NIH RESEARCH PRIORITIES FOR HIV

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CFAR Mentoring Workshops
Figure 1. Average Age of Principal Investigators with MD, MD-PhD, or PhD at the time of First R01 Equivalent Award from NIH, Fiscal Years 1980 to 2011
NIH ‘supposedly’ encouraging early investigators

- **Early Stage Investigator** program initiated 2009 (within 10 years of completing terminal degree of residency; fellowship doesn’t count)

- **Can extend ESI status**: family care responsibilities, extended periods of clinical training, extended periods of additional didactic instruction, disability, illness, active duty military service, loan repayment, natural disasters or comparable disruptive factors (usual 24 mo, can go to 120 mo)

- **ESI status- higher paylines**: As of 11/9/18, NIAID payline for RO1s 14% and ESIs 18% (K’s unannounced)

- Next generation researchers initiative 8/31/17

NIH New Investigator Policies:
http://grants.nih.gov/grants/new_investigators/investigator_policies_faqs.htm
What is your unit of currency on a CV and biosketch for an NIH career and many others?

- The unit of currency as you apply is publications
  - This isn’t changing
  - No new currency in the works
  - Try to have a theme built up in your publications (“developing a niche”)
  - Try not to have the same mentor as last author every time (“beginning of independence”)
  - Few quality publications (higher impact journals, solid demonstration of an important finding) better than quantity
What defines your biosketch and CV?

- **Find your niche:** Exclusive corner of your field where you are starting to conduct research
  - Locate most promising research needs and opportunities in your field.
  - Assess whether you have the skills to make an impact (one or more prior publications should be along this theme)
  - Look at the other players and judge whether you can compete.
  - Network with these players; search the literature and people online (those people will be your reviewers). Meet them at meetings, ask a question about their research, follow-up with an email

**NIAID Pick a Research Project**
[http://www.niaid.nih.gov/researchfunding/grant/strategy/Pages/2picktopic.aspx#a](http://www.niaid.nih.gov/researchfunding/grant/strategy/Pages/2picktopic.aspx#a)
A few more tips for grant-writing

- **Start early and clear decks**
  - Try to give **at least** 3 months
  - Contact your RSA early to get a timeline of when documents are due
  - Cancel standing meetings, don’t meet with students, clear clinical obligations, only keep necessary balls in air
  - Work in your best location (holed up, café, library, etc.)
  - Identify your 3-4 internal reviewers early (NOT MORE), email them ahead of time with stated commitment of when draft will arrive and when you need comments
  - Look at study section roster of your intended study section — **use their references if possible**
The NIH grant format

- **General format of grants**
  - Significance aims page (1)
  - Significance
  - Innovation
  - Approach
    - Preliminary Studies
    - Research design and methods
  - (Protection of Human Subjects, Inclusion of Women and Minorities, Inclusion of Children)
  - References (unlimited)
A few more points..

- Grantsmanship means a lot
  - Don’t crowd page with words, have white space, clear language
  - Use indentations, boxes (pull-out with key points)
  - Can use some color- box your aims, color figures/tables
  - Use Figures/Tables that are clean, easy to read
  - Bold key points (not too much)
  - Don’t start with “HIV affects 36.9 million people worldwide” — reviewers know that, hone in on your problem
  - Don’t hit reviewer over head with preliminary studies or summarizing literature- key points and heavily use references
  - Tell a story of innovation
If you are not awarded the first time...

- Like in a manuscript review, if you are **very responsive, point-by-point**, HIGH CHANCES of getting funded the next time
- Ask the program officer for hints (may have been in review, will know program priorities for funding)
- Frame respectful point-by-point addressing of each question raised by the review
- Try to resubmit to same study section; going new may not help and at least you are responding to comments
NIH HIV related priorities

NIH Priorities for HIV and HIV-Related Research

- Cross-Cutting Areas
  - Reduce the Incidence of HIV
  - Develop Next-Generation HIV Therapies
  - Address HIV-Associated Comorbidities, Coinfections, and Complications
  - Research Toward HIV Cure

NIH New Investigator Policies:
https://www.oar.nih.gov/hiv-policy-and-research/research-priorities
Specifics

- **Reduce the Incidence of HIV**, including supporting the development of safe and effective vaccines, microbicides and pre-exposure prophylaxis.
- **Develop Next-Generation Therapies for HIV** with improved safety and ease of use.
- **Conduct Research Toward an HIV Cure**.
- **Address HIV-Associated Comorbidities, Coinfections, and Complications** through research designed to decrease and/or manage these conditions.
- **Advance Cross-Cutting Areas** of research in the basic sciences, behavioral and social sciences, epidemiology, implementation science, information dissemination, and research training.
### More specifics

<table>
<thead>
<tr>
<th>Reduce the Incidence of HIV</th>
<th>Develop Next-Generation HIV Therapies</th>
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<tbody>
<tr>
<td>- Vaccines</td>
<td>- Less Toxic and Longer Lasting ART</td>
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<tr>
<td>- Pre-exposure Prophylaxis</td>
<td>- Novel HIV Targets &amp; Inhibitors</td>
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<td>- Microbicides and MPTs</td>
<td>- Novel Immune-Based Therapies</td>
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<td>- HIV Testing</td>
<td>- Engagement, Adherence, and Retention in Care</td>
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<td>- Treatment as Prevention</td>
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<td>- Monoclonal Antibodies</td>
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<th>Research Toward HIV Cure</th>
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<td>- Sustained ART-free Viral Remission</td>
<td>- Coinfections</td>
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<td>- Viral Eradication</td>
<td>- Neurologic Complications</td>
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<td>- Viral Latency and Sanctuaries</td>
<td>- Malignancies</td>
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<td>- Cure Ethics and Acceptability</td>
<td>- Cardiovascular Complications</td>
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<td>- Mental Illness and Substance Use</td>
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<td>- Metabolic Disorders</td>
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<td>- Across the Lifespan</td>
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More specifics - know these, put these up front on your specific aims page – “To address the NIH HIV-research priority of xx, I propose, …”

Cross-Cutting Areas

- Basic Virology and Immunology
- Behavioral and Social Sciences
- Epidemiology
- Health Disparities
- Information Dissemination
- Implementation Science
- Research Training, Infrastructure, and Capacity Building

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