SUMMARY – NIH Panel Discussion: A PI’s Perspective on Navigating NIH Programs

Overview

On May 31, 2018, University Research Services hosted a panel discussion focused on NIH funding opportunities. Our panelists – Dr. Stephen Archer and Dr. Curtis Nickel – provided their perspectives on “pitching” projects to NIH and shared some “lessons learned” with participants. A summary of the discussion organized into themes is provided below.

Similarities and Differences between CIHR and NIH

- Like CIHR, NIH grants are highly competitive (~15% success rates). NIH also has an aggressive triage system, with approximately 50% of applications being streamlined.
- NIH & CIHR have a similar level of rigor in their peer review systems. While the application details may differ, both agencies have high expectations for the quality of the science proposed.
  - Resource: NIAID provides examples of successful NIH applications (with reviewer feedback).
- In some cases, NIH may be more open to “niche” areas of research than CIHR. Check out the targeted funding opportunities offered by the NIH Institutes and Centres. If you align with a strategic area of interest, you may have a competitive advantage.
  - Resource: This URS webpage provides information on how to find NIH funding opportunities.
- NIH may be more open to “high risk, high reward” projects than CIHR is. The R21 funding mechanism at NIH is targeted to this type of project. However, the success rates for R21 grants is lower than R01 applications.
  - Resource: This NIH webpage summarizes success rates by Institute and by activity code (e.g., R01, R21)
- Unlike CIHR, NIH budgets include both direct and indirect costs. The indirect cost rates for US universities can be high (40-60%). The indirect cost rate for foreign (non-US) organizations is 8%.

‘Pitching’ an Application to US Reviewers

- Remember that you are writing for a US audience. Clearly show how your project will address US health issues.
- Your proposal must be grounded in the US literature. Position your research within the US context and show how your project idea is unique.
- Remember that your peer reviewers may come from diverse backgrounds. Try to use simple, accessible language in your proposal so that a wide audience could understand your project and its potential impact.
- Do not be afraid to “sell” yourself. Your expertise and track record are very important. Your NIH biosketch will be an important tool for getting this information across to your reviewers.
  - Resource: The NIH biosketch is a simplified 5-page CV. This webpage has detailed instructions & templates.
- Carefully follow all NIH instructions (e.g., font size, headings, etc.). Do not give your reviewers an excuse to score your application poorly!

Leading an NIH proposal vs. Being a Subrecipient

- If you want to lead an NIH grant, your research must be unique & world class. If your research overlaps with research being done in the US, you are unlikely to receive NIH funding.
- Ask yourself – how different is my work from research being done in the US? If your project would only be considered a modest extension on work being done in the US, you may be better off being a subrecipient.
- Ideally, have long-standing US collaborations before applying. Your proposal will be stronger if you can demonstrate that you are “embedded” in the US health research system (e.g., collaborations, projects, publications).
- Being a sub-recipient does NOT mean “giving away” your intellectual leadership. Ideally, you would apply with researchers with whom you have an existing relationship. Ask yourself – what is the benefit of you and your colleagues working together?
Providing a “Foreign Justification”

Context: Non-US applicants must provide a document called a “Foreign Justification” in their application. The justification must explain why a project must be conducted outside of the US (unique expertise, resources, facilities, equipment, etc.).

- **Remember:** NIH’s primary interest is to fund US-based research. Though NIH supports international projects, the onus is on the applicant to provide a strong justification for why the research must be done outside the US.
- **Focus on what makes you unique** – your expertise and track record, along with any unique resources you have.
- **Make it clear why the US system will benefit.** What is the “value-add” to having this research done in Canada? How will you contribute resources or expertise that do not exist in the US, and why will that matter?

Selecting the Correct Funding Opportunity & Peer Review Panel

- **Talk to your colleagues who have held NIH funds or served on NIH panels.** Their perspectives can be invaluable for helping to identify the correct funding opportunity or peer review panel.
  - **Resource:** NIH RePORTER is an online database of all funded NIH projects. You can use the “matchmaker” tool to look up funded research projects in an area of science similar to yours. The tool summarizes which Institute funded the grant, under which activity code, and reviewed by which study section.
- **Talk to an NIH Program Officer.** Program Officers are Ph.D. scientists affiliated with NIH. They can advise you on whether or not your project would align with the research interests of their NIH Institute and/or a particular funding opportunity. They can also advise you on which study section your project would be best aligned with.
  - **Resources:** For specific funding opportunities, NIH program officers are listed in the call text (see, for example, this annotated funding opportunity announcement). Program officers are also listed on an Institute’s webpage, or can be found using the NIH RePORTER matchmaker tool.

Advice for Early Career Investigators

- **Build up a track record within the US first before applying.** Focus on establishing your research collaborations with US colleagues.
- **Try to collaborate with a senior investigator, if you can.** Given how competitive NIH is, you are more likely to receive funding if the proposal is led by a senior investigator.
- **Do an honest self-assessment.** What are your strengths and your expertise? Is your project “worth” the budget price tag? Avoid being self-aggrandizing, but do not be too modest either.
- **Try to sit on an NIH peer review panel.** This is a great learning opportunity for junior investigators.
- **Remember:** rejection is part of being a scientist. Be persistent!

Want More Information?

Visit the URS NIH webpage: [www.queensu.ca/urs/nih](http://www.queensu.ca/urs/nih)