

NIH Grantspersonship Overview: NIH Tools & Resources

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Division of AIDS Research NIMH/NIH

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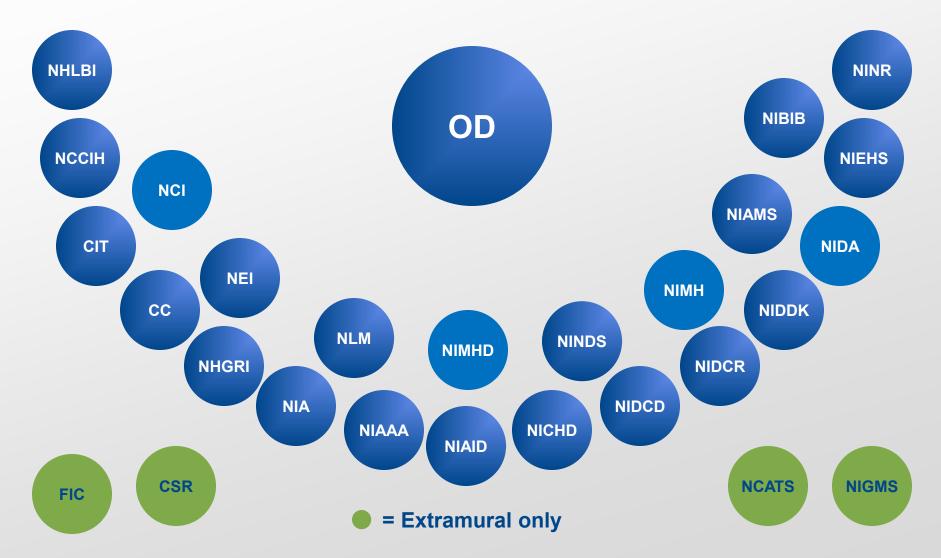
# **National Institutes of Health**

- The mission of the NIH is to uncover new knowledge that will lead to better health for everyone by:
- conducting research in its own laboratories (intramural)
- providing support for research conducted by scientists in universities, medical schools, hospitals, and other research institutions throughout the country and abroad (extramural)
- training research investigators
- fostering the communication of medical information





# NIH consists of 27 Institutes and Centers



# NIH: 27 Institutes and Centers (ICs)



- Office of the Director: central office, responsible for setting policy and for planning, managing and coordinating programs and activities of all NIH components
- ICs:
  - Different Missions & Priorities
  - Individual Budgets



#### NIH: What We Do

- <u>NIH</u> invests over \$39.2 billion annually in medical research for the American people
- Extramural Research:
  - More than 80% of the NIH's funding awarded through almost 50,000 <u>competitive grants</u> to more than 300,000 researchers at more than 2,500 institutions in every state and around the world
    - 1st level of review: Peer review by scientific experts
    - 2nd level of review: IC Advisory Council/Board
    - Final funding decisions made by IC Directors
- Intramural Research:
  - About 10% of the NIH's budget supports projects conducted by nearly 6,000 scientists in its own laboratories

See NIH/Home/About NIH/What We Do/Budget; <a href="https://www.nih.gov/about-nih/what-we-do/budget">https://www.nih.gov/about-nih/what-we-do/budget</a>



#### **NIH: Grants Process Overview**



Grants.nih.gov/grants/grants\_process.htm



#### NIH: Get a sense of who and what NIH funds





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

#### Parent Announcement

- Broad FOAs (e.g., Parent R01, K01, etc.)
- Generally for "investigator-initiated" or "unsolicited" applications
- Usually active for 3 years
- Uses standard receipt dates

#### Program Announcement (PA)

- Identify an area of scientific interest
- PAR: a PA with special receipt, referral, and/or review considerations

#### Request for Application (RFA)

- Identify a more narrowly defined priority area
- Usually has a single receipt date
- Set aside funds and anticipated number of awards
- Usually reviewed by special review panel convened specifically for the RFA



Enjoy the alphabet soup!!



#### New Direction- Notices of Special Interest (NOSIs)

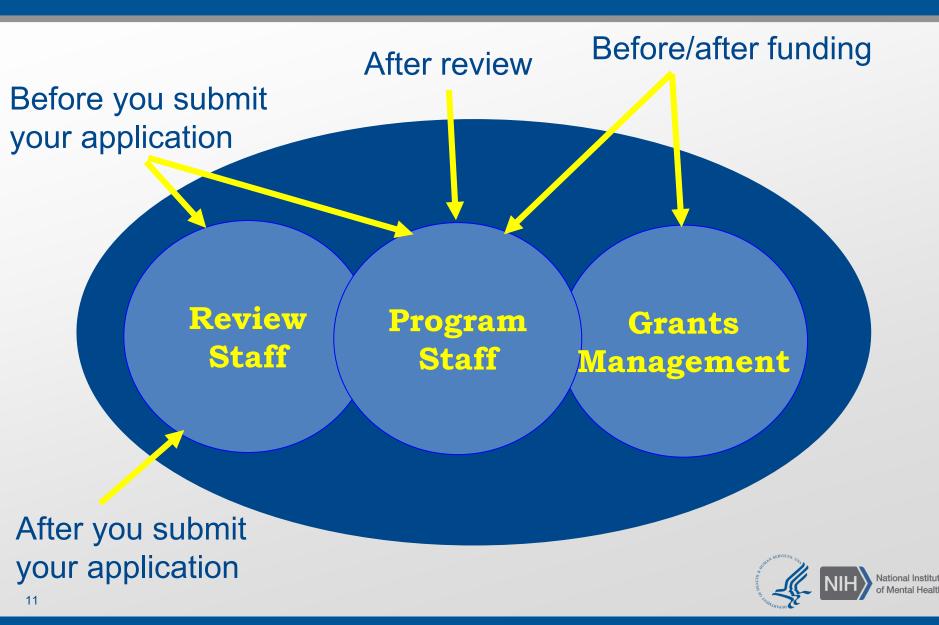
- NIH Institutes and Centers are increasingly using <u>Notices of Special</u> <u>Interest</u> as an alternative to issuing or reissuing non-parent program announcements (PAs)
- PAs will be limited to parent announcements (e.g., Parent K01, Parent R21, etc.)
- Notices will list areas of scientific interest and point to the funding opportunity announcements applicants can use to apply
- NIH will continue to use other types of FOAs (e.g., RFAs, PARs, and PASs)
- Existing non-parent PAs will remain active until their expiration dates
- NIH Office of Extramural Research (OER) will provide guidance moving forward

# **Finding Funding Opportunities**

- <u>NIH Office of Extramural Research (OER)</u>
  - About Grants
  - Funding
- Advertised through:
  - Grants.gov
  - NIH Guide for Grants and Contracts (Demo)
    - <u>Subscribe</u>
- Issued by:
  - Each NIH Institute and Center (IC)
  - Often with other Participating ICs



#### **Extramural Team: Who Can Answer Your Questions**



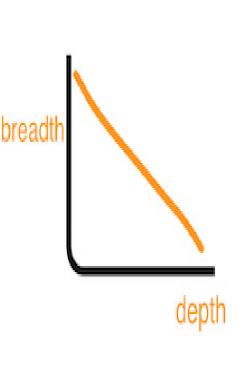
#### **Finding the Right Staff Contacts**

- <u>Contacting Staff at NIH ICs</u>
- FOAs include contact names for program, review and grants management staff.
- Institute websites have org charts or contact lists so to help you find a name. <u>www.nih.gov</u>
- RePORTER provides the NIH program official's name for funded projects. projectreporter.nih.gov (Demo)
  - Matchmaker a new tool to find a PO
- Use the NIH Staff Directory if you already have a name <u>ned.nih.gov</u>



### **NIH Program Officers**

- Oversee a portfolio of funded research grants
- Advise researchers who want to apply for NIH funding
- Have access to additional knowledge not readily available to the field
- Convene and attend meetings to identify research gaps
- Engage in strategic planning 2-3 years in advance of funding initiatives





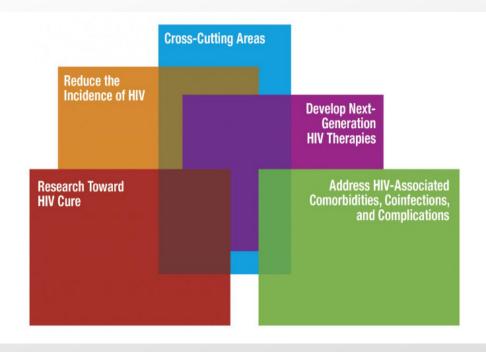
### Program Officers can help you determine...

- The relevance of a research concept to Institute/Center mission and priorities
- The best research mechanism for your project (R01, R21, R34, K awards, etc.)
- The Funding Opportunity Announcement (FOAs: PAs, RFAs, etc.) under which to submit – including whether it meets the <u>NIH definition of a clinical trial</u> (Demo)
- The Study Section or group to which the application would likely be assigned for review



#### **HIV/AIDS Priorities**

#### **Office of AIDS Research Priorities**



https://www.oar.nih.gov/hiv-policy-and-research/research-priorities

#### Institute and Division Priorities example: NIMH Division of AIDS Research Areas of High Priority

- Expand approaches to integrate behavioral science with effective biomedical strategies for HIV prevention.
- Advance the development and testing of interventions delivered beyond the individual level, by incorporating appropriate context into intervention development and testing.
- Increase intervention potency and long-term maintenance of effects, with an emphasis on targeting high-risk vulnerable populations.
- Develop strategies to increase HIV testing, ensure timely treatment initiation, and improve linkage to care.
- Develop and test interventions to improve HIV treatment outcomes through optimal treatment adherence and sustained engagement in care.
- Support implementation science and operations research to enhance dissemination strategies and public health impact of effective interventions.

https://www.nimh.nih.gov/about/organization/dar/index.shtml



National Institute of Mental Health

#### **Types of Grant Funding Mechanisms**

- F = Fellowships
- G = Resource programs

K = Research Career

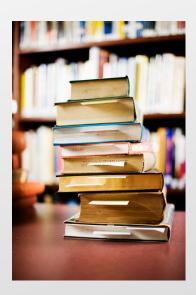
- P = Research Program Projects & Centers
- R = Research Projects
  - S = Research-related
  - T = Training Programs
  - U = Cooperative Agreements



Hope you're in the mood for seconds!



# To provide protected time for individuals to further develop their research expertise.







#### **Training and Career Timetable**



Mentored Quantitative RCDA

National Institute of Mental Health

# **Career Development Awards: K01**

K01 – Mentored research scientist (clinical trial or research project)

- Three to five years to provide support and protected time for intensive, supervised research career development
- Candidate, career goals, objectives and training activities, research plan (direct costs limits), and mentors
- "Full-time" appointment at academic institution; 75% effort required
- IC differences

https://researchtraining.nih.gov/programs/careerdevelopment/K01



#### **Types of Grant Funding Mechanisms**



Mechanism	Description
R03	Small Research Grant
R21	Exploratory/Developmental Research Grant
R34	Intervention development and piloting
R01	Research Project Grant



Hope you're in the mood for seconds!



#### R03 – Small Grant

- Small one or two year grant
- Up to \$50k per year in direct costs
- Appropriate for small studies or secondary data analyses

https://grants.nih.gov/grants/funding/r03.htm



#### R21 – Exploratory/Developmental Grant

- Two year grant
- Direct costs not to exceed \$275k over the course of the two years
- New, exploratory and developmental research
- No preliminary data is generally required



#### R34 – Planning Grant (clinical trial or research project)

- Three year grant
- Direct costs limited to \$225k per year and \$450k over the entire project period
- IC differences re: clinical trial planning grant
- Pilot data is not required

https://grants.nih.gov/grants/funding/r34.htm



#### R15 – Academic Research Enhancement Award (AREA)

- Supports research at eligible domestic institutions that have not been major recipients of NIH research grants
- Up to 3 years with a budget not to exceed \$300k over the course of the grant
- Pilot data is not required
- Small projects by undergraduate or graduate students
- PI cannot be the PI on another NIH grant at the time of the award



#### **R01 – Mature Award**

- Most well known and most commonly used funding mechanism
- Provides up to 5 years of support with direct costs of up to \$500k per year
- Need prior approval to submit an application with a budget over \$500k in any year
- Need preliminary data

https://grants.nih.gov/grants/funding/r01.htm



# Early Stage Investigator (ESI)

- A Early Stage Investigator (ESI) who is within 10 years of completing the terminal research degree or is within 10 years of completing medical residency (or equivalent)
- Has not competed successfully for a substantial NIH-supported research project (R01)
- For multiple PIs, all PIs must meet requirements for ESI status
- Status applies only to R01s
- ESIs are also eligible for the shortened Review Cycle option available to NIs (only applies to non-AIDS-related grant applications)

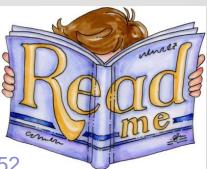
https://grants.nih.gov/policy/early-investigators/index.htm



#### You've found a FOA, now what? Step 1: Read the FOA

- Components of Participating Organizations
- ≻Title
- ➢Activity Code
- Related Notices
- Companion Funding Opportunity
- Purpose
- ➢Key Dates

- Funding Opportunity Description
- Award Information
- Eligibility Information
- Application and Submission Information
- Application Review Information
- Agency Contacts



Examples: <u>RFA-MH-20-201</u>; <u>PA-18-652</u>



#### You've found a FOA, now what? Step 2: Write a concept

#### Be a "problem solver"

- Define a significant health problem and research gap
- Propose a study to address the problem/gap
- Position your study as one step on the path forward
- Underscore how this work advances the field

#### Write your concept

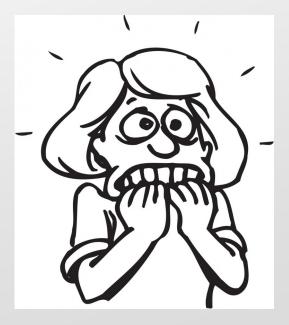
- Format: 1-2 pages; can be a draft of Specific Aims
- Why is the problem you're addressing important?
- How will you address this problem?





#### You've found a FOA, now what? Step 3: Contact a Program Officer

- How do I know which Program Officer to contact?
  - Look at the Scientific Contact on the FOA
  - Look at Institute websites for a listing of Program Officers and the types of research in their portfolios
  - Look in NIH RePorter to identify Program Officers on similar research projects
- Can I contact more than one Program Officer? In the same IC?
- When should I contact a Program Officer?
- How should I reach out?
- What should I expect when I speak to a Program Officer?





#### You've found a FOA, now what? Step 4: Avoid these common pitfalls #1

- Not giving yourself enough time to prepare the grant application
- Not applying to the correct announcement depending on whether or not you're proposing a clinical trial
- Not paying attention to page limits, expiration date, updates, and other rules and requirements
- Not reading the entire FOA carefully (RFA & PAR in particular)
- Putting important information in an Appendix or other attachment
- Not contacting a Program Officer to discuss your application!!!



#### You've found a FOA, now what? Step 4: Avoid these common pitfalls #2

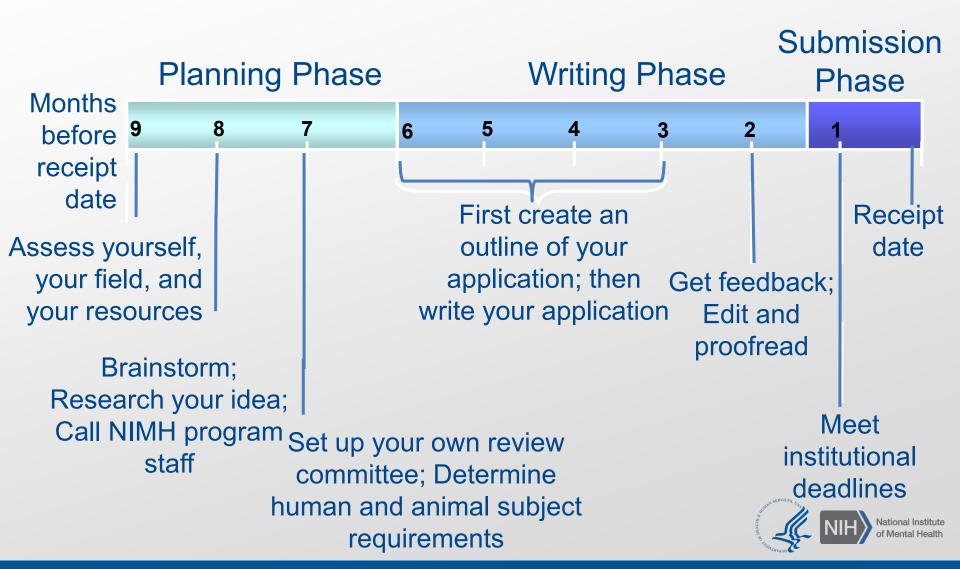
- Not significant or not new research
- Weak rationale
- Low impact research
- Too ambitious
- Unfocused aims
- Career plan does not match research plan

- Lacks methodological rigor
- Little feasibility or preliminary data
- Little consideration of mechanisms
- Few publications or collaborators
- Lack of institutional support

Source: https://www.nimh.nih.gov/funding/grant-writing-and-applicationprocess/common-mistakes-in-writing-applications.shtml



# **Preparation Timeline**



#### **Take-Home Messages**



- Reach out to a program officer prior to submitting a grant application to NIH
- Find a scientific mentor (preferably with NIH funding)
- Submit concept or draft for internal peer review



#### **NIH Center for Scientific Review Resources**

- CSR: For Applicants: <u>https://public.csr.nih.gov/ForApplicants</u>
- Application Process
- Planning & Writing
- Application Deadlines
- Submission & Assignment
  - <u>Assignment Request Form</u> (IC assignment; review group assignment; conflicts; expertise)
  - Assisted Referral Tool (ART)
- Initial Review, Results & Appeals
- FAQs



# **Additional Resources: e-newsletters**

- NIH Grants Policy
  - https://grants.nih.gov/policy/index.htm
- NIH Electronic Submission
  - https://era.nih.gov/
- Sign up for Inside NIMH
  - Funding news for current and future NIMH awardees
  - Visit the Inside NIMH subscription page: <u>https://www.nimh.nih.gov/news/e-mail-newsletters/index.shtml</u>
- Sign up for Fogarty's Global Health Matters e-newsletter
  - Sign up at <u>https://public.govdelivery.com/accounts/USNIHFIC/subscriber/new</u>



# **Additional Resources: Websites**

- NIH Research Portfolio Online Reporting Tools (RePORT)
  - Includes an electronic tool that allows users to search a database of NIH-funded research projects
  - http://projectreporter.nih.gov/reporter.cfm
- World RePORT website
  - Mapping database system which includes biomedical research studies in sub-Saharan Africa that are funded by 9 funding organizations
  - <u>http://worldreport.nih.gov</u>





# Division of AIDS Research at NIMH



#### The Division of AIDS Research



#### Dianne Rausch, Ph.D. Director



#### HIV Prevention and Care Continuum, Psychosocial Comorbidities, & Translational Research Branch



Chris Gordon Ph.D. Branch Chief; HIV Prevention and Treatment Implementation Science Program



Greg Greenwood Ph.D.
HIV Testing and Social
Determinants Program



Mike Stirratt Ph.D. Adherence to Treatment and Prevention Program



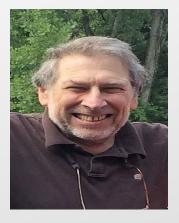
 Teri Senn Ph.D.
Psychosocial Co-morbidities of HIV Prevention and Treatment Program



#### Developmental and Clinical Neuroscience of HIV Prevention and Treatment Branch



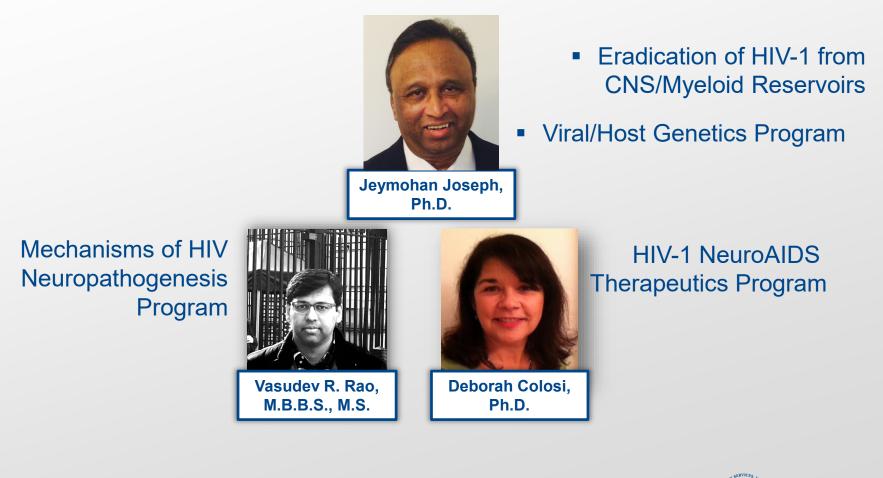




**Pim Brouwers**, Ph.D. Clinical Neuroscience of HIV Infection Program Methodology and Data-Science of Behavior in HIV Program Susannah Allison, Ph.D. Infant, Child, and Adolescent HIV Research Program David Stoff , Ph.D. Assistant Dir., Training and Health Disparities Program Disparities and Mental Health Effects of HIV in Older Adults Program



#### HIV-1 Neuropathogenesis, Genetics, and Therapeutics Branch





# NIMH DAR Non-Parent PAs and RFA

PA-18- 277/278	Innovations in HIV Testing, Adherence, and Retention to Optimize HIV Care Continuum Outcomes (R21/R01)
PA-18- 279/280	Targeted Implementation Science to Achieve 90/90/90 Goals for HIV/AIDS Prevention and Treatment (R01/R21)
PA-18- 271/281	Strengthening the HIV Pre-Exposure Prophylaxis (PrEP) Care Continuum through Behavioral, Social, and Implementation Science (R21/R01)
PA-18- 273/272	Targeted Basic Behavioral and Social Science and Intervention Development for HIV Prevention and Care (R01/R21)
PA-18- 652/653/651	Developmentally Tailored HIV Prevention and Care Research for Adolescents and Young Adults (R21/R34/R01)
PA-18-276	Formative and Pilot Intervention Research for Prevention and Treatment of HIV/AIDS (R34)
PA-18- 274/275	Innovations in Mechanisms and Interventions to Address Mental Health in HIV Prevention and Care Continuum (R01/R21)
RFA-20- 200/201/202	Addressing the Role of Violence on HIV Care and Viral Suppression (R01/R34/R21)

For More Information: http://www.nimh.nih.gov/about/organization/dar/index.shtml



# NIMH Research Bullets within SGM FOAs at NIH

- Research on the Health of Transgender and Gender Nonconforming Populations: R01 and R21 (PA-18-729; PA-18-728)
  - Improved understanding of multivariate risk for, and protection against, the onset of mental disorders and suicidal behavior (including studies that look at multiple RDoC domains); with consideration for transition periods that may heighten risk. In particular, studies that utilize RDoC-consistent measures could inform the etiological factors for both transgender, gender nonconforming, and other individuals.
  - Given the high rates of suicide ideation and attempts, and frequent experiences of harassment, discrimination, violence and rejection among transgender and gender nonconforming individuals, research into what factors protect against suicide ideation in this population and how these factors can inform prevention interventions.
  - Strategies to improve mental health outcomes among transgender and gender nonconforming individuals, the effectiveness of strategies for referral and engagement in mental health treatment and services with providers and in settings that are informed about transgender-related care issue?



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