Presenting a Budget for a Grant Proposal

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Agenda
a) Introduction to budget sections
   a) Budget Page (by year and by total)
   b) Budget Justification
b) Planning a budget for research or other kinds of grants
   c) Typical budget pages in a grant proposal

Grant BUDGETS

• Where you itemize the cost of carrying out the research (or other activity)
• Presented by major expense category as well as by years of the grant (Year 1, Year 2, Year 3, etc.)
  – Categories are also called Line Items
  – Budgets have Direct Costs and Indirect Costs (a.k.a. Facility and Administrative)
• 2 parts of the Budget for a grant: Budget Ledger and Budget Justification
• Reviewers use this to assess the value and reasonableness of the work proposed

Key Grant Writer Issues

• What will it cost to carry out my project?
  – Salary
  – Supplies (lab, computer, data access, etc.)
  – Travel
  – Equipment
  – Patient costs (patient samples, reimbursement, etc.)

• Where will I get the money to do my project?
  – Some / all from the grant
  – The rest from somewhere else

Key Reviewer Issues:

• Do you have a realistic budget?
  – Does it make sense to a typical reviewer?
• Have you accounted for everything that might incur an expense?
• Does your budget exceed the amount offered by the funder?
  – If so, where will the balance of funds come from?
• Should I ask for the maximum amount offered?
  YES, if you can justify the request.

Budget Vocabulary

• "No Budget Necessary" → set amount for stipend and tuition (as in NIH F grants)
• Itemized Budget → show each category and explain; typically a ledger or electronic form with formulas embedded in it
• Line Items → the categories in the budget
• Budget Justification = narrative component explaining how you will spend the money
• Direct Costs = how much you get to do your work (excludes F&A)
• Indirect Costs = Facilities and Administrative (F&A) = Overhead (goes to institution)
• Total Costs = Direct + Indirect
• In-kind / cost-sharing
• Matching funds (sometimes required by funder)
Ways to Fund your Research

100% Grant Funded

75% Grant Funded

Show all sources of funding

- In the Budget Justification, show what it costs to run the entire project and where all the money will be coming from
- No need to show what it costs to run the ‘parent project’ but rather what costs the parent project is going to cover for your project
- Do not show non-grant requests in Budget ledger
- Do not refer to ‘contingent’ sources of funding

NIH Form Page

Use an excel spread sheet to calculate your budget (Google NIH budget calculation)

BUDGET JUSTIFICATION

Explanation in narrative form of the cost of all the items and what they will be used for
- Explain why and when specific items are required
- Some costs only occur in a single year (e.g., buying a freezer)
- Use narrative writing to explain how you calculated your cost estimates
  - Competitive bid (e.g., subcontracts)
  - Reviewed top 5 vendors online (e.g., computer expenses)
  - Standard per diem as per university, funder, etc.
  - Calculated for increases due to inflation, anticipated increases in salary
  - Salary caps
- For a large grant, this section is like a mini-grant within a grant

Planning a budget

1. What is the unit of currency for your funder?
2. Who is the fiscal agent for the award?
   - Travel Award – You (typically a student) may get the check
   - Research grant or contract with pharmaceutical firm – University gets the funds
   - Health care services or NGO funds – Health Department may get the funds
3. What will it cost to do the ENTIRE study?
   - Is your research a small part of a larger study?
   - ‘piggy backing’ is ok and cost effective (e.g., T cell responses to patients in a TB drug study), i.e., leveraging a parent study
   - Describe only the expenses associated with the grant proposal under consideration (T cell study) not the larger project (drug RCT).
4. Does the study involve any usual medical care?
   - Funds for usual medical care are not requested as part of a grant budget but need to be described nonetheless.
   - Explain that funds are NOT requested for these activities and that these activities will be covered as part of usual care or in-kind:
     - HIV testing which is part of public health activities
     - Childhood immunizations – part of usual care at the health center
   - Funds ARE requested for all experimental or research activities:
     - Assay Vitamin D levels in patients tested for HIV
     - Repeated chest x-rays for TB for patients in a drug trial
     - Additional 'research MRI' for children with Crohn’s disease

Planning a budget

Sample Size: How many patients or participants or animals or blood draws or x-rays will you need to complete the project (must factor in attrition, dropout, death, etc.)?

Patient Costs: reimbursement, medical care, medical supplies

Key Personnel and Staff: Who will do the work?
   - Who must receive salary for this work?
   - Can you access other resources for salary - in-kind?

Supplies: have on hand, need to purchase?
   - Today’s cost to purchase new supplies (unit cost)

Physical space: is needed to conduct the project?
   - clinic, lab, office, do you need to pay rent?

Travel: Conferences, travel to see participants

Planning a budget – other issues

Justifying a $15,000 research project

You must have the $5,000 in hand (or at least a promise in writing) before you submit the proposal. You cannot ‘fund raise’ for the additional $5,000 or have it contingent on another grant that is not yet funded.

Describe what it costs to do the $15,000 project by Budget Category

| Material and Supplies: $3,000 laboratory analyses |
| Other Direct Costs: $2,700 software license and maintenance fees, analysis consulting fees |
| Other Personnel: $4,300 research technician salary |
| $15,000 must be presented and justified in the budget section |
| $10,000 is itemized in Budget ledger |
| $5,000 PI salary (from Fogarty in-country training award) |

NIH Budget Categories

A. Senior/Key Person (professional level contributors)
B. Other Personnel (post doctoral, graduate students, undergraduate, staff, outreach workers, technicians)
C. Equipment (for any item > $5,000)
D. Travel
E. Participant/Trainee Support Costs (tuition for students)
F. Other Costs (materials and supplies, publication costs, consultant services, etc.)
G. Direct Costs (Total of A-F)
H. Indirect Costs (rate is pre-set; also called Facilities and Administrative Costs)

A. Senior/Key Personnel (professional level contributors)

- Calculated as % effort or as ‘person months’
  - 25% of a 9 month academic year appointment equals 2.25 person months (9 x .25 = 2.25)
  - 10% of a 12 month calendar appointment equals 1.2 person months (12 x .10 = 1.2)
  - 35% of a 3 month summer term appointment equals 1.05 person months (3 x .35 = 1.05)
F. Other Direct Costs

1. Materials and Supplies
2. Publication Costs
3. Consultant Services
4. ADP/Computer Services
   - Cost of computer-based retrieval of scientific, technical or educational information
5. Subawards / Consortium / Contractual Costs
   - Costs for a foreign collaboration site
6. Equipment or Facility Rental / User Fees
7. Alterations and Renovations
8. Other
   - Patient care, patient reimbursement
   - Animal purchase and care

Emory Global Health Institute Field Scholar Awards

Budget - Be very clear about how much the project is going to cost. Budget cannot exceed $4,000. Line items must include travel costs, project costs, source of additional funding, etc.

BUDGET
- Travel Costs: This includes a round trip plane ticket from Atlanta, Georgia, USA, to Nairobi-Jomo Kenyatta International Airport, Kenya, transfers, etc. @ $2,500.
- Room and Board: This includes 9 weeks at a hostel in Nyando District in western Kenya @ $1,300.
- Project costs: These costs will be covered by the senior investigator’s research funds through the U.S. Center for Disease Control and Prevention. No funds are requested.
- Source of additional funding: There is no source of additional funding.
- Total Cost = $3,800

$50,000 research grant

Budget Examples

1. Personnel
   - To be named, Study Coordinator (40% effort; or 4.8 calendar months): The Study Coordinator will be chosen based on prior experience in hospital-based studies with critically ill subjects. He/she will be responsible for identifying and consenting study subjects and the day-to-day performance of the protocol at the Emory Hospital site. He/she will work with Dr. Ziegler’s U01 project Lead Study Coordinator Dr. Gautam Hebbar and the hospital nutrition support team members with regard to day-to-day enteral and parenteral nutrition support orders based on nutrition support team clinical and metabolic assessments of patient progress, including transition to enteral from parenteral feeding. He/she will also be responsible for data handling, including preparing chart documents for infection adjudication by Dr. Blumberg.

   - To be named, Pharmacist (20% effort; or 2.4 calendar months): This will be a licensed pharmacist with prior experience in preparation of parenteral nutrition solutions. He/she will work closely with the unblinded Pharmacist Technician in the EIH Department of Pharmacy IV room and the EIH Research Pharmacy to assure preparation of the appropriate blinded enteral and parenteral nutrient solutions according to the randomization of each study subject.

F. Other Direct Costs (continued)

2. Equipment (only in Year 1) - Support is requested for the purchase price ($20,212) of a state-of-the-art Vmax Encore 2N portable Indirect Calorimetry System (Viasys Healthcare, Yorba Linda, CA) to carry out Aim 2 of the project. This cost includes a computer and printer, software, gas calibration containers and onsite training for the system. This is a Year 1 only expense.

3. Supplies - $8,500 is requested for general laboratory supplies; NMR supplies for metabolomics analysis. Supplies will increase in Y2 because of the increased sample size from 500 – 750 samples/yr.

4. Travel - $1,288 is requested for the PI to attend the required annual NH meeting for investigators in Washington, DC on December 1-3, 2010. This includes round trip airfare ($448); hotel at conference rate (2 nights @ $210) and per diem for 3 days ($308). Travel in Y2 will include an additional trip to the National Nutrition meetings in November 2011.

5. Other Expenses (only in Year 2) - $8,500 is requested for research pharmacy charges ($2,500) and LC-FTMS and 1H-NMR machine time fees for metabolomics analysis ($6,000).

Use commas in $5 amounts >$999; don’t show cents

$50,000 research grant

Budget Justification

Typical “Other Expenses” in Justification

DATA STORAGE

REDCap is an open source software program supported through a consortium lead by Vanderbilt University. REDCap is a metadata driven electronic data capture system available for investigators to use for form-based data collection. The system is supported by the Emory Research and Health Sciences IT division and hosted through Emory University Technology Services (UTS) on a virtual machine (VM) environment with nightly backup and full redundancy for high availability and reliability. REDCap is a web-based system with the Apache/PHP web server located in the DMZ and the MySQL database backend hosted in a HIPAA compliant secure data zone. Access to the system requires an Emory University or Emory Healthcare user account with external users supported using Emory University sponsored accounts. $600 per year for REDCap maintenance fees plus $65 per hour for consulting. We estimate 5 hours of consulting, for a total base of $325 in consulting fees per year. Fees and consulting rates have been adjusted for a 3% increase for each project year (based on Y1 total cost of $325). REDCap fees for all project years as anticipated as follows: Y1-$325; Y2-$393; Y3- $481; Y4-$511

Total Data Storage Fees: $1,870 for all project years.

March 3, 2014
Budget Justification of Laboratory Supplies

Laboratory Supplies:
Calculations are based on 764 participants enrolled over 4 years with 3 visits per patient (at baseline, 30 days and 120 days) and one blood sample per visit. Enrollment rate is anticipated to be 16 patients per month. A 3% increase each year is incorporated into the budget for sample analysis to anticipate annual increases in costs from the supplier. hs-CRP is provided at no cost to the study because it is usual care in the patient’s lipid profile determination.

Supplies for Qualitative Research

SUPPLIES: Year 1 only
Digital Recorders: Three digital voice recorders are needed to conduct in-depth interviews. The digital recorders are estimated at @ $212.50 each for a total cost of $640 in Year 1 only. Two transcription kits are needed @ $150 each for a total of $300 in PY01 only. We request fund for software to manage qualitative data. Three NVivo licenses are estimated at $650 each for a total of $1,950 in Year 1 only.
Total Supply Costs = $2,890

Other allowable expenses
- Purchasing a license to use a dataset
- Paying subjects/patients for their participation (reimbursement / honorarium)
- Travel to and from a research site (for staff and for patients/subjects)
- Travel for research assistant to and from remote sites to collect patient data
- Copying for chart review
- Paying for x-rays, scans, other ‘research only’ medical expenses
- Purchasing software for specialized data analyses such as focus group transcripts
- Purchasing equipment for intervention studies, such as the WatchPat, a portable monitor for screening and diagnosis of sleep related breathing disorders.
- Pharmaceuticals required for the research study, such as nicotine patch for quitting smoking

Summary
- Use Excel or similar spreadsheet software to make a budget calculation template (these can be found online)
- Check, re-check and triple check your math as well as the budget
  - Do all the grant proposal activities agree with the budget items?
  - Assume the funder does not know what it will cost to do this work – you must tell them everything.
  - There should be no ‘new news’ in the budget
- Are all your expenses allowable by the funder? When in doubt, ask for clarification.

Enjoy the Budget!