Budgeting Your Research: Budget Strategies that Support Your NIH Proposal

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Principal Investigators Association™

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Best Regards,

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Designing the Budget

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When is budget discussed?

- During the review process budget is discussed, AFTER the science and after the human subjects, vertebrate animals.
- IT IS NOT PART OF THE SCORE!!!!
- However, a faulty budget could be used against you in the sense that you are NOT realistic about costs—this speaks to your credibility.

Budgets must be compliant

Government has rules about what costs are allowed and what are not.

For example, secretarial costs are NOT allowed.

However, you could pay a secretary to record data—administrator costs are allowed for program projects, but NOT for other grants.

What the Fed says:

Costs must be:

Allowable, Allocable, reasonable, necessary and consistently applied.

Funding Opportunity Announcement

- Each FOA will have budget criteria, READ THEM.
- Some specialized applications have different limits—say, no construction allowed, spending caps on certain costs, such as travel.
- Identify costs that are necessary and reasonable.
- Round to whole dollars and use US dollars.

More budget tips

- Request a reasonable amount
- Reviewers will judge whether the costs for the amount of work proposed match
- Cost sharing (where your institution pays something into the pot) does not usually impact the outcome of your proposal

EXCEPT---Shared instrument grants!!!!!

Designing the budget

No one budget for all purposes—depends on type of grant, requirements of your institution.

Biggest differences

R21 Budget is fixed! 275 direct for 2 years

R01 Can be Modular up to 250K

Over 250K, then extensive justification

Over 500k, need permission from NIH

Funding opportunities

Each opportunity will have budget criteria listed and LIMITS!!

In some, there may be NO construction, in others travel expenses may be limited.

Total funds may be limited.

Pay Attention to Mechanism, funds available, cost sharing, and funding restrictions in the request document!

Costs are costs?

- NO!!
- DIRECT costs are those related to the direct performance of the grant
- INDIRECT costs are those NOT associated with a particular research project.

~~Allowable Indirect costs (AKA~~ financial & admin (F&A) costs.

- These costs are negotiated by each institution to get a rate or percentage of the direct costs.
- Most have a modified total direct cost (MTDC) base which excludes: equipment, student tuition, research patient costs, rent and sub-award charges (after the first 25K)—Contact your institution for this amount.
- To calculate if your costs are 500K or greater—DO NOT include sub-award indirect costs in the base, but DO include all other direct costs, including equipment

Forms R US

- SF424 application guide has TWO optional budgets
- R&R Budget DETAILED
- Simplified PHS398 Modular budget NOT DETAILED

RULES FOR USING R&R budget

MUST USE IF:

Direct costs MORE than 250K

ARE NOT applying for R01, R03, R15, R21, R34

Not based in US

Rules for modular budgets

Modules are 25k increments.

Your institution likely requires more detail than the NIH (mine does) for a modular budget.

Keep in mind that the dollar amount does not change over time, so if you increase salaries by 3%, that money will come from somewhere else.

Rules for Modular Budgets

- Personnel Justification—name, role and person-months.
- Consortium justification—include total costs—direct plus indirect round to nearest 1000 dollars for each.
- If Foreign, justify.
- Additional detail may include explanation for numbers of modules, any work off site.

- THAT'S ALL, FOLKS!!

Key components of budget page

- Personnel
- Consultant costs
- Equipment
- Supplies (Itemize by category)
- Travel
- In patient care costs/outpatient care costs
- Alterations and renovations (Itemize by category)
- Other expenses (Itemize by category)
- Consortium/contractual costs

Rules for Detailed budget

- Personnel is pretty similar to modular—just need more detail and more justification.
- Put effort, (remember salary caps), fringe, then list in detail the Senior/Key personnel and define in detail what their roles are in proposal.
- Be sure and list post docs and graduate students and detail their role.

  Level of detail post doc X will perform the biochemistry experiments, do western blotting and Elisa assays for Y protein.

Personnel

- Last name, first name Role on Project Cal months.
- Cal Months say you want 25% of your salary—that would be 3 calendar months, 50% would be 6 months

  To derive calendar months, take the percentage that you want, say 40% then multiply this by 12 (.40 x 12= 4.8 months.

Personnel costs

Next: Inst base salary (current NIH cap is 199K)

Salary requested (should match Cal Mos)

Fringe benefits (depends on job description--set by inst.)

Last line is total amount requested for each person

Example of personnel justification

- Miguel Orozco PhD—PI, 6.0 cal. Dr. Orozco will have primary responsibility for the overseeing the project, design, plan and direct the efforts of the postdoc and graduate student requested.
- Jesse Owens PhD—Postdoctoral Fellow, 12.0 cal. Dr. Owens has been in Dr. Orozco's lab for about a year, with expertise in proteomics. She will prepare materials for the proteomic experiments and analyze the data.

Personnel as a percentage of Budget

- About 60-70% of total direct costs are usually due to personnel.
- Beware of under or over estimating these costs
- Some reviewers are pretty cognizant of what these costs are

Consultant costs

- Need to be reasonable based on the amount of time needed—including whether needed for all years.
- For example, if the consultant is to help analyze the data—maybe you don't need them the first year—but starting the second year.
- Does the consultant need travel to do the work?

Equipment costs

- The GOVERNMENT has a definition!
- Is it over 5K, expected to last more than 1 year?
- Necessary equipment —with large budget justify.
- Keep in mind that equipment costs are not usually recurrent—if you leave in the costs and reviewer notices, leaves a bad taste.

Equipment costs

- If you already have 5 centrifuges and 5 PCR machines (as listed in your resources pages)—it will be hard to justify needed additional equipment.
- But, if you really need a dedicated centrifuge, PCR machine, say to put in BSL3 space, then need to justify—explain it—don't make the reader work!!
- Without this, NIH may disallow cost

Equipment costs

- General purpose equipment, say computers used by many projects are NOT acceptable for direct costs, but should be factored in indirect costs—ie YOUR institution should use that money to help you.
- Gripe, gripe----seems most of us do NOT know where that money goes!
- Buy computers? Fat chance.

Equipment justification

- However, if a dedicated computer of stellar nature is required and you can justify it—then put it in.
- Don't have to have price quote for equipment for most grants (except instrumentation grants) but wouldn't hurt to put in if you have.

Travel costs

- Usually travel to scientific meeting, one or two people specific WHO will go.
- Travel to meet with collaborators.
- Travel for a postdoc or graduate student to learn a technique.
- Travel to collect specimens

Travel Justification

- Need to tell the reader why travel is necessary---ie how it will benefit grant—to present the research, NOT to see and be seen!!
- Institutions usually have travel policies, so must follow or follow federal government ones.

  (could only take US carriers to South Africa—cost 1000 dollars more)

Trainee costs

- Leave blank unless stated otherwise in the FOA.
- Student tuition remission can be entered in section called “other costs”.

Patient costs

- These could include reimbursement for parking or travel expenses
- Standard of care costs are not usually included in the budget.
- If a real clinical trial, funding mechanism is different from R01, etc.

Supplies

- Consumables—like plastic-ware, media, antibodies, supplies for molecular biology, Elisa assays
- Round off the numbers—unless:

Some grants do a cost per patient or cost per test—in which case the cost of the components should be estimated—with a set fee per test.

Supplies

- Ballpark estimate per person working in the lab is 15-20K per person.
- If you ask for more or less, likely to raise a flag. Speaks to credibility.
- Some high budget items---primates!!, anything Omics

Alterations and renovations

- Those required to do the work—ie you need a BSL3 space to do the work—you might be able to justify this kind of renovation.
- In most cases, renovation budget is not there.
- If you need this, best to talk with program officer about best approach.

What are other costs?

User fees on an instrument—for example, you buy time on for usage of and instrument-- calculate numbers of hours needed.

Service contracts on existing instruments.

Animal housing costs.

Biohazard disposal costs.

Publication costs, shipping costs.

Tuition

Justify the other costs

- By giving the per diem charges for care, multiplied by numbers of animals (and the vertebrate animals at end must match).
- Fee for service usage needed for grant.
- Service contracts on existing instruments needed for the grant.
- Publication costs—estimate 2-3 papers per year.
- Shipping, Biohazard costs—must detail this.
- Tuition—who the student is and their role in project.

Consortiums/subawards

- Direct costs: Total costs of the sub-award including indirect costs to institution
- Indirect costs: F and A costs as above are NOT part of direct cost base when deciding if you can use modular form or the prior approval (more than 500K)
- If consortium is foreign or international org, can only be 8%.
- If with for-profit entity, must have a negotiated rate before can charge costs.
- For SBIR and STTR its 40% capped.

Consortium justification

- The budget should be justified at same level of detail.
- The science to be done should be addressed.

Budgeting over the years

Include % increase per year, for inflation/raises

Usually suggested by your institution—2-4% increases per year.

Institutional official usually puts that percentage into the budget over time.

Rebudgeting

- Happens all the time
- Goes through institution
- Can justify in progress reports
- Usually no problems with rebudgeting.

Best advice for budgets

- Read instructions
- Be realistic—if its in your budget, the work should be in the grant!!
- Enlist help from your institution

- Get funded!!