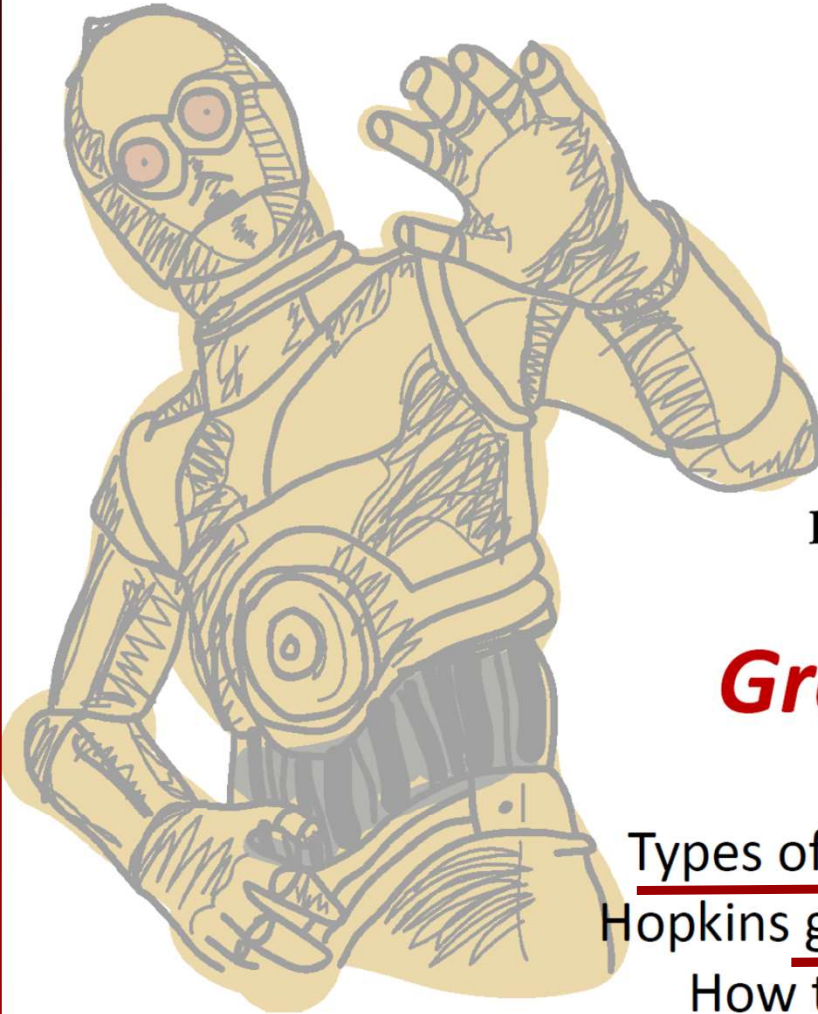


Grant Preparation, Submission and Review Process

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COMPREHENSIVE CANCER CENTER POSTDOCTORAL ORGANIZATION



3-4 PM Wednesday, June 13th
CRBII Room 3M41

Faculty Speaker:

George Sgouros, Ph.D.

Professor of Radiology and Radiological Science

Grant Preparation Session

Types of NIH Grants | NIH R01 grant preparation
Hopkins grant submission process | Review process
How to interpret/read the review summary

Types of NIH grants

- **R01**

- **The career builder**
- **5 years support**
- **\$500k direct per year (written explanation if need more)**
- **Requires publication record in area**
- **Requires prelim data showing that you can do proposed work**

Types of NIH grants

- **R21**

- High Risk/high return
- 2 years support
- \$275k total
- Publications showing competence in area
- No prelim data
- If prelim data included need to be strong
- Harder to get than R01
- Toss-up whether it's worth the effort
- If you have prelim data and a pub record go for R01

Types of NIH grants

- **K - Career development awards**
 - **K99/R00 - transition from mentored research to independent (R01-like) research**
 - **Training/mentoring plan needed**
 - **Pathway to independent research needed**
 - **How good is the candidate?**
- **Not all award mechanism are available**

About the NIH

- [Use Google](#)

Grant Preparation (R01)

- **Learn the system**
 - Sign up for e-mail, follow on twitter
- **Sketch out your aims**
- **Do a literature search**
 - Learn everything about what's already been done
- **Discuss aims w/ mentors, peers, significant others**
 - The more people that hear from you and know what you'd like to do the better
 - Have a sales pitch, tell a story
- **Obsess over your aims**
 - If this all works what will be the impact?
 - Will this make me famous (in my field of study)?
 - What can I publish once all the work is done?
 - What am I missing?
 - What won't work?
 - Can I do this work, do I have the resources,

Grant Preparation (R01)

- **Once you have aims page identify center, contact program officer for that center**
 - **Get background on the person before e-mailing/calling them**
 - **E-mail them your aims page and ask for time for a phone call**
 - **They want to hear from you**
 - **Give brief additional description of what you have in mind (sales pitch, story)**
 - **Get them enthusiastic about what you are proposing**
 - **Can direct you to grant opportunities/links**
 - **Ask them which review panel (AKA study section) would be best**
 - **Should you write a cover letter asking for that panel**
 - **Given that they've seen your aims and heard your pitch/story, ask them what are the chances that the application will get funded?**
 - **Is there anything that you can do to improve funding chances?**
 - **Program officers have no influence on the review but most have seen enough of them to provide general guidance**

Grant Preparation (R01)

- Look up the review panel to get a sense of their expertise
- Never-Ever contact a reviewer that is in the study section for your grant.

Grant Preparation (R01)

- **What do I have to do to address the proposed aims?**
 - Do I have the.... to do the required work:
 - Background/knowledge
 - Resources/facilities
 - Publications showing that I can do the proposed work
 - Who can help me with the proposed work?
 - Who are the experts in the area?
- **Is now the best time to submit?**
 - Preliminary studies: show that you can do the work proposed
 - Evidence to show that things will work and that tax money won't be wasted.
 - Publications to show that you have a record in the general topic of interest
- **Don't focus on deadlines**
 - Start writing, be prepared to miss a cycle
- **Any grant writing will be useful**
 - Can use the text for other grant or for review articles

Grant Preparation (R01)

- As early as possible, abstract should let reader know what you are proposing and why it is important
- Understand how your proposal will be judged
- [Go to reviewer guidelines site.](#)

Grant Submission Process

- **Your division/department research grant specialist**
 - Pre-award person - contact person for all the administrative aspects
 - let them know right away that you're planning on submitting
 - provide list of personnel
 - Get budget process going
 - They submit to Hopkins Office of Research administration (ORA)
 - Expect feedback/corrections from ORA review
 - ORA submits to NIH
 - Once submitted, you get an e-mail telling you that you've got a couple of days to make sure that submission is OK - it usually is, but good to check
 - NIH sends e-mail telling you which study sections will review the proposal
 - Which centers will provide funds for the grant

NIH review process

- **Grant goes to the Center for Scientific Review (CSR)**
- **Scientific Review Officer (SRO) is assigned**
 - Person that assigns your grant to individual reviewers, that organizes the review meeting and that writes the summary statement describing the discussion
- **3 members of the panel review the application in detail**
 - They present it to the rest of the panel
 - Rest of panel would not have ordinarily read it
 - Discussion can change opinion of the 3 primary reviewers
 - Panel listens in, asks questions, holds discussion
 - Everyone votes
 - Primary reviewers don't always update their scores/comments to reflect discussion
 - Summary at top of summary statement is usually best indication of what was said
- **Google Search for info on review criteria/instructions given to reviewers**

Revised submission

- **Has revised grant addressed the deficiencies?**
 - Reviewers will look at prior critique and at 1-page introduction
 - Provide a point-by-point response to the critique
 - Thank reviewers, highlight positive comments
 - Reviewers will be merciless if revised submission ignored a major concern
 - Highlight in the body of your grant places in which you changed things.
 - If reviewer is dead wrong on something, politely point this out
 - Review panels are sympathetic to an initial unfair/misguided criticism

Reading the review summary

- **Good scores from 3 reviewers but poor overall score/percentile**
 - Grant got dinged during discussion and whoever dinged it was able to sway most of panel
 - Read the summary carefully
 - TALK to the *PROGRAM CONTACT* (not the SRO/SRA)
 - Ask if they happened to be there during review -ask what happened
- **Not discussed**
 - Grant score by the 3 primary reviewers did not place in the top 50%
 - Read critique critically - did they pick on minor things?
 - Where they specific about what needs to be fixed?
 - Do they want to see this again?
- **Score interpretation**
- **Percentile interpretation - ask the Program Contact**
- **<5 %ile - will get funded**

Understanding the scores

- **Impact/priority score**
- **Percentile score interpretation**
 - Depends on funds available and number of grants that scored high
 - <5 %ile - Almost guaranteed
 - 5-10%ile - very very likely to get funded
 - 11-15%ile - Call Program Contact ask if they would champion it during council
 - If yes, write very detailed and strong rebuttal to the critique -
 - want to make the criticisms seem unreasonable or misguided.
 - Reviewers won't see them they'll be used by Program Contact to argue for the grant during council meeting
 - Council meeting - grants that are borderline fundable get selected based on whether they match programmatic interests of the different centers in the current round.

Parting words

- **Successful grants:**
 - tell a compelling story
 - fill a well-expressed gap in knowledge/technology/therapy/diagnostic need
 - Show that the PI can do the work
 - PI has a strong record in the area
 - Got lucky by ending in the hands of the right reviewers
- **Reviewing grants is not easy**
- **Panels do the best they can**
- **Know when you're spending too much time cycling the same work**
 - be willing/ready to move on to another topic/proposal
- **Read outside your area/Collaborate with others**
- **Hot topics are competitive**
- **In approach impress them w/ consideration of things that show your expertise/knowledge in the area**

Good Luck