



Opportunities & Resources to Help Early Career Scientists Navigate the NIH

Dr. Lisa Steele Chief, Population Sciences & Epidemiology Integrated Review Group Center for Scientific Review National Institutes of Health

Goals of todays webinar

- To learn the basics of the NIH Application and Peer Review Process
- To gain insight into preparing your own application
- To learn how you can participate in the NIH Peer Review Process
- To learn who you can contact at NIH at all stages in the process



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

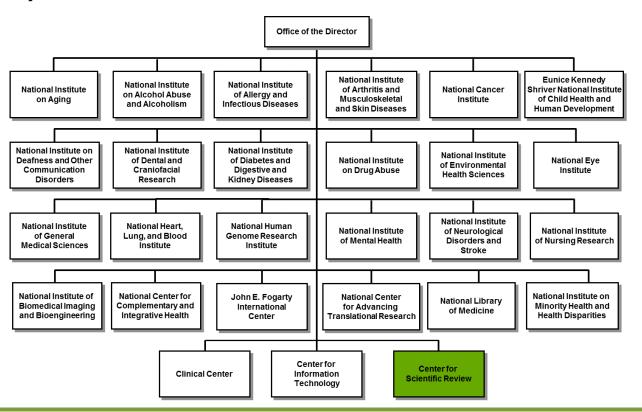
Much of the biomedical research in the United States is supported by the Federal Government, primarily the National Institutes of Health (NIH).



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 = ~ 64,000 applications/year

Review and Funding of NIH Grant Applications





NIH Peer Review System for Grant Applications

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

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



Standard Due Dates

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

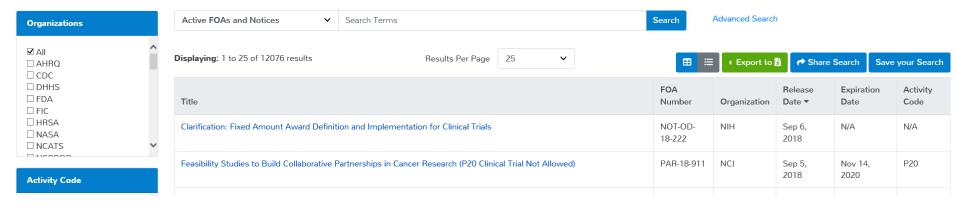


How can researchers find FOAs?

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/searchquide/index.html



Parent Announcements: https://grants.nih.gov/grants/guide/pa-files/PA-19-056.html

Department of Health and Human Services

Part 1 Overview Information

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

National Institutes of Health (NIH)

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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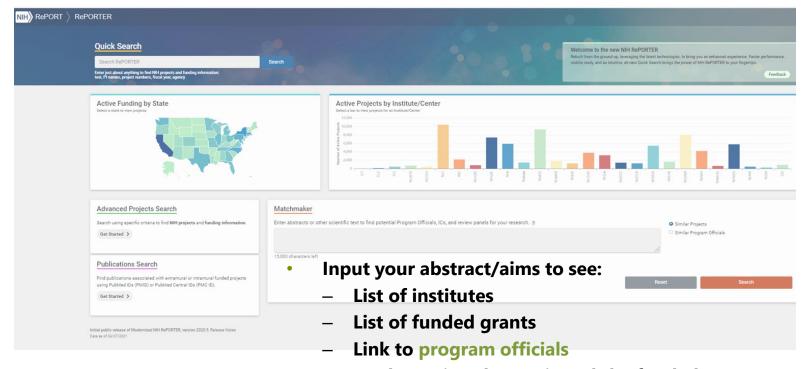
Talk to a program officer

- 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: https://projectreporter.nih.gov/reporter.cfm







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).

Terms will be weighted by frequency of appearance in the text above. The process is automated and confidential. ART does not track or store submitted text. Characters left: 14002

Resubmit

	Relevance	SRG	IRG	Membership	Name		
	Strong	CP	BBBP	Roster	Cognition and Perception Study Section		
	Strong	SPC	IFCN	Roster	Mechanisms of Sensory, Perceptual, and Cognitive Processes Study Se		
•	Strong	NPAS	BDCN	Roster	Neural Basis of Psychopathology, Addictions and Sleep Disorders Study Section		
	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.

Requests for IC assignment Teaching Opportunity Trail Teaching Opport			Exp			Expiration Date: 3/31/2020		
Requests for IC assignment Specific proposed:					ation			
Requests for IC assignment August blank Consumer			Awarding Component Assignment Requ	uest (optional)				
Requests for IC assignment Assign to Assigned Component. Do but Assign to Assigned Component. Study Section Assignment Sequence of the Use of Use of the Use of Use of Use of the Use of Use							opriate short abbreviation and enter it below. All	
Requests for IC assignment Augus to Austral Component:			Awarding Components: https://grants.nih.gov/grants/phs.assignment.information.htm#AwardingComponents					
Requests for IC assignment Do led Assignment Do led Assignmen				First Choice	Second Choice	Third Choice		
Requests for review group assignment Assign to Study Section Personal Implement, use the law below to identify the appropriate study section in group in the study and implement, powerference, and spaces. All requests will be considered however, assignment requests cannot always be horored. Souly Section: ** [Fost Choice ** Their C			Assign to Awarding Component:					
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Requests for review group assignment Assign to State/ Sector: Cryl 20 characters allowed Data Assign to State/ Sector: Cryl 20 characters allowed List individuals who should not review your application and why (optional) First Choice Second Choice Their Choice Second Choice Their Choic								
Requests for review group assignment Section: Sect			Study Sections: https://grants.nih.gov/gran	nts/phs_assignment_information	.htm#StudySection			
List individuals who should not review your application and why (potons) City 1000 characters aboved [Provide sufficient information (e.g., name organization affiliation) to correctly, dentity each individual [Provide specific reason why an individual should not review your application.] [Individuals who should not review your application.] [Individuals who should not review your application.] [Individuals who should not review your application.] [Individuals and on the individuals and the review your application.] [Individuals who should not revi	Requests for review group assignment	\Rightarrow	Only 20 characters allowed Do Not Assign to Study Section:	First Choice	Second Choice	Third Choice	go with it, even if not your first choice. [DRR may still assign to listed study section if	
Identify conflicts Provide specific reason why an individual should not review your application.				our application and why (option	noi)			
Suggest expertise	Identify conflicts	y conflicts Provide sufficient information (e.g., name organization affiliation) to correctly dentify each individual Provide specific reason why an individual should not review your application.						
- Cray 40 Oran cert a stoked	Suggest expertise	>	Note: Please do not provide names of indivi Limit your answers to expertise DO NOT	duals		3	4 5	

Never list names of recommended reviewers!

PHS Assignment Request Form



OMB Number 0925-000

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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 <u>not</u> 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



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

Program Officer 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 Impact/Priority Score 10-90 range **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 Percentile in whole Project Title: numbers 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** Year Requested **Total Cost** 349,997 564,629 350,802 565,928 361,871 583,785 387,212 624,666 **Indicator for Early** 384,834 620,830 Stage

2,959,839

Investigators/New

Investigator

eligibility

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.

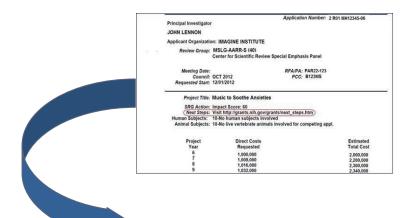
1,834,716

EARLY STAGE INVESTIGATOR **NEW INVESTIGATOR**

TOTAL

Your Application Was Reviewed What Do You Do Next?

Visit NIH's Next Steps Website



http://grants.nih.gov/grants/next_steps.htm



Early Career Reviewer Program Goals

- Train and educate qualified scientists to become critical and well-trained reviewers
- Expose investigators to the peer review experience to help make them more competitive as applicants
- Enrich the existing pool of NIH reviewers









Serve on a review panel – Early Career Reviewer Program

- Early career scientists can apply to CSR's early career reviewer (ECR) program.
- ECR's serve one time and review 2 applications as reviewer 3.
- Check
 https://public.csr.nih.gov/ForRe
 viewers/BecomeAReviewer/ECR
 for qualifications and
 application process.



ECR Qualifications

Employment

You have at least 1 year of experience as a fulltime faculty member or researcher in a similar role. Post-doctoral fellows are not eligible.

You must be an Assistant Professor or in an equivalent role. Because the program is focused on early career scientists, Associate Professors are not eligible.

Research

You show evidence of an active, independent research program. Examples include publications, presentations, institutional research support, patents, acting as supervisor of student projects.

You have at least 1 senior-authored research publication in a peer-reviewed journal in the last 2 years plus at least 1 additional senior-authored research publication since receiving a doctorate.

Grant & Review History

You have not served on an NIH study section in any capacity aside from as a mail reviewer. (Mail reviews do not include participation in the meeting.)

You have not held an R01 or R01-equivalent (R35, R37, RF1, R23, R29, DP1, DP2, DP5, U01, RL1) grant in the PD/PI role

You must have submitted a grant proposal, in the PI/PD role, to the NIH and received the associated summary statement.



Qualifications for the Early Career Reviewer Program

Employment

• You have at least **1 year of experience as a fulltime faculty member** (assistant professor) or a researcher in a similar role.

Grant & Review History

- You have not served on an NIH study section aside from being a mail reviewer.
- You have not held an R01 or equivalent grant as a PI/PD.
- You have submitted a grant application to NIH and received the summary statement.

Research

- You have evidence of an active, independent research program.
- You have at least 2 senior-authored research publication in a peer-reviewed journal 1 since doctoral degree, 1 in the last 2 yrs.

https://public.csr.nih.gov/ForReviewers/BecomeAReviewer/ECR



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/

