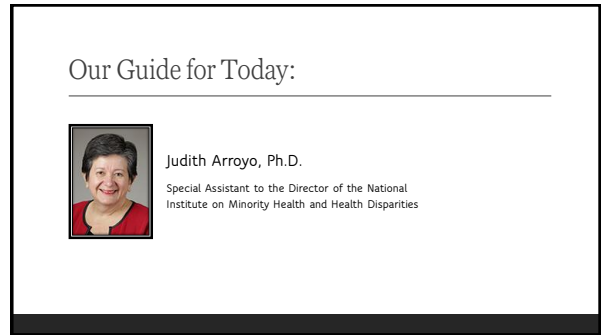
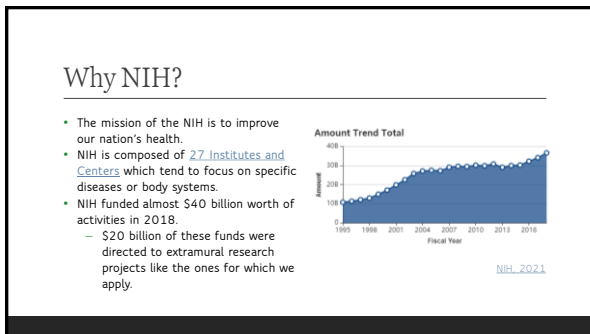




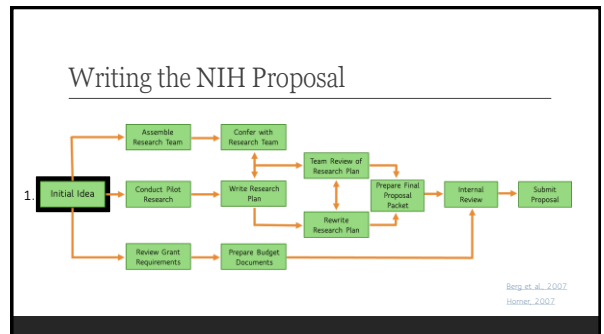
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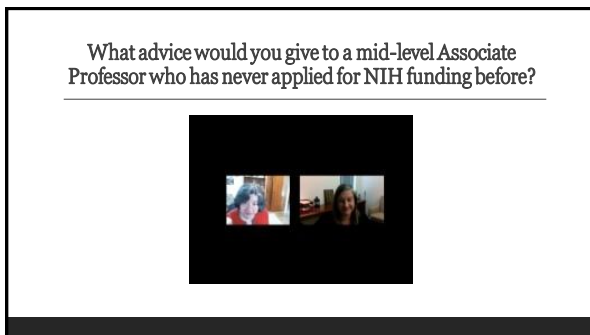
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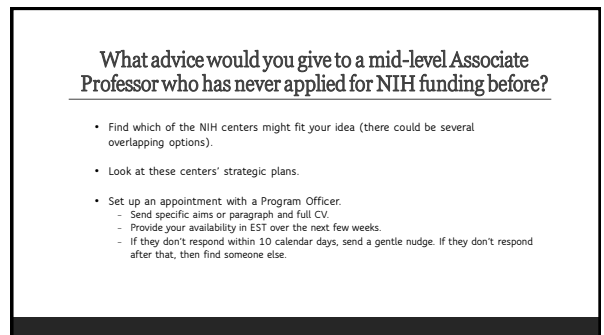
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5



6

Sometimes, researchers are hesitant to talk to their Program Officers. What do you think about that?



7

Sometimes, researchers are hesitant to talk to their Program Officers. What do you think about that?

- Program Officials are public servants. We pay their salaries. Talk to them.
- It pays to shop around. If one PO doesn't like your idea, another might.

8

It seems like the R1 Universities get all the research funding. What about me?



9

It seems like the R1 Universities get all the research funding. What about me?

- NIH realizes that they need to start spreading the wealth around.
- Check out specific grant mechanisms that might target your type of institution (examples: AREA R15).

10

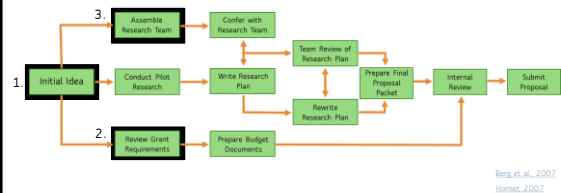
Review Grant Requirements

Let TXST OSP know what your plans are. They can help at each step of the process.

- Which [NIH mechanism](#) is right for you and your idea?
  - Mentored awards (K08, 3-5yrs, \$ varies; K23, 3-5yrs, \$ varies)
  - Small Grants for Pilots and Secondary Data (RO3, 2yrs, \$50K / yr)
  - Exploratory / Developmental Research (R21, 2yrs, \$275K total)
  - Traditional Research Project (RO1, <5yrs, \$500K / yr)
  - Clinical Trial Planning (R34, 1yr, \$100K)
  - Research Enhancement Award (R15, 3yrs, \$300,000 total)
- Read the [NIH instructions](#) for assembling the grant application.
- Pay attention to any special considerations that might apply to your situation.

11

Writing the NIH Proposal



Berg et al., 2007  
Homer, 2007

12

## Assemble the Research Team

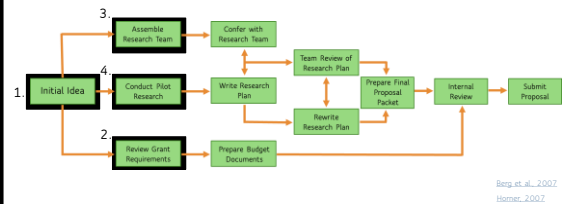
- Establish evidence of collaboration.
- Engage an external, senior consultant.
- Establish your roles early on.
- Check out this [Useful Advice](#) for support letters.



✓ If you haven't already, you should tell your Department Chair what you're up to. You'll need a support letter from them later.

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## Writing the Proposal



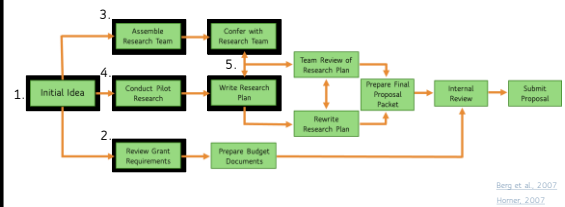
14

## Pilot Research

- Leverage your existing publications; use these to tell a story.
- Show that your idea is feasible.
- Demonstrate that you have already mastered the techniques for the project that you hope to get funded.
- Provide evidence that your team can work together efficiently and produce meaningful results.

15

## Writing the NIH Proposal



16

## How much time should a researcher budget for writing (and resubmitting) a grant?



17

## How much time should a researcher budget for writing (and resubmitting) a grant?

- Spend at least 6 months writing the first submission.
- Plan for at least 18 months to cover first submission, review, sitting out a round, then resubmission.

18

## Research Strategy

- Obtain a copy of someone's previously funded proposal for your mechanism.
- Assume the reviewer will not read your proposal from start to finish.
- Address Significance, Innovation, and Approach for your specific aims.
  - Significance: begin section with an overview paragraph identifying gaps in the literature and how your proposal will fill them.
  - Innovation: begin section with a heading literally asking, "How is this proposal innovative?" and then answer this question.
  - Approach: include introduction paragraph, then headings of justification & feasibility (the pilot data), research design & methods (with power analysis), data analysis plan (organized by hypothesis), expected outcomes, potential problems & alternative approaches, and rigor & transparency, and how variables like sex and age will be addressed (if applicable).

19

## Where can I get an example of a successfully funded proposal?



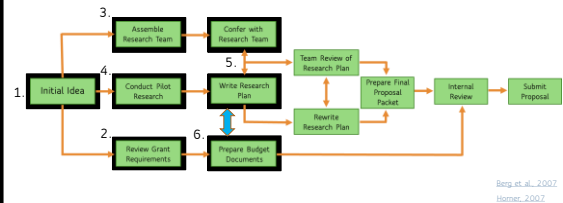
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## Where can I get an example of a successfully funded proposal?

- The best place to get these is from your university's Office of Sponsored Programs.
- You must have the researchers' approval to view the document and it must remain confidential.

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## Writing the NIH Proposal



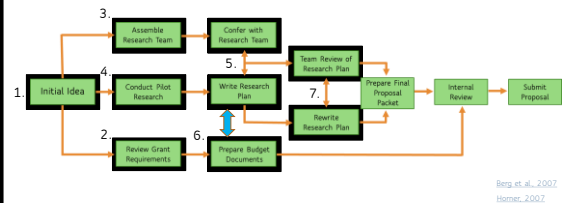
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## Budget Documents

- Obtain budget spreadsheet draft from TXST grants specialist.
- Prepare budget draft in parallel with the research plan.
- Seek external quotes early to allow time for processing, especially in our new COVID reality. .
- Budget an adequate number of course buy-outs to complete the project. (Make sure your Department Chair is aware of your plans early on!)
- Revisit agreements with team members and decide on the distribution of indirect funds.

23

## Writing the NIH Proposal



24

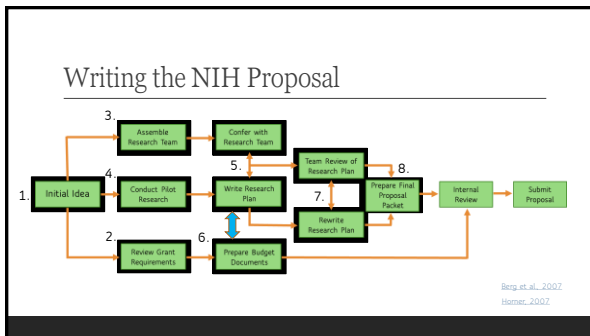
### How important is it to have external review of your proposal?

25

### How important is it to have external review of your proposal?

- It's ESSENTIAL!!
- Give them at least 3 weeks to give you feedback.
- Have at least two people read it:
  - An "informed bystander"
  - Someone from your field.

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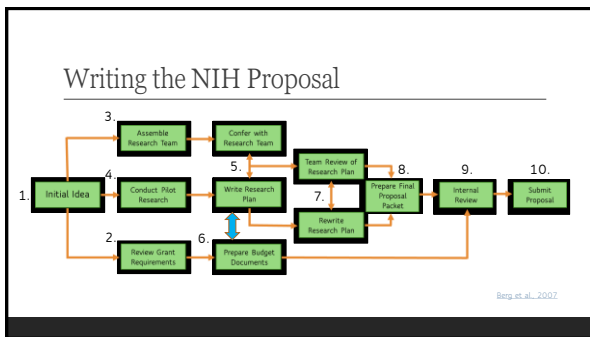


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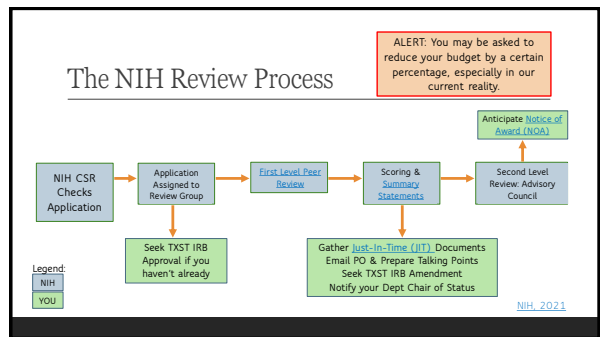
### Prepare the Proposal Packet

- Review the NIH Guidance again and make sure you have all required components of the proposal.
  - Biosketches in [latest format](#).
  - Support letters from everyone involved with the project. Give them plenty of notice of this earlier in the process!
  - Support letter from your Department Chair and anything else that would demonstrate "institutional support."
  - Cover letter indicating which NIH institute(s) and [study section](#)(s) would be appropriate for the application.
  - Don't forget to address any extra components that might be unique to your specific target mechanism (example: student mentoring plan for an R15).

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29



30

### What are the top mistakes that you see people making in the grant-writing process?



31

### What are the top mistakes that you see people making in the grant-writing process?

- The top mistake is failing to resubmit!
  - Don't give up; you might be on the brink of success and not even know it.
- Tips for responding to the review:
  - Pay attention to what they didn't like but keep the parts that they did.
  - Prepare a one-pager and reach out to your Program Officer.
- Another frequent problem is researchers' failure to understand "Federalese".

32

### Promote your Research Agenda

- Network. Get out there and meet some people!
  - We are scientists. Some of us are introverts by nature.
- Attend your national organization's conference.
  - Find a PO at the meeting. Talk to them. Be ready to answer the direct question, "why should we fund this work?"
  - Use professional and scholarly social media platforms to make new contacts.

33

### How important is it to attend scientific conferences in my field?



34

### How important is it to attend scientific conferences in my field?

- Especially for early-career researchers, it is very important to network at conferences. It makes a big difference.
- Bring actual paper business cards and hand them out!
- Be prepared for Program Officers to walk up to your presentation and ask, "why should we fund this work?"

35

### Grant writing is time consuming. How can I keep this from slowing down my publication rate?



36

### Grant writing is time consuming. How can I keep this from slowing down my publication rate?

- Every grant application should yield at least four papers, spaced out over time.
  - The review article (from your grant introduction; write this one even if you don't get funded!)
  - The outreach article (here's how I worked with the community to start the project)
  - Your baseline data (here are some of our preliminary results on this project)
  - The final article (here's the full picture, the one you would normally submit at the end)

37

### COVID has delayed activity on our funded grants. What should we do?!



38

### COVID has delayed activity on our funded grants. What should we do?!

- Talk to your Program Official and keep them updated!
- Explain how COVID has affected your research.
  - Be specific
  - Make sure you communicate your issues BEFORE you near the end of your funding period.

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# Questions?

40

## Activity: Working on your PO Pitch



### A foolproof elevator pitch template



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