



# **PAVES 15: Life of a Grant**

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# Goals

- To learn the basics of the NIH application and peer review process
- To gain insight into preparing your own application
- To learn who you can contact at NIH at all stages in the process



# National Institutes of Health.... turning discovery into health

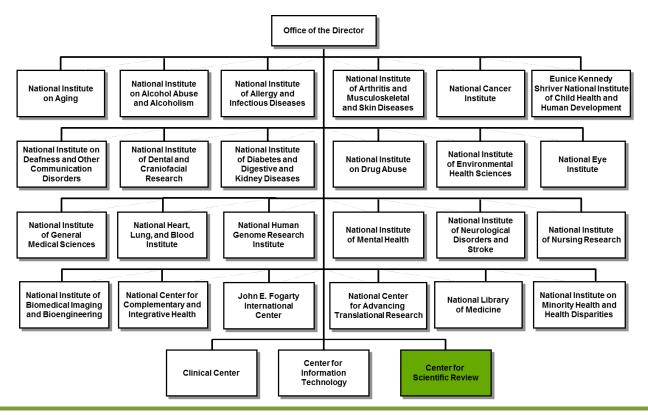
Much of the biomedical research in the United States is supported by the Federal Government, primarily the National Institutes of Health (NIH).



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.



# Your application could be funded by one of 24 NIH Institutes or Centers (ICs)





# The Gateway for NIH Grant Applications

#### The Center for Scientific Review



- Receives all NIH grant applications
- Assigns applications to one or more NIH institutes or centers for potential funding
- Assigns applications to CSR or NIH institute review groups
- Conducts initial scientific merit review of most NIH research applications ~75% of NIH grant applications = ~ 66,000 applications/year

# Review and Funding of NIH Grant Applications





# **NIH Peer Review System for Grant Applications**

| Jan-May<br>May-Sept<br>Sept-Jan | Receipt Dates                         |
|---------------------------------|---------------------------------------|
| May-July<br>Sept-Nov<br>Jan-Mar | Review Dates                          |
| Sept-Oct<br>Jan-Feb<br>May-June | National Advisory Council/Board Dates |
| Dec<br>Apr<br>July              | Earliest Possible Beginning Date      |

http://grants1.nih.gov/grants/funding/submissionschedule.htm



# Standard Due Dates

| R01<br>new                                                         | Research Grants                                  |             | June 5  | October 5  |
|--------------------------------------------------------------------|--------------------------------------------------|-------------|---------|------------|
| U01<br>new                                                         | Research Grants - Cooperative Agreements         | February 5  | June 5  | October 5  |
| K series<br>new                                                    | Research Career Development                      | February 12 | June 12 | October 12 |
| R03, R21, R33, R21/R33, R34, R36, U34,<br>UH2, UH3, UH2/UH3<br>new | Other Research Grants and Cooperative Agreements | February 16 | June 16 | October 16 |
| R15<br>All - new, renewal, resubmission, revision                  | Academic Research Enhancement Award (AREA)       |             | June 25 | October 25 |
| R01<br>renewal, resubmission, revision                             | Research Grants                                  | March 5     | July 5  | November 5 |
| U01<br>renewal, resubmission, revision                             | Research Grants - Cooperative Agreements         |             | July 5  | November 5 |

https://grants.nih.gov/grants/how-to-apply-application-guide/due-dates-and-submission-policies/due-dates.htm



# How can researchers navigate the NIH?

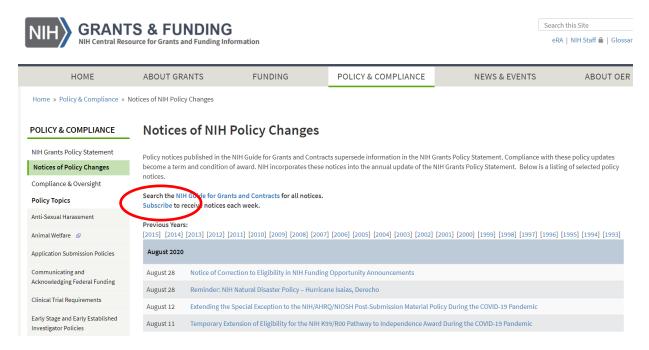
- Subscribe to the NIH Guide Notice.
- Find a Funding Opportunity Announcement = FOA.
- Talk to program officers.
- Prepare the application well in advance of the deadline.
- Learn about the review process so you can put together a competitive application.



# What is the NIH Guide Notice?

This is how NIH communicates changes in policy, such as changes to submission deadlines, changes to requirements for grants, etc.

Subscribe so that you are in the know!



https://grants.nih.gov/policy/notices.htm



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## How NIH lets you know what it wants to support - FOAs

#### **Funding Opportunity Announcements (FOAs)**

- **Program Announcements (PA)** Identifies priority areas and/or funding mechanisms for an area.
  - o **PAR:** a PA with special receipt, referral and/or review considerations.
  - PAS: a PA with set-aside funds.
- Request for Applications (RFA): Identifies a focused area where NIH award grants with set aside funds.
- Request for Proposal (RFP): Solicits contract proposals, usually with one receipt date.
- Notices of Special Interest (NOSI): Simplified notices of specific research interests.
- **Notice (NOT):** Announces policy and procedures, changes to earlier FOAs and general info.

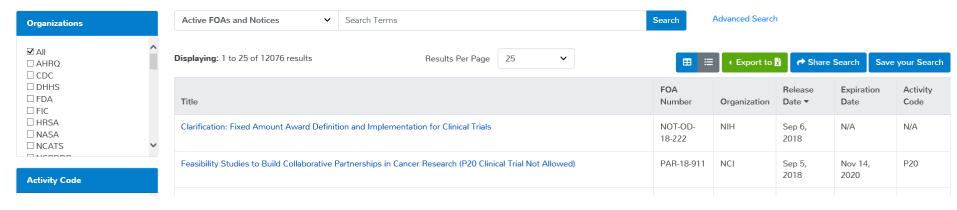


## How can researchers find FOAs?

#### NIH Guide to Grants and Contracts

The NIH Guide for Grants and Contracts is NIH's official publication of notices of grant policies, guidelines and funding opportunity announcements (FOAs).

We publish daily and issue a table of contents weekly. Learn more about the NIH Guide and subscribe to recieve updates today!



https://grants.nih.gov/funding/searchguide/index.html



## Parent Announcements: <a href="https://grants.nih.gov/grants/guide/pa-files/PA-19-056.html">https://grants.nih.gov/grants/guide/pa-files/PA-19-056.html</a>

#### Department of Health and Human Services

#### Part 1. Overview Information

National Institutes of Health (NIH) Participating Organization(s) Components of Participating Organizations National Cancer Institute (NCI) National Eye Institute ( NEI ) National Heart, Lung, and Blood Institute (NHLBI) National Human Genome Research Institute (NHGRI) National Institute on Aging (NIA) National Institute on Alcohol Abuse and Alcoholism (NIAAA) National Institute of Allergy and Infectious Diseases (NIAID) National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) National Institute of Biomedical Imaging and Bioengineering (NIBIB) Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) National Institute of Dental and Craniofacial Research (NIDCR) National Institute on Deafness and Other Communication Disorders (NIDCD) National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) National Institute on Drug Abuse (NIDA) National Institute of Environmental Health Sciences (NIEHS) National Institute of General Medical Sciences (NIGMS) National Institute of Mental Health (NIMH) National Institute of Neurological Disorders and Stroke (NINDS) National Institute of Nursing Research (NINR) National Institute on Minority Health and Health Disparities (NIMHD) National Library of Medicine (NLM) National Center for Complementary and Integrative Health (NCCIH) Division of Program Coordination, Planning and Strategic Initiatives, Office of Research Infrastructure Programs (ORIP) Note: Not all NIH Institutes and Centers (ICs) participate in Parent Announcements, Applicants should carefully note which ICs participate in this announcement and view their respective areas of research interest at the R01 IC-Specific Scientific Interests and Contact website ICs that do not participate in this announcement will not consider applications for funding **Funding Opportunity Title** NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed) **Activity Code** R01 Research Project Grant

Read these announcements in detail!

- It tells you which institutes participate (might fund you).
- Specifics here trump general application instructions (the SF424).



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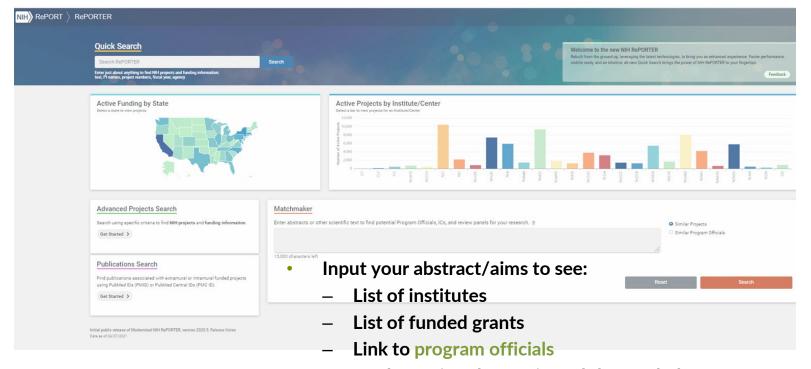
# Talk to a program officer

- They can tell you whether your research fits the institute's priorities.
- They can help you identify funding opportunities.
- They can help you figure out a study section (= review panel) to request for the review.
- They can offer advice if you need to resubmit your application after the initial review.

How can you find a program officer?



# Use NIH RePORTER: <a href="https://projectreporter.nih.gov/reporter.cfm">https://projectreporter.nih.gov/reporter.cfm</a>







# Help your application get to the right study section



http://www.csr.nih.gov



# **Output from the Assisted Referral Tool**

Enter application text and hit the Submit button to get a list of relevant study sections. Entering the Specific Aims is highly recommended.

Title The neural basis of impulsive sensation seeking: a multimodal neuroimaging approach

diagnosis, fMRI-localized EEG measures and risky decision making.

Impact. By elucidating the oscillatory neural events that underlie specific patterns fMRI activity associated with high trait ISS and BD, the proposed research can identify neural targets for new treatments (e.g., non-invasive neuromodulation) for disorders such as BD that are characterized by high trait ISS, and provide biomarkers to guide interventions for young adults with high trait ISS who are at risk for these disorders (Fig. 2).

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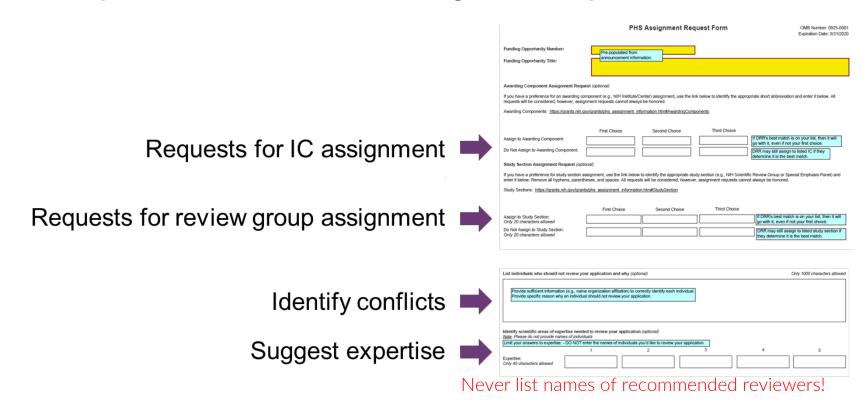
#### Resubmit

|   | Relevance | SRG  | IRG  | Membership | Name                                                                     |  |  |
|---|-----------|------|------|------------|--------------------------------------------------------------------------|--|--|
|   | Strong    | СР   | BBBP | Roster     | Cognition and Perception Study Section                                   |  |  |
|   | Strong    | SPC  | IFCN | Roster     | Mechanisms of Sensory, Perceptual, and Cognitive Processes Study Section |  |  |
| ١ | Strong    | NPAS | BDCN | Roster     | Neural Basis of Psychopathology, Addictions and Sleep Disorders Study Se |  |  |
|   | Strong    | SPIP | RPHB | Roster     | Social Psychology, Personality and Interpersonal Processes Study Section |  |  |
|   | Possible  | APDA | BBBP | Roster     | Adult Psychopathology and Disorders of Aging Study Section               |  |  |
|   | Possible  | BRLE | BBBP | Roster     | Biobehavioral Regulation, Learning and Ethology Study Section            |  |  |
|   | Possible  | CPDD | BBBP | Roster     | Child Psychopathology and Developmental Disabilities Study Section       |  |  |
|   | Possible  | ARM  | RPHB | Roster     | Addiction Risks and Mechanisms Study Section                             |  |  |
|   | Possible  | MESH | BBBP | Roster     | Biobehavioral Mechanisms of Emotion, Stress and Health Study Section     |  |  |





# If you've identified a potential funding institute and study section, how do you let us know? Use the Assignment Request Form.





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# Submit your application ahead of the deadline

#### Start early!

Application must be accepted TWICE: Grants.gov and NIH

**Check eRA Commons for your submitted application -** automated e-mails are sent but can be caught in SPAM filters

- High volume at deadlines slows processing/validation time
- On time application = submitted error-free by 5 PM local time on due date
- Errors cause rejection
- Warnings are error-free and accepted but could be cause for withdrawal at a later stage.
- 2-day viewing window does not extend the deadline



# How can you take advantage of the 2-day viewing window? Submit early!

There is a 2-day viewing window during which the application can be rejected, changed, submitted again.

### The final version must be in the system before the application deadline.

- If you submit 3 days early, you get 2 days to view the application and fix it.
- If you submit 2 days early, you get 2 days to view the application and fix it.
- If you submit 4 hrs early, you get 4 hrs to view the application and fix it.

Grants.gov will allow you to submit it late (because there are acceptable reasons for late applications). But, if you submit it late without an acceptable reason, it will be caught and withdrawn.





# A window to your application: eRA Commons

#### eRA Commons is an online interface where a grant applicant can:

- Check submitted grant application for errors and warnings and view final image
- Track review assignment, view review outcomes (score, summary statements), find contact info for scientific review officers (SRO) and program officers (PO)
- Update Personal Profile to ensure Early Stage Investigator eligibility is in place
- Submit pre-award information (just in time)
- View Notice of Award and other key documents

#### And much more!

https://commons.era.nih.gov/commons/





# Track your application

- An Authorized Organizational Representative (AOR) in your sponsored research office must submit your application.
- The Principal Investigator (PI) is responsible for accuracy of submission.
- Again, submit early to give yourself time to make corrections if needed.
- Do not wait for e-mails; proactively check eRA Commons.
- If you cannot see your application in eRA Commons, neither can we!



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# How can you learn more about the review process?

For Applicants For Reviewers



#### **Application Process**

CSR does not award funding but instead handles review of proposals. Please visit the NIH for an overview of the grant process or view our video What Happens to Your Grant Application.



Planning & Writing

Guidance to assist you in planning and preparing a proposal.



**Application Deadlines** 

Standard receipt dates for grant proposals



Become a Reviewer

We welcome researchers who volunteer to serve on our peer review groups. Explore the ways you can do this.



Meeting Overview

Explore orientation materials and resources to get you started.



Guidelines & Templates

Learn about review criteria, scoring and possible conflict of interest information.



Submission & Assignment

How proposals are assigned to a review group



Initial Review, Results, & Appeals

What happens in the review process?



#### Frequently Asked Questions (FAQs)

Top 10 and Top 100 Peer Review Q&As for NIH Applicants



#### Tools & Technology

Looking for guidance on the technology we use? Explore our online tutorials and tools.



#### Travel & Reimbursement

Explore all you need to know to about getting reimbursed for travel and



#### Frequently Asked Questions (FAQs)

Top Peer Review Q&As for NIH Reviewers



### Your Scientific Review Officer



- Recruits reviewers and assigns applications
- Manages the meeting and conflicts
- Prepares summary statements
- Provides information to NIH institutes and centers



# **Before the Study Section Meeting**



Each application is assigned to 3 or more reviewers 5-6 weeks in advance

#### **Reviewers Assess Each Application by Providing:**

- Preliminary Overall Impact score
- Criterion scores for each of the 5 core review criteria
- Comment on appropriateness of your budget
- A written critique



## What Reviewers Look for in Applications

- Significance and impact
- Exciting ideas
- Clarity
- Ideas they can understand -- Don't assume too much
- Realistic aims and timelines -- Don't be overly ambitious
- Brevity with things that everybody knows
- Noted limitations of the study
- A clean, well-written application

Insider's Guide to Peer Review for Applicants:

http://www.csr.nih.gov/applicantresources/insider



## **Common Problems in Applications**

- Lack of a strong scientific foundation
- Lack of new or original ideas
- Absence of an acceptable scientific rationale
- Lack of experience in the essential methodology
- Questionable reasoning in experimental approach
- Uncritical approach
- Diffuse, superficial, or unfocused research plan
- Lack of sufficient experimental detail
- Lack of knowledge of published relevant work
- Unrealistically large amount of work
- Uncertainty concerning future directions



# CSR Study Sections: The Meeting

 Each CSR standing study section (review group) has ~12-22 regular members plus temporary reviewers from the scientific community

 About 70-100 applications are reviewed by each study section in 1-2 day meetings



# At the Meeting

#### **Not Discussed Applications**

- About half the applications will be discussed
- Applications unanimously judged by the review committee to be in the lower half are not discussed

#### **Clustering of Review**

New Investigator R01 & some types of applications are often reviewed together

#### **Order of Review**

Applications to be discussed are reviewed in random order within each cluster.





# **Summary Statement**

SUMMARY STATEMENT PROGRAM CONTACT: (Privileged Communication) Release Date: 02/05/2019 **Austin Yang** Revised Date: 301.496.9350 yangj13@mail.nih.gov Application Number: 1 R01 AG Principal Investigator **Applicant Organization:** Review Group: CMND Cellular and Molecular Biology of Neurodegeneration Study Section RFA/PA: PA18-484 Meeting Date: 01/31/2019 Council: MAY 2019 PCC: 3BSETAY Requested Start: 07/01/2019 Project Title: SRG Action: Impact Score:34 Percentile:13 Next Steps: Visit https://grants.nih.gov/grants/next\_steps.htm Human Subjects: 10-No human subjects involved Animal Subjects: 30-Vertebrate animals involved - no SRG concerns noted Project **Direct Costs** Estimated **Total Cost** Year Requested 349,997 564,629 350,802 565,928 361,871 583,785 387,212 624,666 384,834 620,830

ADMINISTRATIVE BUDGET NOTE: The budget shown is the requested budget and has not been adjusted to reflect any recommendations made by reviewers. If an award is planned, the costs will be calculated by Institute grants management staff based on the recommendations outlined below in the COMMITTEE BUDGET RECOMMENDATIONS section.

2,959,839

1,834,716

EARLY STAGE INVESTIGATOR NEW INVESTIGATOR

TOTAL

#### **Program Officer**

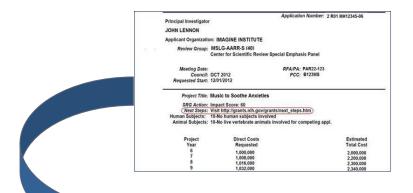
Impact/Priority Score 10-90 range

Percentile in whole numbers

Indicator for Early Stage Investigators/New Investigator eligibility

# Your Application Was Reviewed What Do You Do Next?

#### Visit NIH's Next Steps Website



http://grants.nih.gov/grants/next\_steps.htm



# Resources: Who should you talk to? When?

Before you submit - identify and talk to a program officer

**After you submit and before the review** – your scientific review officer (SRO)

After the review – program officer

If you have trouble finding these contacts, email CSR – we'll put you in touch with the right people: askexperts@csr.nih.gov





# NIH Research Training and Development Site



https://researchtraining.nih.gov/



# **Discussion**

# Thank You!

