

# How to Write a Budget Justification

## PERSONNEL

Explain all personnel for EACH YEAR. Include:

- How much effort per person. If the person has a 9-month appointment, the effort must be defined as either academic year or summer effort (or both, if applicable). Effort must be calculated as a percentage for internal purposes, but as person-months for federal sponsors.
- If a person's effort changes from year to year, explain why the effort increases/decreases.
- Why the person is on the project: job title and tasks the person will perform.
- RA--8 or 12 months? What is the salary rate applied? Does it meet GRASP guidelines? REMEMBER THAT THE RATE APPLIED DEPENDS ON THE COLLEGE AND THE CLASSIFICATION OF YOUR RESEARCH AREA (HUMANITIES, SOCIAL SCIENCES, ETC.). Please check with your proposal AD for current salary rates. Undergraduate students: break down by hourly rate and the number of hours estimated to work per week.
- Secretary should be based on a percent of effort. This item must be thoroughly justified, and include a description of what specific, project-related tasks s/he will perform. **IMPORTANT:** If the sponsor is a federal agency, the project must be classified as a MAJOR project in order to include secretarial effort on the project. If the project is not determined to be a MAJOR project, then no secretarial support can be included in the budget.
- What percentage increase is factored into yearly salary increases (3%, 4%, etc.)? Please note that NIH allows a maximum 3% annual increase.

## CONSULTANTS

Detailed explanation of consultants: how many hours or days will the consultant work? What tasks will the consultant perform on the project? What is the hourly or per diem rate of the consultant? Fringe benefits of 8.2% must be included on the consultant's fee. Please note that some federal agencies have limits on daily fees for consultants. Please check with your proposal AD for any limitations.

## FRINGE BENEFITS

The fringe benefit rate applied depends on whether the sponsor is a federal agency, an agency with federal pass-through funds, or a non-federal agency using its own funds. Please note that an agency using federal pass-through funds is defined as an institution with a prime award from a federal agency issuing a subcontract to Boston University.

Fringe benefits rates, as of 7/1/08:

	Federal and Federal Pass-Through Awards	Non-Federal Awards
Professional	26.5%	28.3%
Support Staff	24.1%	25.9%
Consultants	8.2%	8.2%
Graduate Students (monthly paid)	7.8%	7.8%

## **COMPUTER EQUIPMENT**

- Justify computer purchase. Include specifications, if known.
- Laptop or desktop? Printer(s) needed?
- How will the computer aid the research? Why is it necessary? Data analysis, etc.?
- Include any written quotes.
- **IMPORTANT: Capital Equipment is defined as any article of property that has a useful life greater than or equal to one year, and a cost greater than or equal to \$5,000 which does not become a permanent part of a building.**
- Each unit of capital equipment is exempt from indirect costs. However, special consideration must be paid when PIs request funds for any type of “workstation.” For example, a PI may include a research workstation in the budget, consisting of a desktop computer, printer, electronic microscopes, and various other items of equipment. If any of the equipment can be used independently of the other equipment, then that piece of equipment should be evaluated on its own cost as to whether or not it is subject to or exempt from indirect costs. On the other hand, if a piece of equipment cannot be used independently of other equipment, then the costs of those pieces of equipment can be evaluated as a “bundle.” For example, a computer and printer can be bundled, but only if they will be purchased together as a package, as the printer cannot be used independently of the computer.
- Please refer questions regarding fabricated equipment to your proposal AD.

## **TRAVEL**

- Explain budget for all years. How many sites? Are locations known? How many trips to each site? How many people will travel to each location? Estimate a cost for each trip per person per day, broken down into airfare, lodging, meals, and local travel costs (i.e., taxis).
- For lodging and meals, either estimates or government-approved per diem rates can be applied (government rates are the maximum for which one can be reimbursed on a federal grant).

FY 2008 federal per diem rates:

[http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentId=17943&contentType=GSA\\_BASIC](http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentId=17943&contentType=GSA_BASIC)

**IMPORTANT:** On a federal grant, (1) alcohol and limousine transportation are unallowable costs; (2) no first-class airfare is allowed; and (3) any airline travel must be made on a U.S. air carrier. Only in the event that no U.S. air carrier flies to a particular destination can a foreign air carrier be used. Convenience and/or cost are not allowable justifications for using a non-U.S. air carrier.

## **OTHER DIRECT COSTS**

If the sponsor is a federal agency, the proposal must conform to Circular A-21 guidelines, which state that several categories of expenses are unallowable:

1. General postage\*
2. General office supplies\*
3. Secretarial and Administrative support\*
4. Dues and memberships
5. Local telephone costs

\* Proposals that are designated as “major projects” can include these items in their budget (see Exhibit C in Circular A-21 for examples).

Guidelines: <http://www.whitehouse.gov/WH/EOP/OMB/html/circulars/a021/a021.html>

### Long-Distance Telephone, Overnight Mail, Etc.

- How much will be spent on long-distance telephone, overnight mail, photocopying, books, software, etc.?
- Also, please detail how these items directly relate to the project.
- **IMPORTANT:** If the sponsor is a federal agency, the project must be designated by BU/OSP as a MAJOR project in order to include general postage. However, overnight mail services such as FedEx and DHL are allowed on projects regardless of “Major Projects” designation, and in the proposal should be described as “overnight mail services” in order to differentiate it from general postage.

### Research-Related Supplies

- What are you buying and why? How do these supplies support the research?
- **IMPORTANT:** If the sponsor is a federal agency, the project must be designated by BU/OSP as a MAJOR project in order to include general office supplies. A loose definition of general office supplies is any office supply that can be found in an average office desk. For example, paper, folders, pens, pencils, binders, etc. are unallowable expenses. However, computer-related supplies such as diskettes are considered allowable expenses.

### Subject Costs

If the project will use human subjects and the subjects will be compensated for their participation in the project, please list the number of subjects/year and the amount that each subject will be compensated.

### Publication Costs

Will the PI need funds for publication costs?

### Subcontracts

Identify the PI of the subcontract and his/her institution. Provide a brief justification for the subcontract. This justification does not need to be very long, as the subcontractor will provide his/her own detailed justification for the proposal.

## **INDIRECT COSTS**

Indirect costs are calculated at a percentage of modified total direct costs\*:

Description of the project	New and Competitive renewal awards with a start date of or after <b>7/1/08</b>
• on-campus, research:	• 62.5%
• on-campus, instruction/training:	• 56.0%
• on-campus, other	• 49.0%
• off-campus, research/instruction/training/other:	• 26.0%

\* Modified Total Direct Costs (MTDC) are total direct costs minus:

- Capital Equipment (defined as being equal to or greater than \$5,000 in value and having a useful life of one year or more);
- Subcontract costs over \$25,000 for each subcontract;
- Alteration and Renovation costs;
- Patient Services;
- Rental/Maintenance of off-campus facilities;
- Student Aid; and
- University room/board allowance.

**“The Analysis of Data Associated with Consumer Confidence”**

**PI: Abigail Able, Ph.D.  
Boston University**

**Budget Justification**

**PERSONNEL**

Abigail Able, Ph.D., Principal Investigator, will act as the Primary Investigator on this project, and as such will direct the research in this proposal. This includes the conception and organization of specific experiments, the interpretation of the data, and the publication of the final results. In each project year, Dr. Able will dedicate 20% of her academic year effort and 100% effort during the summer period to this project (1.8 person months and 3.0 person-months, respectively). This will allow Dr. Able to reduce her teaching load by one course during the academic year and to dedicate her summer to this project, greatly facilitating the progress of the proposed research.

Benjamin Bentley, Ph.D., Co-I, has worked with the PI for the past four years. Dr. Bentley will provide detailed data computation and analysis for this research. He will devote 25% effort to this project during both the academic year and the summer period of each project year (academic year 2.25 person-months; summer: 0.75 person-months).

Christopher Carpenter, Ph.D., Co-I, will conduct numerous experiments and collect data samples for analysis. With twenty years of experience in data collection, his expertise is invaluable to this project. He will devote 10% effort of each calendar year during the entire project (1.2 person months).

One graduate student assistant will devote 100% effort during each calendar year (12 person-months). The graduate student will perform data entry and analysis, as well as coordinate the distribution and collection of survey materials.

One undergraduate student assistant will perform general lab tasks. In each project year, s/he will work approximately 10 hours per week for 26 weeks, at \$10/hour.

For all personnel above, subsequent years are adjusted for a 3% increase per year.

**CONSULTANT COSTS**

Danielle Davidson, Ph.D. will provide expert data analysis on the results of this research. As a professor of statistics at M.I.T., Dr. Davidson has extensive experience in this area. She will work 20 days/year on this project, at \$300 per day. No annual increase is calculated.

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**FRINGE BENEFITS**

Fringe benefits for Drs. Able, Bentley, and Carpenter are calculated at 26.5%; for the Graduate Research Assistant, 7.8%; for the Undergraduate Assistant, 0%; and for the consultant, 8.2%.

**TRAVEL**

Dr. Able plans to make one trip from Boston to Washington, D.C. for an annual two-day professional conference to present research findings and to consult with colleagues. In Year One, this trip is estimated to cost \$850:

Description	Breakdown		Cost
	# of travelers	Per traveler costs	
Airfare	1	\$400	\$400
Lodging	1	2 nights @ \$150 night	\$300
Meals & IE	1	3 days @ \$50/day	\$150
<b>TOTAL</b>			<b>\$850</b>

In addition, Drs. Able, Bentley, and Carpenter each plan to attend the annual Consumer Confidence conference, along with the graduate research assistant. While the location of the conference has not yet been determined, Dr. Able estimates the conference travel in Year One as \$4,200, per the following breakdown:

Description	Breakdown		Cost
	# of travelers	Per traveler costs	
Airfare	4	\$500	\$2,000
Lodging	4	2 nights @ \$200 night	\$1,600
Meals & IE	4	3 days @ \$50/day	\$600
<b>TOTAL</b>			<b>\$4,200</b>

Subsequent years are adjusted for an annual 3% increase.

**OTHER DIRECT COSTS**

**Minor Equipment**

A total of \$6,790 has been budgeted as a one-time cost in Year One to purchase several items of minor equipment:

1. Ultrasonic homogenizer: The sample preparation requirements for the protein gels and Western blot studies require that very small volume retinal samples be thoroughly homogenized without producing foaming. Homogenization of such samples can be handled with an ultrasonic homogenizer with a small tip probe that fits into Eppendorf

microtubes. The model VC60 60 watt ultrasonic processor from Sonic Materials, Inc. fulfills this need. This piece of equipment is estimated to cost \$2,000 (please see the attached quote).

2. Desktop computer: A desktop computer will be required to process and store results from data analysis. A super-duper model with lots of memory will be essential to this project as many of the analyses will take several hours each. This piece of equipment is estimated to cost \$4,190.
3. Printer: A printer will be necessary to print out analysis results and any papers resulting from this research. This piece of equipment has an estimated cost of \$600.

#### Long-Distance Telephone

Costs have been estimated at \$50 per month for a total of \$600 per year to consult with colleagues regarding research results, with subsequent years are adjusted for an annual 4% increase.

#### Photocopying

Funds for photocopying are requested to support the creation of any papers resulting from this research. Total funds requested for photocopying in Year One are \$200, with subsequent years are adjusted for an annual 4% increase.

#### Research-Related Supplies

Funds are requested for the purchase of computer diskettes for data storage, and also for software such as "Super Software" which will be used for the detailed data analysis and computations required by this research. Dr. Able estimates that in Year One, five boxes of diskettes will be used at a cost of \$10 per box. The software will be purchased at an estimated \$900. The total funds requested in Year One for research-related supplies are \$950.

In each of Year Two and Year Three, the PI anticipates purchasing software upgrades estimated to cost \$400 per year.

#### Overnight Mail Services

Funds are requested to support the dissemination of information to colleagues via an overnight mail carrier such as FedEx or DHL. Dr. Able estimates approximately \$500 in Year One for this expense, with subsequent years are adjusted for an annual 3% increase.

#### Publication Costs

Due to the need for page charges and for color printouts to submit with publications, Dr. Able requests \$1,000/year for publication costs.

### **INDIRECT COSTS**

Indirect costs are calculated at 62.5%, as negotiated with DHHS (January 30, 2008).