Opportunities & Resources to Help Early Career Scientists Navigate the NIH

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Goals of today's 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
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

**Center for Scientific Review**
*Division of Receipt and Referral*

- Assigns to Institute(s) and Review Group: 2 weeks

**Level I Review: Study Section**
- Recruits and Assigns Reviewers: 2-4 weeks
- Reviews for Scientific Merit: 4-6 weeks
- Meets: 1-2 days
- Releases Score: ~3 days
- Produces Summary Statement: ~30 days

**Level II Review: Institute or Center**
- Evaluates Relevance to Research Priorities: 2-4 Months
- Council Recommends Action
- Decision

CSR’s role

Funding Institute’s role
### NIH Peer Review System for Grant Applications

<table>
<thead>
<tr>
<th>Jan-May</th>
<th>May-Sept</th>
<th>Sept-Jan</th>
<th>Receipt Dates</th>
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<tr>
<td>May-July</td>
<td>Sept-Nov</td>
<td>Jan-Mar</td>
<td>Review Dates</td>
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<td>Sept-Oct</td>
<td>Jan-Feb</td>
<td>May-June</td>
<td>National Advisory Council/Board Dates</td>
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<tr>
<td>Dec-Apr</td>
<td>July</td>
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<td>Earliest Possible Beginning Date</td>
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[http://grants1.nih.gov/grants/funding/submissionschedule.htm](http://grants1.nih.gov/grants/funding/submissionschedule.htm)
## Standard Due Dates

<table>
<thead>
<tr>
<th>R01 (new)</th>
<th>Research Grants</th>
<th>February 5</th>
<th>June 5</th>
<th>October 5</th>
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<tbody>
<tr>
<td>U01 (new)</td>
<td>Research Grants - Cooperative Agreements</td>
<td>February 5</td>
<td>June 5</td>
<td>October 5</td>
</tr>
<tr>
<td>K series (new)</td>
<td>Research Career Development</td>
<td>February 12</td>
<td>June 12</td>
<td>October 12</td>
</tr>
<tr>
<td>R03, R21, R33, R21/R33, R34, R36, U34, UH2, UH3, UH2/UH3 (new)</td>
<td>Other Research Grants and Cooperative Agreements</td>
<td>February 16</td>
<td>June 16</td>
<td>October 16</td>
</tr>
<tr>
<td>R01 (renewal, resubmission, revision)</td>
<td>Research Grants</td>
<td>March 5</td>
<td>July 5</td>
<td>November 5</td>
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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.
  - **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 receive updates today!

https://grants.nih.gov/funding/searchguide/index.html
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](https://projectreporter.nih.gov/reporter.cfm)

- **Input your abstract/aims to see:**
  - List of institutes
  - List of funded grants
  - Link to **program officials**
  - Study section that reviewed the funded grant
Help your application get to the right study section

http://www.csr.nih.gov
Output from the Assisted Referral Tool
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

Requests for review group assignment

Identify conflicts

Suggest expertise

Never list names of recommended reviewers!
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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!**
How can researchers navigate the NIH?

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- Learn about the review process so you can put together a competitive application.
How can you learn more about the review process?

For Applicants

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.

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 FAQs for NIH applicants.

For Reviewers

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.

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

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

Frequently Asked Questions (FAQs)
Top Peer Review FAQs for NIH Reviewers

NIH Center for Scientific Review
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.
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/ForReviewers/BecomeAReviewer/ECR](https://public.csr.nih.gov/ForReviewers/BecomeAReviewer/ECR) for qualifications and application process.
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/BecomeAResviewer/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/