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What makes a compelling NIH grant proposal?

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Background

- I am commenting as an individual
- Participated in many successful, and even more unsuccessful, NIH grant applications

 As Co-I and some as PI
- Participated in many NIH study sections
 - I have read many, many, many, many, many, many grant applications ;)





NIH grant basics

- Review is conducted by the Center for Scientific Review
 - Most grants are *scored* in a Study Section
 - E.g. BMRD
- Funding decisions are made by an institute or center (27 of them).
 - Talk to your Program Officer at e.g.
 - NCI- National Cancer Institute
 - NIA- National Institute on Aging

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UC San Diego



NIH grant basics

- Each institute has its own payline
 Score below which funding is likely
- Early Stage or New Investigator PI's have a funding advantage
- There are specific RFA's and PA's, but most applications are to the parent PA
 - I.e. the general request for R01 or R21 proposals





NIH websites are a resource!

- The Center for Scientific Review
 - https://public.csr.nih.gov/ForApplicants
 - https://grants.nih.gov/grants/grants_process.h tm
- StatFund at NCI
 - https://statfund.cancer.gov/links.html
 - https://statfund.cancer.gov/application/
- Your center's website





Learn about review criteria

| Overall Impact: The likelihood for a project | to | Overall Impact | High | Medium | Low | | |
|---|----|---|--|--|-----|--|--|
| exert a <u>sustained</u> , <u>powerful</u> influence on research field(s involved | | Score | 123 | 456 | 789 | | |
| Evaluating Overall | | a problem of ance/interest in ay have some or | may be probler importa field, b weakno criteria the ove mediur e.g. Ap may be probler importa field, v | e.g. Applications may be addressing a problem of <u>high</u> importance in the field, but weaknesses in the criteria bring down the overall impact to medium. e.g. Applications may be addressing a problem of <u>moderate</u> importance in the field, with some or no weaknesses | | e.g. Applications may be addressing a problem of <u>moderate/high</u> importance in the field, but weaknesses in the criteria bring down the overall impact to low. e.g. Applications may be addressing a problem of <u>low</u> or <u>no</u> importance in the field, with some or no weaknesses. | |

should always be considered.





Be a reviewer!

 https://public.csr.nih.gov/ForReviewers/Be comeAReviewer/ECR

Early Career Reviewer (ECR) Program

The ECR Program develops qualified scientists without prior CSR review experience into well trained reviewers to advance their careers and enrich the existing pool of NIH reviewers.





Personal comments

Each reviewer will read 9 or 10 grants

Reviewers will not all be expert in your area

Make it easy for reviewers to grasp the main new ideas and the specific impact of your proposed work.





Personal comments

- Be clear, be concise
- Situate the work in the literature
- Tell us WHY IT IS IMPORTANT
- Demonstrate REAL WORLD impact
 - Applications should be convincing
- Convey statistical ideas
 - With adequate technical detail
 - But make the ideas accessible





Suggestions

- Have others read and comment on your application
- Revise, revise, revise
- Persistence in submitting is the best long term strategy
 - It is rare to be funded on first try





Good luck, have fun, learn a lot!!



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