunde

# Tailor the application

*Tailor your application to address  
all the FOA-specific instructions  
and review criteria*

# Application dos



- Justify the research
- Include pilot data
- Address potential overlaps
- Reduce complexity
- Ensure aims are capable of advancing the field
- Choose appropriately expert personnel for a multidisciplinary team
- Link data collection and analysis to aims
- Justify the use of multiple sites and sample size

# Application don'ts



- Skip any steps (eg, literature review)
- Use dense or confusing writing style
- Include untestable aims
- Include non-relevant aims or fishing expeditions
- Assume that prior collaboration is irrelevant

# Strategies for success



- Pose a clear research question
- Convince the reviewer your study is worth doing
- Sell your research plan—highlight the strengths
- Identify weaknesses and explain how you will deal with them
- Tailor your application to the funding agency
- Obtain feedback from your collaborators, consultants, and others

# NIH online resources

<https://researchmethodsresources.nih.gov/>

- Research methods resources on designing pragmatic and group randomized trials
- NIH Grants Guide: finding FOAs
- NIH Guidance on Biosketches
- NIH Peer Review
- NIH General Application Guide
- NIH Inclusion Policies for research involving human subjects
- NIA Blog (subscribe for weekly posting)



## Important things to do

- Read relevant Funding Opportunity Announcement multiple times
- Identify program staff at your target NIH Institute/Center and review your Specific Aims and any questions about them
- Obtain adequate feedback on the Research Plan from the entire study team



# Resource: The Living Textbook

The screenshot shows the homepage of the NIH Collaboratory Living Textbook. The header is dark blue with the text 'NIH COLLABORATORY LIVING TEXTBOOK of Pragmatic Clinical Trials'. Below the header is a navigation bar with a home icon, 'ABOUT', 'RESOURCES', 'GRAND ROUNDS', and 'NEWS', along with a search bar. The main content area is divided into three columns: 'DESIGN' (purple background), 'DATA, TOOLS & CONDUCT' (dark blue background), and 'DISSEMINATION' (green background). Each column lists specific topics related to its category.

DESIGN	DATA, TOOLS & CONDUCT	DISSEMINATION
Developing a Compelling Grant Application Experimental Designs and Randomization Schemes Endpoints and Outcomes	Analysis Plan Consent, Disclosure, and Non-disclosure Using Electronic Health Record Data	Data and Safety Monitoring Designing With Implementation and Dissemination in Mind Embedded PCT Team Composition

## Developing a Compelling Grant Application

- [Introduction](#)
- [Find the Right Program Official](#)
- [Find the Right Funding Opportunity Announcement](#)
- [Write a Strong Proposal That Addresses Review Criteria](#)
- [Review Criteria](#)
- [Award Status](#)
- [Additional Resources](#)