Preparing a Proposal Budget



Celia M. Elliott Department of Physics *University of Illinois cmelliott@illinois.edu*

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Costs in a proposal budget must meet four criteria:

- "Allowable"—do funder and institutional policies *allow* you to charge this expense to a grant?
- "Allocable"—can you prove that this expense was incurred solely to benefit the project?
- "Reasonable"—would a prudent person pay this amount for these goods or services?
- "Consistent"—does the institution always treat these expenses this way?

Your budget must conform to your technical description

Go through the narrative and highlight every activity that has financial implications make a list of everything that will have to be paid for during the course of the project

Assign each one of those costs to an appropriate budget category

Make a note, too, of the non-monetary contributions your institution will make

- Examples: existing research infrastructure, space, administrative management, personnel
- Emphasize these contributions in your project narrative and facilities descriptions

Look at it from the funder's point of view your institution's prior investment in facilities and equipment lowers the cost of doing this project, putting your proposal at a competitive advantage Your budget must be realistic

Reviewers and program officers know what things cost

A budget that is *too low* may make it impossible to complete the project, jeopardizing your chances for future funding

A budget that is *unrealistically high* makes you look incompetent or dishonest

Estimate costs as accurately as possible get formal price quotes for equipment and written agreements for subcontracts and services

Budgets must conform to the FOA and include only *eligible* costs

Research Personnel





Research Equipment & Supplies





Other Eligible Costs

Institutional Overhead



Some costs may *never* be charged to a grant

- Payments to individuals who do no work on the project
- Travel that is not connected to field work, collaborations, or dissemination of results
- Equipment and supplies that will not be used in the research project
- **Entertainment (including meals)**
- Most construction, repair, or remodeling of facilities
- Membership dues, even for professional groups

The FOA will also stipulate additional budget constraints

- **Budgetary limits on salaries**
- Classes of personnel who cannot be supported (e.g., secretaries, grant writers, business and administrative personnel)
- Minimum and maximum budget request
- Mandatory budget items (e.g., external evaluator, DEI activities, travel to grantee meetings)

Evaluate every item in your budget with a reviewer's skeptical eyes

Teach yourself to ask the questions that a reviewer would ask



For what? How much? Why?

Likely reviewer questions about personnel:



Are all these people really needed?

What is each person's assigned role? What will he/she/they contribute to the project?

Does the budget allocation accurately reflect each person's work contribution?

Is there an appropriate distribution of categories of personnel?

Are the salaries in line with funder guidelines?

Likely questions about equipment and research supplies:



Is the equipment needed to carry out the experiments described in the work plan?

Should the grantee already have this equipment? Is it replacing existing equipment? Why?

Is the equipment requested the best suited for the job to be done?

Are the supplies requested needed and the amounts reasonable?

Is the travel justified?



Is the travel necessary to carry out the work?

Why travel to conferences in the first year of the project before there are any results to present?

Does the conference travel represent appropriate fora for results obtained in this project?

Why travel to one another's labs at the end of the project?

What about subcontracts?



Is the subcontract really necessary?*

Should the PIs be able to do this work in their own laboratory?

Are the fees reasonable?

Is the time charged consistent with the amount of work to be done

What criteria were used to select this subcontractor or consultant?

*Some agencies limit the percentage of the total budget that can be assigned to subawardees—*read* the directions

Overhead or indirect costs?



- Q: First of all, what are they?
- A: A percentage of the total cost of the project that goes directly to the university to support facilities and administrative (F&A) costs
- Are the institutional costs calculated correctly?
- Do they exceed the maximum allowed by the funder guidelines?
- Are they less than the established federal rate?*
 - *NSF does not allow—considered prohibited cost-sharing





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Total direct costs (all allowable costs):\$403,173Minus excluded costs:82,196

tuition remission (\$17,920) permanent equipment (\$64,276) Modified total direct costs (MTDC base) \$320,977 Applicable F&A rate (58.60%) \$188,093

Total project cost to funder\$509,070

FOA says budget for research projects cannot exceed \$450,000; is this budget compliant?

Finally, review the rules and double-check *everything*



Check your arithmetic is everything added correctly?

Have you included all required information?

Has every line and every box been completed?

Stop—you're not done yet!



Now you've got to write the "budget justification"*

*Narrative that explains what assumptions you made and what methods you used to estimate the numbers you plugged into the budget forms The budget narrative should explain how costs were determined

- Explain what each person will do and how many months' work is being supported
- Explain why equipment is needed and how it will be used in the project
- Provide written price quotations for expensive items of equipment (>\$5k)
- Itemize each budget line and explain how those numbers were determined
- Ensure that your costs are realistic and in line with the scope of work to be done

Map your narrative to the formal budget forms

Senior personnel '

Other personnel

Fringe benefits

Equipment

Travel -

Other direct costs/

Indirect costs -

SUMMARY PROPOSAL BUDGI		AR	FOR	R NSF	USE ONL	Y
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versity of Illinois at Urbana-Champaign					ed Grante	
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Anthony J Leggett		. · · · · ·		-	· · · · · · · · · · · · · · · · · · ·	Panta
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates		NSF Funded Person-months			Funds Recuested Re. 100	
(List each separately with title, A.7. show number in brackets)	CAL	ACAD	SUMR		quested By proposer	granted by (if differe
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 () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE) 	0.00	0.00	0.00	<u> </u>	0	<u> </u>
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)	0.00	0.00	0.00	-	0	
OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS) O POST DOCTORAL SCHOLARS	0.00	0.00	0.00			
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00	-	0	<u> </u>
3. (7) GRADUATE STUDENTS	0.00	0.00	0.00		99,488	
4. (0) UNDERGRADUATE STUDENTS				 _	0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0	
5.(0) OTHER				<u> </u>	ő	
TOTAL SALARIES AND WAGES (A + B)					99,488	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				-	6,069	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					105,557	
TOTAL EQUIPMENT				-	0	
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1 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

Example of a wellorganized, clear budget narrative

Section headings correspond to budget forms

Detailed explanations are given for how costs were calculated

Section F. Budget Justification

An itemized budget for each year of the three-year proposed project and a cumulative budget are presented on NSF Forms 1030, pages 1–4 of this section. We believe that the program of condensed matter physics and materials research outlined in the proposal and the contributions it will make to scientific understanding, education and training, and the nation's research infrastructure fully justify the requested budget.

It should be noted that NSF support for this research group has been effectively enhanced by direct University support and prior investments in research infrastructure, which is critical to our program, as detailed in the facilities section of this proposal. The Department of Physics provides secretarial and administrative support through the Physics Business Office, and the University provides shared research equipment, to which the PI has access, through the Micro and Nanotechnology Laboratory and the Materials Research Laboratory.

In the following sections, detailed justification is provided for each budget item for Year 1, which represents actual first-year estimated costs. Budget numbers for Years 2 and 3 represent Year-1 costs plus modest allowances for inflation. Section headings used below correspond to the respective sections of Form 1030.

A. Senior Personnel

One month of summer salary is requested for the principal investigator in each year of the project. He will be heavily involved in directing and carrying out the research program outlined in the project description.

B. Other Personnel

Funds are requested for one postdoctoral research associate (100-percent time for 6 months per year) and one graduate student (50-percent time for 11 months). In the Department of Physics, graduate students are typically appointed for nine months during the academic year and two months during the summer term. To undertake the wide-ranging experimental program described herein, both a postdoc and a student will be needed.

C. Fringe Benefits

Fringe benefits have been calculated in accordance with the rates published in the University of Illinois at Urbana-Champaign FY09 Final Facilities/Administrative (F&A) and Tuition Remission Rates and FY09 Provisional Fringe Benefit Rates schedule (rev. 08/15/08).

D. Equipment

No funds are requested for purchasing new equipment. The equipment currently available in the PI's lab and also available through the Micro and Nanotechnology Laboratory and the Materials Research Laboratory is sufficient to carry out the work presented in this proposal.

E. Travel

Domestic travel has been budgeted to allow for the researchers to present results at appropriate conferences and symposia and to pursue collaborative exchanges with other researchers. Probable destinations include the annual American Physical Society March meetings (Portland, Oregon, 2010; Dallas, Texas, 2011; Boston, Massachusetts, 2012).

The Travel Industry Association of America travel trends and hotel industry trends, which show a significant increase from previous years, were consulted to estimate travel costs. We also reviewed current airfares, past travel vouchers, and miscellaneous vouchers to estimate travel expenditures, since we are unable to predict at this time the exact number of trips and their destinaThe budget narrative should make a persuasive case for investing in you and your team

Demonstrate that project is cost-effective, that it will have a significant impact for a reasonable cost

Remind the reviewer again in a few sentences why your project is important

But—don't include any *scientific* arguments that could be construed as an attempt to circumvent page limits of the project description

To recap:

Follow funder guidelines <u>exactly</u>

- Get help if you need it from someone in your institution's business office
- Do not include or imply cost-sharing unless an FOA specifically requires it

Do not include any scientific arguments or statements about institutional support in the budget justification

Look at your budget and justification with a skeptical reviewer's eyes

cmelliot@illinois.edu http://physics.illinois.edu/people/Celia/