

NIH Grants: How to and why with secondary data analysis

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Outline

- ▶ **Why, What & Who**
- ▶ **NIH Funding Mechanisms**
- ▶ **Specific Funding Opportunities**
- ▶ **Amy's Tips**

Why bother?

- ▶ Impacts salary, promotion, tenure, and reputation
- ▶ Generates publications
- ▶ Grants + Pubs = Power
- ▶ Grants = Freedom
- ▶ Control your destiny
- ▶ Enact your vision

Do your homework before you submit

- ▶ Think novel but not too far outside the box
- ▶ NIH Guide listserv:
<http://grants1.nih.gov/grants/guide/listserv.htm>
- ▶ Search for current Funding Opportunity Announcements (FOAs)
- ▶ CRISP (Computer Retrieval of Information on Scientific Projects database):
<http://crisp.cit.nih.gov>
- ▶ Contact a Program Director to discuss

Program Directors are your “Friends”

- ▶ Your PD’s are there to answer questions (set up a time to talk):
 - ▶ Identify resources to locate funding opportunities
 - ▶ Direct investigators to grant mechanisms that match the goal or intent of their projects and experience
 - ▶ Have knowledge of grant portfolio
 - ▶ Attend Study Section reviews (can follow-up after review of grant)
 - ▶ Refer you to appropriate program staff at NCI and other NIH institutes
- ▶ And remember that **80%** of NIH funded research is investigator-initiated

Types of Grant Mechanisms

- ▶ R03 – Small Research Grants
- ▶ R21 – Exploratory/Developmental Grants
- ▶ R01 – Research Projects
- ▶ R13 – Conference Grants
- ▶ P01 – Research Program Projects
- ▶ K-Awards NCI – Training Awards

<http://deainfo.nci.nih.gov/flash/awards.htm>

R03

Small Research Grants

- ▶ Provide short-term awards for testing new techniques, secondary analyses of existing data, and development of innovative projects that could provide pilot data
- ▶ Characteristics:
 - ▶▶ **Up to \$100K for 2-years (nonrenewable)**
 - ▶▶ **2 submissions—initial and 1 amended**
 - ▶▶ **Special NCI review committee for behavioral research PAR**
 - ▶▶ **Only in response to Program Announcement (not part of the blanket NIH R03)**

R03

R21: Exploratory/Developmental Grants

- ▶ Support development of pilot projects, feasibility studies, and intervention studies that are creative, novel, high-risk/high-payoff, and produce innovative advances
- ▶ Characteristics:
 - ▶▶ **Up to \$275K for 2 years (nonrenewable)**
 - ▶▶ **2 submissions—initial and 1 amended**
 - ▶▶ **Only in response to Program Announcement (not part of the blanket NIH R21)**



R01: Research Project Grants

- ▶ Traditional investigator-initiated grant providing support for discrete, specified research
 - ▶▶ **If \geq \$500K/year, need to request NIH Center for Scientific Review (CSR)/Institute Program Director approval to submit—at least 6 to 8 weeks before submission deadline for NCI DCCPS**
 - ▶▶ **Up to 5 years (usually 3–5 years)**
 - ▶▶ **2 submissions—initial and 1 amended**

R01

PA's to look at for secondary data analysis

- ▶ PA 06-151 (R21) Secondary analyses in obesity, diabetes, digestive, and kidney diseases (NIDDK)
<http://grants.nih.gov/grants/guide/pa-files/PA-06-151.html>
- ▶ PA 06-180 (R03) NIH Small Research Grant Program (multiple NIH IC's but not NCI)
<http://grants.nih.gov/grants/guide/pa-files/PA-06-180.html>
- ▶ PAR 09-003 (R03) Small Grants for Behavioral Research in Cancer Control (NCI-specific)
<http://grants.nih.gov/grants/guide/pa-files/PAR-09-003.html>

PA's to look at for secondary data analysis (Cont'd)

- ▶ **PA 06-351 (R21): Exploratory grants for behavioral research in cancer control (NCI)**
<http://grants.nih.gov/grants/guide/pa-files/PA-06-351.html>
- ▶ **PAR 07-019 (R03): Understanding and promoting health literacy (multiple institutes including NCI)**
<http://grants.nih.gov/grants/guide/pa-files/PAR-07-019.html>
- ▶ **PA 08-167,168, 169 (R01, R21, & R03): Secondary analysis of existing alcohol epidemiology data (NIAAA)**
<http://grants.nih.gov/grants/guide/pa-files/PA-08-167.html> (R01)

PA's to look at for secondary data analysis (Cont'd)

- ▶ **PA 07-082 (R01): Risk Factors For Psychopathology Using Existing Data Sets (NIDA, NIAAA, NIMH)**
<http://grants.nih.gov/grants/guide/pa-files/PA-07-082.html>

- ▶ **PA 08-252 (R03): Archiving and development of social behavioral datasets in aging related studies (NIA)**
<http://grants.nih.gov/grants/guide/pa-files/PA-08-252.html>

- ▶ *****Accelerating the Pace of Drug Abuse Research Using Existing Epidemiology, Prevention, and Treatment Research Data (PAR-R01)- NIDA & NCI**
Receipt dates: February & June 2010

“Amy’s Tips”: Develop Your Idea

- ▶ Generate preliminary data (need pilot data for R01s!)
- ▶ Enlist collaborators, include letters of commitment
- ▶ Review successful proposals of other colleagues

“Amy’s Tips”: Preparing the Application

- ▶ Clear, concise writing style
- ▶ Be focused and don’t rush
- ▶ Read instructions!
- ▶ Never assume that reviewers “know what you mean”
- ▶ Explain your rationale/choices
- ▶ Critique, critique, and critique again

“Amy’s Tips”: Preparing the Application (cont’d)

- ▶ Concentrate on specific aims
- ▶ Generate especially strong methods
 - Does it work? Prelim data
 - Define design, analytic model, and primary outcome
 - Link outcomes to specific measures
 - Use VALIDATED instruments!
 - Detailed recruitment and retention
 - Defuse attacks by identifying limitations
- ▶ Anticipate human subject issues

“Amy’s Tips”: Other important factors

- ▶ Include analyses on:
 - ▶▶ Mediators/moderators
 - ▶▶ Process
 - ▶▶ Cost-benefit
 - ▶▶ Dissemination/diffusion
- ▶ Get outside consultants and/or subs
- ▶ Assess and adjust for intervention fidelity

“Amy’s Tips”: Study Sections

- ▶ Look at CSR’s website to determine most appropriate study section and discuss with Program Director
- ▶ Cover letter
 - ▶▶ Put in suggestion for study section
 - ▶▶ Institute(s) for best assignment
 - ▶▶ Name of PD (Optional)
- ▶ Don’t put too much energy into these options

Key Deadlines

- ▶ New R01's: Feb 5, June 5, and Oct 5
- ▶ New R03's and R21's: Feb 16, June 16th, and Oct 16
 (note NCI small grants for behavioral research:
 April 20, Aug 21, and Dec 22, 2008)
- ▶ Resubmission/Competing continuation:
 one month after above dates
- ▶ SBIR/STTR: April 5, Aug 5, and Dec 5

Other Key NIH web-links

- ▶ **Electronic Submission Intranet**
▶ <http://odoerdb2.od.nih.gov/ElectronicSubmission/index.htm>
- ▶ **Electronic Submission of Grant Applications**
▶ <http://era.nih.gov/ElectronicReceipt/>
- ▶ **Electronic Submission FAQs**
▶ <http://era.nih.gov/ElectronicReceipt/faq.htm>
- ▶ **Funding Opportunities and Notices**
▶ <http://grants.nih.gov/grants/guide/index.html>
- ▶ **Parent Announcements (For Unsolicited or Investigator-Initiated Applications)**
▶ http://grants.nih.gov/grants/guide/parent_announcements.htm
- ▶ **Standard Due Dates for Competing Applications**
▶ <http://grants.nih.gov/grants/funding/submissionschedule.htm>

The New Review Process: What's Changing

- ▶ Review and scoring process
- ▶ Clustering of New Investigators
- ▶ Number of allowed amended (e.g., resubmitted) applications
- ▶ Application: Not quite yet...

The New Review Process: Scoring

- ▶ 9-point scale:
1= Exceptional ----- 9= poor
- ▶ Online posting of initial reviews to Study Section
- ▶ Following discussion, all committee members give final overall impact score
- ▶ Average score x 10: Range 10-90

The New Review Process: Enhanced Review Criteria

- ▶ Assigned reviewers preliminary score on 5 criteria
 - *Significance
 - *Investigators
 - *Innovation
 - *Approach
 - *Environment
- ▶ Do Not have to be strong in all 5 areas
- ▶ Reformatted summary statements

The New Review Process: New Investigators

- ▶ Clustered during review
- ▶ New subset: “Early Stage Investigators”
 - * ≤ 10 years degree
- ▶ Goal: Support New Investigators at same rate as Established

The New Review Process: Resubmission

- ▶ ONLY ONE RESUBMISSION
- ▶ NIH Plans to perform detailed evaluation of the impact of these changes

