NIH: DEVELOPING YOUR FIRST R01 PROPOSAL

RESEARCH AND FACULTY DEVELOPMENT FACULTY SUCCESS SEMINAR SERIES

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Proposal Development Specialist, Research and Faculty Development

Special Guest: Eva Top, PhD
Professor, Biological Sciences

Please note that this session is being recorded
OFFICE OF RESEARCH AND FACULTY DEVELOPMENT

We provide proposal development assistance across the spectrum*

Meet goals in the UI strategic plan – grow research and creative efforts across all disciplines

Reach out to request service – uidaho.edu/orfd

*Not including budget preparation

All services are optional and are granted on a first come, first served basis
HELP US IMPROVE OUR SEMINARS

After the Q&A session: brief 3 question sli.do poll

- On a scale from 1-5, how helpful was this seminar?
- What did you like most about this seminar?
- How can we improve this seminar?

www.slido.com or use the sli.do app (Use code #FSS)
OBJECTIVES

IN THIS SESSION, WE’LL DISCUSS:

1. Understand NIH
2. The R01 funding mechanism
3. Determine your fit: Institutes/Centers; Study Sections
4. Find funding opportunities
5. Prepare your application
6. Special Guest: Dr. Eva Top
NATIONAL INSTITUTES OF HEALTH

- Federal funding agency
- Part of the U. S. Department of Health and Human Services (HHS)
- Began in 1887 as a one-room laboratory in Marine Hospital Services
- Director: Francis S. Collins, MD, PhD (since 2009)
- NIH's mission is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.
NIH divided into 27 Institutes/Centers (I/C) → Study Sections → Research funding mechanisms (R)

NIH Regional Grants Conference - Spring and Fall
GET STARTED: UNDERSTAND NIH

- Structure
- Approach to grant funding
- Eligibility requirements
- Research project
- Grant programs
R FUNDING MECHANISMS

R = Research grants
Examples: R01, R03, R21
Not all Institutes/Centers (I/C) participate in all PA/FOAs
Two options:
- Funding Opportunity Announcement (FOA)
- Parent Announcements (PA)
More about this naming here
R01 RESEARCH PROJECT GRANT

- NIH's most commonly used grant program
- Supports a discrete, specified, circumscribed research project
- Open to applicants throughout their research careers with benefits for early-stage investigators (ESI)
- Preliminary data are required
- No specific dollar limit unless specified in FOA
  - Advance permission required for $500K or more (direct costs) in any year (typical practice; not just for R01)
- Generally awarded for 3-5 years
- Utilized by all Institutes and most Centers
R01: NIH Research Project Grant Program

Application types allowed
- New
- Renewal
- Resubmission
- Revision

NIH standard deadlines - three per calendar year (Table)
- R01 new: Feb. 5, June 5, Oct. 5
- R01 resubmission, renewal, revision: Mar. 5, July 5, Nov. 5
BENEFITS EARLY-STAGE INVESTIGATORS

Completed terminal research degree or end of post-graduate clinical training (whichever date is later) within the past **10 years** and have not competed successfully as PD/PI for a substantial NIH independent research award.

**Timeframe and research scope**

**Modular budget for $250,000 project**

**Special status in review process**

- Lower reviewer expectations
- More complete review comments
MW CTR-IN FUNDING PROGRAMS

1. Mountain West Clinical and Translational Infrastructure Network Program

2. Single Institution Pilot Grants
   - Provides early career investigators with funding to capture preliminary data that will support and inform a competitive R-level grant application to NIH or other extramural funding source

3. Multi Site Pilot Projects (MSPP)

4. Developmental Translational Team Grants (DTTG)
FIND YOUR R01 FIT

1. Understand NIH: Finding the Right Fit for Your Research

1. Use NIH websites and tools to understand the mission, priorities and goals of the IC and find those that might be relevant to your research

1. Search NIH Guide for Grants and Contracts to Identify the specific grant programs offered by each IC.

1. Let RePORTER and Matchmaker tools help you identify similar work, appropriate IC, study section and funding mechanism

1. Use the NIH Guide or the career stage-specific websites to identify appropriate FOAs
NIH AWARD DATA: MATCHMAKER
https://projectreporter.nih.gov/reporter_matchmaker.cfm

Enter ~6 pages of single-spaced text
ASK BEFORE ASSUMING

- Talk with funded colleagues/mentors
- Contact an NIH Program Official before beginning to write
- Study successful grant applications
  - Ask Investigator of funded proposal in your discipline
  - NIAID: [R01 Sample Applications and Summary Statements](#)
- Request help from RFD

[REQUEST RFD SERVICES]
FIND FUNDING OPPORTUNITIES

  - Save customized searches
- [Subscribe](#) to NIH listserves, RSS feeds, Twitter,
  - [Extramural Nexus](#): news, updates, blog posts, guide notices,
  - [Open Mike blog](#): Michael Lauer, Deputy Director Extramural Res.
  - Weekly [Table of Contents](#) listserve
TYPES OF FOA

1. Parent announcements
2. Program Announcements
3. Requests for Applications

<table>
<thead>
<tr>
<th>Types of Funding Opportunity Announcements (FOAs):</th>
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<tbody>
<tr>
<td><strong>Type of FOA</strong></td>
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<td>-----------------</td>
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</table>
| **Parent Announcements** | - Broad FOAs allowing applicants to submit an investigator-initiated application for a specific activity code  
- Many NIH institutes and centers (IC) participate  
- Usually ongoing (3 yrs)  
- Use standard due dates |
| **Program Announcements (PAs)** | - FOAs issued by one or more Institutes and Centers to highlight areas of scientific interest  
- Encourage applications for a new or ongoing program  
- Usually ongoing (3 yrs)  
- Use standard due dates  
- Types of PAs:  
  - PAS: with set-aside funds  
  - PAR: special receipt, referral, and/or review considerations  
  - Note: There is growing use of "Notices of Special Interest", rather than topic-specific PAs, to highlight areas of scientific interest. The notices designate existing FOAs to use for application submission. |
| **Requests for Applications (RFA)** | - FOAs issued by one or more Institute or Center to highlight well-defined areas of scientific interest to accomplish specific program objectives  
(Make sure the science you are proposing fits the scope of the RFA!)  
- Indicate the amount of set-aside funds  
- Indicate anticipated number of awards  
- Usually single due date  
- Institute/Center usually convenes review panel |
# THREE PARENT ANNOUNCEMENTS

<table>
<thead>
<tr>
<th>Activity Code(s)</th>
<th>Title</th>
<th>Announcement Number</th>
<th>Issuing Organization</th>
<th>Release Date</th>
<th>Opening Date (SF424 Only)</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>R01</td>
<td>NIH Research Project Grant (Parent R01 Basic Experimental Studies with Humans Required)</td>
<td>PA-19-091</td>
<td>NIH</td>
<td>11/28/2018</td>
<td>01/05/2019</td>
<td>01/08/2022</td>
</tr>
<tr>
<td>R01</td>
<td>Research Project Grant (Parent R01 Clinical Trial Required)</td>
<td>PA-19-055</td>
<td>NIH</td>
<td>11/05/2018</td>
<td>01/05/2019</td>
<td>01/08/2022</td>
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<tr>
<td>R01</td>
<td>Research Project Grant (Parent R01 Clinical Trial Not Allowed)</td>
<td>PA-19-056</td>
<td>NIH</td>
<td>11/05/2018</td>
<td>01/05/2019</td>
<td>01/08/2022</td>
</tr>
</tbody>
</table>
If you are doing human research, use the [clinical trial tool](#) to determine whether NIH considers any of your studies a clinical trial.

<table>
<thead>
<tr>
<th>Specific Aim</th>
<th>Clinical Trials Required</th>
<th>Clinical Trials Optional</th>
<th>Clinical Trials Not Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIM #1 - NOT A TRIAL</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>AIM #2 - NOT A TRIAL</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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</table>
Take a tour of an annotated FOA for tips and key information.

- I/Cs participating
- Basic/clinical designations
- Award amounts
- Specific due dates
- Section IV - program-specific instructions
PREPARE TO APPLY: MAIN PARTS

1. Project Summary/Abstract
2. Project Narrative
3. Specific Aims (1 page)
4. Research Strategy (12 pages)
   - Significance
   - Innovation
   - Approach
5. Bibliography
6. Budget/Budget justification
7. Equipment
8. Biosketches
9. Application forms (PHS; SFS424 (R&R))
OTHER CONSIDERATIONS

- Human subjects research
  - IRB approval, includes CITI certification
- Other research plan section:
  - Vertebrate animal research
  - Select agent research
  - Multiple PD/PI Leadership plan
  - Letters of support
  - Resource sharing plan
- Biosketches
  - 5 page, NIH format, SciEnCV tool
- Propose your best and most creative ideas
R01 REVIEW CRITERIA

- Main review components of an R01
  - Significance
  - Investigator
  - Innovation
  - Approach
  - Environment

- Keep review criteria in mind when planning and writing your proposal

- Next week’s FSS: NIH: Understanding Proposal Review
APPLY AND SUBMIT

FOLLOW INSTRUCTIONS

1. General Application Guide for NIH and Other PHS Agencies
   - Follow grant application forms and instructions outlined in the application guide and the FOA
   - Current forms are SF424 (R&R) Version E
   - NEW Version FORMS-F for due dates on or after May 25, 2020

2. Work with the Office of Sponsored Programs and your SPA

3. Submit using ASSIST
Use NIH resources for help

http://grants.nih.gov

Get Started

Sometimes the hardest part of any effort is getting started. Let us orient you to how NIH works, and the basics of planning your application.

Learn the Basics

Before getting started, learn how NIH is structured (and why that’s important), our approach to grant funding, the types of organizations and people eligible to apply, what we look for in a research project, and the types of grant programs we offer.

Plan Your Application

Plan ahead and prepare to get an edge in this highly competitive process. Figure out the early issues, such as picking the right grant type, determining if you need prior approval from NIH to apply, planning within your organization, considering implications
PREPARE YOUR APPLICATION
RESOURCE: NIH GRANTS AND FUNDING APPLICATION INSTRUCTIONS

How to Apply – Application Guide

Prepare to Apply
- Systems and Roles
- Register
- Understand Funding Opportunities
- Types of Applications
- Submission Options
- Obtain Software

Write Application
- Write Your Application
- Find Forms
- Develop Your Budget
- Format Attachments
- Rules for Text Fields
- Page Limits
- Data Tables
- Reference Letters
- Biosketches

Submit
- Submit, Track, and View
- How We Check for Completeness
- Changed/Corrected Applications
- Due Dates
- Submission Policies
- Dealing with System Issues
PREPARE YOUR APPLICATION

RESOURCE: APPLY FOR A GRANT TUTORIAL - NIAID

- Prepare your application
- Draft Specific Aims
- Outline your experiments
- Know your audience
- Write your research plan
- Plan your budget and personnel
- Additional application elements (data tables, letters, biosketches)
- Submit and application
TOOLS/RESOURCES

Grants Process Overview
- NIH Grants Process [video]
- How to choose the right FOA [video]
- Plan, write and submit an application [website]

Early Stage Investigator (ESI) [Policies]
Biosketch: [Looking for help developing your biosketch?]

Award tools:
- [RePORTER]
  - MyRePORTER Video [Tutorial] (6:35)
- [Matchmaker]

[RFD Proposal Development Resources](checklists, Steps for your R01 instructions)
LETS ASK OUR EXPERT
DR. EVA TOP

What to know before applying for an R01
- Special considerations?
- Common mistakes?
- Biggest hurdles?
- Tips for shaping your research plan

Advice to early career PIs

Other considerations
UI/CTR WORKING GROUP
JOIN THE LISTSERVE

For those interested in clinical translational research

Facilitate connections, data collection/sharing and collaborations between researchers and clinicians in Idaho

Join the listserve

- Email whessler@uidaho.edu
- In subject line: UI/CTR List ADD
FACULTY SUCCESS SEMINARS

Let Us Be Your Guide Through the Proposal Development Process

JOIN US IN IRIC 305
12:30 P.M. – 1:30 P.M. PT

Can’t join us in person? Then join us live via Zoom: uidaho.zoom.us/j/798224314. Each seminar will be recorded and be available on our website.
FALL 2019

- **Sept. 4**  HERC IGEM Info Session
- **Sept. 11**  Find Funding Opportunities: Intro to Pivot
- **Sept. 25**  NSF CAREER All Year: An Introduction
- **Oct. 2**    W.M. Keck Foundation Info Session
- **Oct. 16**  Tips for Successful Proposal Writing
- **Oct. 23**  NSF CAREER All Year: Getting Started
- **Oct. 30**  Exploring Humanities Funding Opportunities
- **Nov. 13**  MW CTR-IN Funding Opportunities
- **Nov. 20**  NSF CAREER All Year: Integrating the Research and Education Plans
- **Dec. 11**  M.J. Murdock Trust Commercialization Initiation Program Info Session

SPRING 2020

- **Jan. 22**  Developing Successful Project Management Plans for Large Proposals (Rescheduled Apr 15)
- **Feb. 5**  NSF: Broader Impacts Really Do Matter!
- **Feb. 12**  NIH: Funding Mechanisms Overview (R03, R21, R01)
- **Feb. 19**  NIH: Developing Your First RO1 Proposal
- **Mar. 4**  NIH: Understanding Proposal Review
- **Mar. 11**  NSF: Understanding Proposal Review
- **Mar. 25**  Fulbright Faculty Scholar Program Info Session
- **Apr. 1**  Find Funding Opportunities: Intro to Pivot
- **Apr. 8**  NSF MRI: Creating Competitive Proposals
- **Apr. 15**  Developing Successful Project Management Plans for Large Proposals

WE GUIDE THE DEVELOPMENT OF COMPETITIVE EXTERNAL GRANT PROPOSALS

Office of Research and Faculty Development

| Phone: (208) 885-1144 |
| Email: ored-rfdteam@uidaho.edu |
| Website: uidaho.edu/orfd |
THANK YOU FOR COMING!

QUESTIONS?

BEFORE YOU GO...

Please take a brief 3-question sli.do poll

www.slido.com or use the sli.do app

Use code #FSS