

AAPM 2022

The nuts and bolts of getting your research funded by NIH

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OVERVIEW

- **Start planning early**
- Apply for the right opportunities and contact appropriate program staff early
- Present ideas clearly
- What to do after review

Lifecycle of a Grant application & Whom should I talk to?

Grants Management Officer/Specialist (GMO/GMS)

- Prepares and issues awards
- Interprets and ensures compliance with grant policies
- Reviews grant business activities



Program Director

- Advises on funding opportunities and requirements for applications
- Observes review meetings and helps PI interpret summary statements
- Approves funding and monitors scientific progress
- Anticipates future scientific directions, assesses research gaps and opportunities

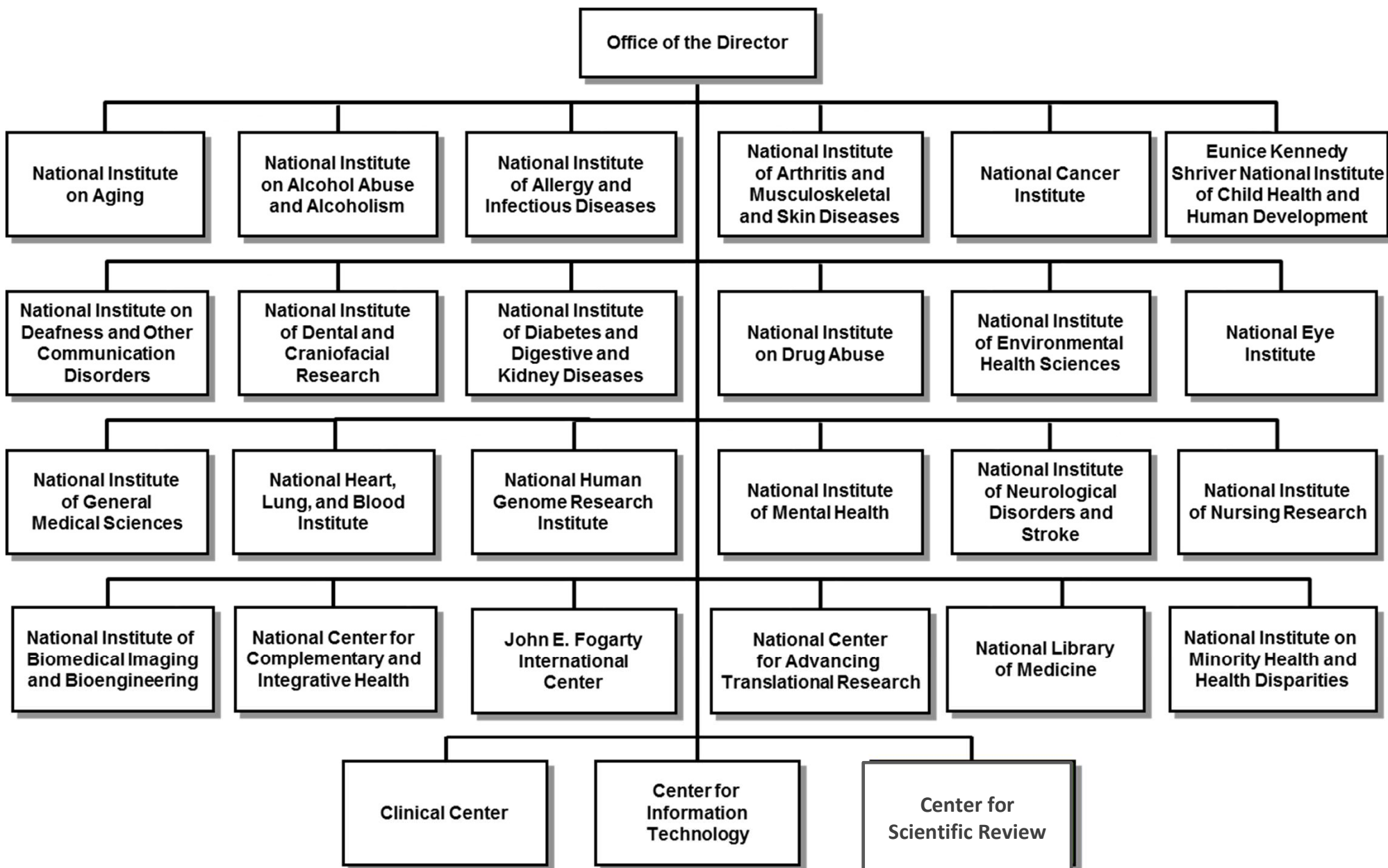
Scientific Review Officer

- Manages, coordinates and conducts initial peer review
- Ensures fairness and administrative compliance of applications
- Prepares summary statements

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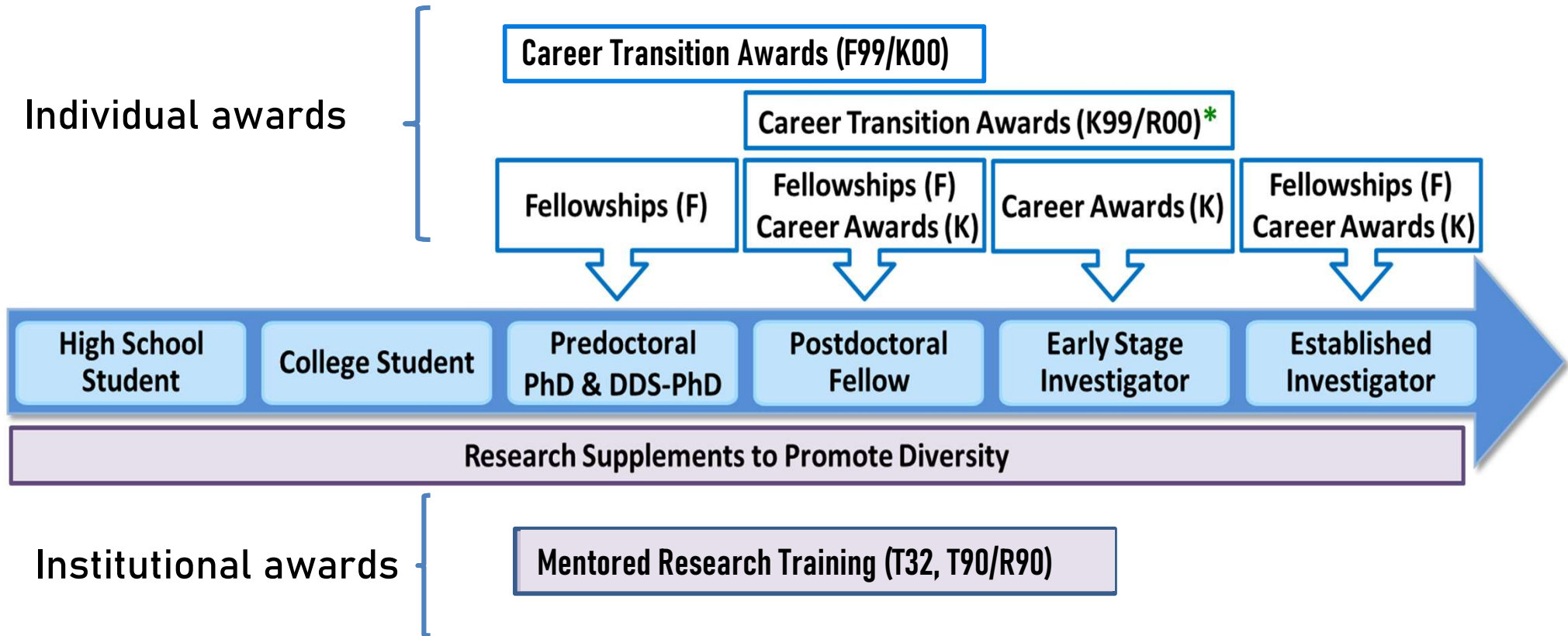
Your grant could be funded by one of 24 NIH's Institutes or Centers



Find your application's funding home

- Search RePORTER (reporter.nih.gov) by keyword to find the projects most similar to yours
 - Identify the Program Officials (POs) who are associated with these projects
- Find a Funding Opportunity Announcement (FOA) that Fits Your Research (search by keyword)
 - <https://grants.nih.gov/funding/index.htm>
- Call the target PO, discuss
 - Your idea (provide specific aims page)
 - Fit (is idea fit for institute or center (IC))
 - FOA
 - Funding mechanisms the IC supports

Early career funding mechanisms



K99/R00: Pathway to independence award

- Facilitate transition of outstanding postdoctoral researchers with a PhD or MD degree from mentored, postdoctoral research positions to independent, tenure-track or equivalent faculty positions
- Eligibility: **Any qualified individual**, < 4 years of post-doc. **US institutions**, small and large businesses, non-governmental agencies etc
 - Having held an independent NIH award (R03, R21, R01), or a training award (K01, K07, K08, K23, K25) disqualifies a candidate. Must be on a non-tenure track at time of application.
- Notable participating institutions: NCI, NHLBI, NIBIB, NINDS. Almost all institutes participate.
- The applicant needs to identify a mentor (who will supervise the training and research experience) for the K99 phase-- an active investigator in the area of the proposed research
- Funding covers salary (min 75% dedicated to research). Up to 2 years of K99, up to 3 years of R00
- Success rate of 10-45% (depending on IC)**

[*https://grants.nih.gov/grants/guide/pa-files/PA-20-188.html](https://grants.nih.gov/grants/guide/pa-files/PA-20-188.html)

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[*https://grants.nih.gov/grants/guide/pa-files/PA-20-189.html](https://grants.nih.gov/grants/guide/pa-files/PA-20-189.html)

[**https://report.nih.gov/reports/catalog#/
/](https://report.nih.gov/reports/catalog#/)

Mid-late career funding mechanisms

PI level of experience



Type	Supports	Notes	Institution
R21	Exploratory and developmental research grant	<ul style="list-style-type: none"> Limited or no preliminary data Each institute may have its own PA Up to \$275k (direct costs) total over 2 years 	US and/or Foreign
R21 trailblazer	Exploratory and developmental research grant	<ul style="list-style-type: none"> NIBIB and NIA alone Limited to early-stage investigators and new investigator applicants Max of ½ page/ 1 figure with preliminary data Up to \$400k (direct costs) total over 3 years 	US
R01	Established research grant	<ul style="list-style-type: none"> Significant preliminary data expected Multiple FOA's available Up to \$500k (direct costs)/year times 4/5 years 	US and/or Foreign
U01	Established research-cooperative agreement	<ul style="list-style-type: none"> Significant preliminary data expected Multiple FOA's available Up to \$500k (direct costs)/year times 4/5 years 	US and/or Foreign
P01	Program project applications	<ul style="list-style-type: none"> Multi-disciplinary, multi-component projects (at least 3 component; administrative core) Multiple FOA's available Up to \$2000k (direct costs)/year times 5 years 	US

Katz R01: a good option for early career investigators

- Grant mechanism named in honor of the late National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) Director, Stephen I. Katz, M.D., Ph.D
- **Standard R01 mechanism** (up to \$500k/yr in direct costs for up to 5 years)
 - *Intended for early-stage investigators*
 - **Research needs to represent a change in direction for the PI** (or for ALL MPI's, if MPI's)
 - **No preliminary data required or accepted!**
- *Most (but not all) institutes participate in at least one of the Katz FOA's. NCI, NIBIB, NHLBI, e.g. do.*

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Write a Winning Application

- Read instructions on the application form
- Define research needs and develop testable hypothesis **with quantifiable outcomes**
 - *Spell everything out clearly. Reviewers do not read your mind. Do not assume they read between the lines or know what you intend!*
- Design research strategy, build research team
- **Discuss potential problem areas and possible solutions**
- **Justify your numbers**
- **Get letters of support**
- Draft and seek feedback, polish

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After review

- Read and re-read the summary statement
- Contact your program officer and be prepared to discuss:
 - Reviewer comments from summary statement
 - Scores and percentiles
 - Funding prospects
 - Resubmission and other options

Volunteer to be a reviewer!

- Better understand the review process
- Improve your own grant writing skills by getting an insider's view of how grant applications are evaluated
- Early Career Reviewer program

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

- At least 1 year of experience as a fulltime faculty member/researcher in a similar role (Assistant Professor or equivalent) role.
- 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.
- Have submitted a grant proposal, in the PI/PD role, to the NIH and received the associated summary statement.
- Have not reviewed before and do not hold an R01 (or R01 equivalent) grant

THANK YOU

Later questions: feel free to contact me @ ileana.hancu@nih.gov