Advice for Early Stage Investigators

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Advice for Early Stage Investigators

• Know the purpose the program you will apply for, and the review criteria; make sure the application addresses them completely
• Tell Reviewers what they need to know to favorably evaluate your application
• Use the data to better understand your choices and chances
• Avoid applying for the R21 Activity Code
• Build Networks
Know the purpose of the program and its review criteria

**Mentored Patient-Oriented Research Career Development Award (Parent K23)**

“The purpose of the NIH Mentored Patient-Oriented Research Career Development Award (K23) is to support the career development of individuals with a clinical doctoral degree who have made a commitment to focus their research endeavors on patient-oriented research.”

**NIH Research Project Grant (Parent R01)**

“The NIH Research Project Grant supports a discrete, specified, circumscribed project in areas representing the specific interests and competencies of the investigator(s).”
Review Criteria - K23

• Candidate
• Career Development Plan/Career Goals and Objectives
• Research Plan
• Mentor(s), Co-Mentor(s), Consultant(s), Collaborator(s)
• Environment & Institutional Commitment to the Candidate

✓ State Career Objectives
✓ Explain how Career Development Plan, Research Plan, Mentors and Institution will help fulfill career objectives
✓ Letters of support must express commitment to fulfilling candidate’s career objectives
Review Criteria – R01

• Significance
• Investigator(s)
• Innovation
• Approach
• Environment

✓ Focus of review criteria is the research project
  • Approach, Significance, Innovation
  • These three criteria are weighted most heavily

✓ Other criteria assess how the research objectives are advanced.
  • Investigator(s), Environment

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Tell Reviewers what they need to know to favorably evaluate your application

• Explain in the application:
  • How the project is significant and innovative
  • How the project fulfills the objectives of the program

• If there are controversies or conflicting literature in the field, it must be discussed in the application (scientific premise) – explain how your research will inform the discussion.

• Don’t ignore limitations in the application in hopes that reviewers don’t notice them.
  • It is better to make the argument for your chosen solution
  • Assures reviewers you have thought of (most) everything

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Use the data to better understand the scientific landscape around your application

• Look for funded grants similar to your own
• “Futurecasting”
• Talk to other successful applicants about their experiences and strategies

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Finding Funded Grants...

A tool available in NIH RePORTER database that many are not familiar with is “Matchmaker”.

Under the “Matchmaker” tab, you can copy and paste your abstract and/or specific aims.

Matchmaker will return a list of the recently funded awards with project descriptions most similar to the text you pasted into the text box.

https://projectreporter.nih.gov/reporter_matchmaker.cfm

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Matchmaker also reports the most prevalent:
1) Institutes/Centers
2) Activity codes
3) Study sections

associated with the applications.
Avoid applying for the parent R21 Activity Code

• Why? Reviewers look for fit with purpose, e.g. the “high risk – high reward” aspects of the application
• Look for the stated purpose from the parent announcement:
  “...These studies may involve considerable risk but may lead to a breakthrough in a particular area, or to the development of novel techniques, agents, methodologies, models, or applications that could have a major impact on a field of biomedical, behavioral, or clinical research.”
• Reviewers look for evidence that approach is “feasible”; risk is “manageable” in the hands of this investigator
  • Read: Preliminary data – not required but established investigators often provide it
  • Limited funds and time make challenges for inexperienced managers, reviewers know this
  • No ESI handicap for R21, so enlist an established investigator to collaborate as a MPI

• If the R01 is not a choice (due to institutional policies or other limitations) –
  • tell reviewers how your application fits the stated purpose; how you plan to manage risk
  • look for an RFA or PAR to avoid applying for the parent announcement.
  • Reviewers will focus on RFA’s scientific concepts instead of lingering on high risk – high reward
  • If you can find an R21/R33, that’s almost better than an R01

• Overall award rates for NIA (FY17): 93/417 = 22%; ESIs: 16/74 = 22%
  • Compare to R01: 319/1,615 = 20%; ESIs: 61/222 = 27%
Build your Networks !!!

• Don’t try to be too self-reliant
  • Many will want to help you, so if the first person does not respond, keep asking until you find your partners

• Program Staff are often on travel and read emails on tiny screens. You may have to send a reminder emails to get a response.
  • We do want to speak to you, it’s the fun part