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

Funding Opportunity Title

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. "

Funding Opportunity Title

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**

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

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

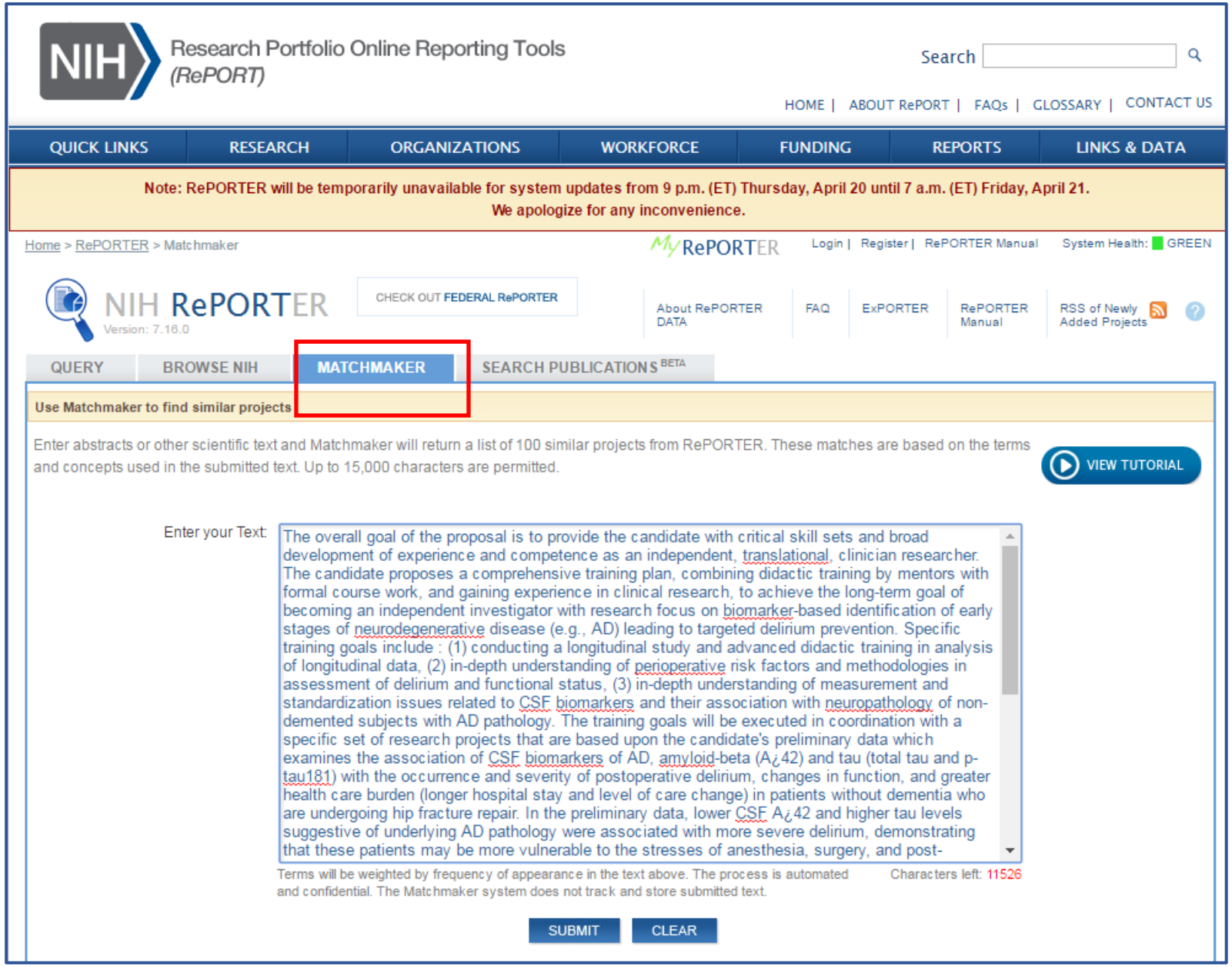
Finding Funded Grants…

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



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

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:

  https://grants.nih.gov/grants/guide/pa-files/PA-16-161.html

"…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