NIH Grant writing mechanics

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NIH mechanisms

*RO3: generally two years; limited budget.
• Supports development of research line that should lead to RO1
• Ideal “starter grant” for new investigators.
• no pilot data needed
• R21: two year limited budget
• “high risk/high yield”.
• supports innovative work with potential to impact many areas.
• Pilot data a plus but limited expectations.
• RO1: Major investigator-initiated mechanism. Five year limit.
• Pilot data is important.
• New investigator status is weighted but proposal needs clear theoretical/clinical relevance, solid methods, and clear analysis plans.
• K-Award: ideal mechanism for young researchers to develop new skill sets.
• Needs both clear training plan and scientific excellence.
• Multi-discipline and multi-site are pluses.
Getting started

• * get copies of successful proposals (as many as possible)!
• Identify multiple readers and use them! (some with content area expertise, methodological/stats expertise, and grant writing skills)
• Leave plenty of time for revisions.
• Regular team meetings to refine and revise.
Theoretical relevance

• Theoretical framework, if put forward must deliver:

• Clear explicit hypotheses with discussion of how design and possible outcomes go to confirmation/disconfirmation; consider alternative theories or models.
Clinical relevance

• If clinical sample is included:
• Clear up to date literature review on the clinical issues with focus on how outcomes inform clinical theory or practice.
• **Not an “add-on”**
• Thorough battery to insure matching.
• Consider treatment as experiment.
• Include measures, when possible, where clinical sample should be comparable to controls.
The Proposal

• Aims should meet the “grandmother” criterion.
• Background and significance: clear, succinct, up to date in references, link each section to the methods that follow.
• Pilot data: detailed as in MS; connect to the following methods section (be telegraphic).
• Methods: reviewer should be able to do the study; stats must be clear, alternative outcomes and implications a plus.
• Do not ignore human subjects issues.
• Do not rely on appendices for anything other than background materials.
Revisions

• DO NOT GIVE UP!!
• “unscored” is not necessarily “kiss of death”
• Be responsive to reviews. Justify those criticisms or suggestions that you do not accept.
• Positive tone.
• Look for common criticisms across three reviews.
Additional thoughts

• Inter-disciplinary work is valued but need to find common language and real involvement from each discipline in the writing.
• Longitudinal designs are valued.
• Analyses that are dynamic and go beyond simple significance testing is valued.
• Neuroimaging, genetics, etc., must pass the “value added” test. No points just for having these anymore.