

## Developing Grant Budgets

How to get what you need –  
you won't get what you  
want

## Budget Basics

Types of Budgets  
Budget Components  
Federal Requirements  
Pre-Award Policy Issues  
Other Considerations

## Types of Budgets

- Modular vs. Itemized
- Multi-Project/Consortium
- SBIR/STTR
- Clinical Trials
- Fellowships
- Institutional Training Grants
- Research Career Awards

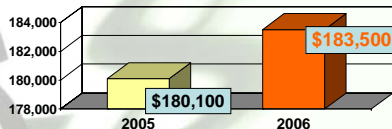
## Budget Components (1)

- Personnel
  - Faculty (academic vs. summer; Institutional Base Salary; Legislative Cap)
  - Research Scientists (postdocs and beyond)
  - Graduate Students
  - Other Personnel



## Salary Cap

- Restricts the amount of **direct salary** under a grant or contract to Executive Level I of the Federal Executive Pay Scale
- Executive Level I increase effective January 1, 2006



January 12, 2006 NIH Guide Notice  
<http://grants.nih.gov/grants/guide/notice-files/NOT-OD-06-031.html>

## Budget Components (2)

- Personnel (cont'd)
  - Graduate Students
    - Pay for salaries as compensation for services.
    - Don't pay stipends; support for studies or research training.





## Graduate Student Compensation

- Ties compensation on research grants to the zero level NRSA postdoc stipend in effect at the time of award
- Compensation continues to include "salary or wages, fringe benefits and tuition remission"
- No adjustments will be made to noncompeting award levels or future years
- Grantees may rebudget to accommodate the higher level
- This policy was effective with awards issued on or after 12/10/2001

See NIH Guide, 12/10/2001 <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-02-017.html>

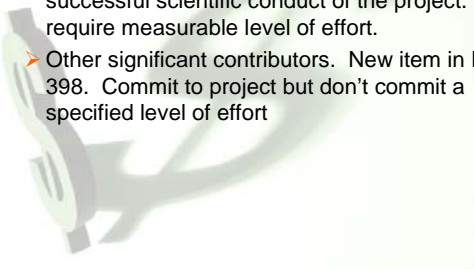
## Budget Components (3)

- Personnel (cont'd)
  - Technicians, inc. programmers
  - Interviewers and evaluators
  - Administrators and Secretaries (only under certain circumstances)



## Budget Components

- Key personnel – Individuals critical to the successful scientific conduct of the project. Now require measurable level of effort.
- Other significant contributors. New item in PHS 398. Commit to project but don't commit a specified level of effort



## Budget Components (4)

- Fringe benefits
- Consultant Costs (inc. fee and travel costs)
- Equipment (how does your institution define it?)
- Materials and Supplies
  - Animals, inc. purchase and maintenance
  - Lab supplies
  - Office supplies (rarely)
  - Small equipment (under your equipment threshold)
- Travel



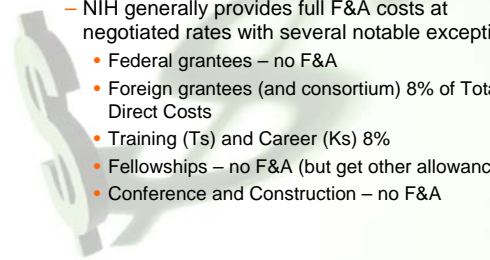
## Budget Components (5)

- Patient Care
- Alterations and Renovations
- Other Expenses
- Consortia Costs
- Facilities and Administrative (F&A) Costs
- Cost sharing



## Budget Components

- F&A (Indirect Costs)
  - NIH generally provides full F&A costs at negotiated rates with several notable exceptions:
    - Federal grantees – no F&A
    - Foreign grantees (and consortium) 8% of Total Direct Costs
    - Training (Ts) and Career (Ks) 8%
    - Fellowships – no F&A (but get other allowances)
    - Conference and Construction – no F&A



## Budget Components

- Cost Sharing
  - Mandatory – required by legislation, program or regulation.
    - Legislative Salary Cap
    - Cost Sharing Match (rare at NIH)
  - Voluntary – offered in application
    - Investigator effort at no-cost (becomes mandatory when accepted in awarded budget).



## Modular Applications

- No categorical budget accepted at time of application
- No categorical budget required at time of award
- No difference in allowable costs
- No difference in post-award financial management requirements



## Creating a Modular Budget

1. Start with an itemized budget (form p. 4)
2. Create out-year budgets
3. Divide total of all years by \$25,000
4. Request same number of modules each year (there is an exception for equipment)
5. Consortia costs may be rounded to nearest \$1000

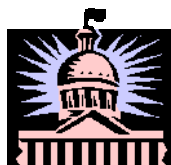


## More on Modulars

- List all personnel with responsibilities and % effort
- Consortia costs are calculated separately and rounded to nearest \$1,000
- NIH may request detailed budget to address specific issues



## Federal Requirements



## Cost Principles

- OMB Circular A-21 - Educational Institutions
- OMB Circular A-122 – Non-Profits
- OMB Circular A-87 – State/Local Governments
- 45 CFR Part 74, Appendix E - (hospitals)
- 48 CFR Subpart 31.2 (FAR) – (for-profits)
  - Must budget in accord with these rules
  - Must expend grant funds per these rules

<http://www.whitehouse.gov/omb/circulars/>



## OMB Circular A-21/A-122

- Establishes principles for determining costs applicable to grants, contracts, and other agreements
  - Direct costs
  - F&A/indirect costs
  - Selected items of cost
  - allowable/unallowable costs
  - time and effort reporting

## Administrative Standards

- **OMB Circular A-110** - Uniform Administrative Requirements for Grants and Agreements with Universities, Hospitals and Other Non-Profit Organizations

## OMB Circular A-110

Prescribes:

- Preaward requirements
- Postaward requirements

Also requirements for:

- Payment
- Cost sharing or matching
- Accounting for program income
- Revision of budget and program plans
- Non-Federal audits
- Allowable costs
- Property standards
- Procurement standards
- Reports and records

## Pre-Award Policy Issues

## Legislative Mandates

1. Acknowledgment of Federal Funding (Section 506)
2. Anti-Lobbying (Section 503)
3. Continued Salary Limitation (Section 204)
4. Ban on Funding of Human Embryo Research (Section 509)
5. Limitation on Use of Funds for Promotion of Legalization of Controlled Substances (Section 510)
6. Restriction on Distribution of Sterile Needles (Section 505)
7. Restriction on Abortions (Section 507)

NIH Guide January 12, 2006 <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-06-030.html>

## Pre-award Costs

At grantee's own risk and expense

- Up to 90 days prior to the start date of a competing award if costs:
  - Are necessary to conduct the project, **and**
  - Would be allowable under a potential award without prior approval
- Greater than 90 days requires prior approval; retroactive approval may be granted
- No time limit for noncompeting awards, need to be allowable and carefully managed

## Cost Sharing

- Not required as a condition of applying for/receiving unsolicited NIH awards
- Only a few NIH solicited programs that require it
- Nonetheless, mandatory cost sharing for salary in excess of current salary cap
- Be sure you intend to commit to cost sharing when you propose an item at no cost to the government.

## Award Restrictions

- Only applied to a particular grant for cause
- Shown on the NGA after Section III
- Restricted funds must be tracked by grantee to ensure compliance
- Example: restricted equipment funds pending receipt of current price quote or prohibiting human subjects research pending IRB review

## Read the Notice of Grant Award

- Special Terms and Conditions
- Other Terms of Award
  - 45 CFR Part 74 or 92 - HHS rules and requirements that govern the administration of grants
  - NIH Grants Policy Statement - compendium of several regulatory requirements applicable to grants and cooperative agreements
  - Program and appropriation legislation
  - Program regulations
  - 42 CFR Part 52 - Grants for Research Projects

## Who is Responsible for Financial Management?

- The Principal Investigator
- The Departmental Administrator
- The Department Chair
- The Institution

## Other Considerations

- Consistent with institution policies and practice
- Request reasonable amounts based on current conditions and need.
- Don't request contingencies or uncommitted promotions
- Keep it reasonable
- Justify the unusual and large ticket items
- Ideally the science drives the budget and justification

## Preparing a realistic budget: perspective from experience

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## What do you need to accomplish your objectives?

- People – labor, intellectual effort
- Equipment/Instrumentation
- Access to:
  - biological models
  - subjects/patients
  - data
  - resources
  - consumables
- Travel

## How is the budget used by reviewers and program officials?

- Budgets are not used to assess scientific merit
- The Budget is reviewed after the scientific merit is assessed
- Budgets reveal how the applicant understands what it takes to accomplish their science
- A lean budget will not rescue a low impact or mediocre project

**RULE 1: Develop a Realistic Budget!**  
**RULE 2: Justify Your Needs!**

## Start with personnel

- Determine % effort/time that you will spend on this project.
- Determine the number, qualifications and % effort for other personnel needed
  - Technicians
  - Postdoctoral Fellows
  - Graduate Students
  - Undergraduate Students

## Personnel (continued)

- There are no magic numbers regarding the qualifications and/or number of individuals needed for each aim.
- Be realistic about what each individual can accomplish and how long will it take.

## Consider the supplies needed for the personnel involved

- It may be reasonable to estimate a supply budget of ~\$12,000–15,000/year for each FTE
- This number will vary depending on the nature of the research proposed.
- Animal intensive studies and studies involving human subjects tend to be more costly.
- In silico studies tend to be less costly for supplies.
- Consider stage of career of personnel involved

## Do you need new equipment?

- If you need additional equipment, this is the time to consider it.
- **Equipment should be project specific – be sure to include a written justification.**
- Most equipment is requested during the first year of the grant.
- **If you use a modular budget format, you may ask for extra module(s) to cover equipment.**

## Travel funds

- This amount is usually small (\$2,000-4,000/year)
- Generally supports one meeting per year for 2-3 individuals

## Other Expenses

- This category includes funds needed for things such as publication costs and equipment maintenance.
- Estimate these expenses realistically.

## Add it all up

- Calculate the direct costs for the first year.
  - (for example, Year 1 budget = \$179,000)
- Calculate the direct costs for subsequent years taking into account salary increases and changes in funds requested for equipment.
  - Year 2 = \$184,370
  - Year 3 = \$189,901
  - Year 4 = \$195,598
  - Year 5 = \$201,466

## Do I need to submit a modular budget?

- Calculate the total direct costs for all years
  - Total direct costs for 5 years = \$950,335
- Divide total by the number of years requested
  - Average direct costs = \$190,067/yr
- Investigator-initiated R01s up to \$250,000/yr must use modular format

## Convert Your Average Direct Costs to the Modular Format

- Round up to the next module (number divisible by \$25,000)
  - In the example, \$190,067/yr rounds up to \$200,000/yr
- No yearly increases for inflation
- First year may include additional modules for one-time expenses like equipment

## Where to get help

- PHS 398 instructions
  - <http://grants.nih.gov/grants/funding/phs398/phs398.html>
- 424 R&R instructions
  - [http://era.nih.gov/ElectronicReceipt/faq\\_sf424.htm#1](http://era.nih.gov/ElectronicReceipt/faq_sf424.htm#1)
- Your sponsored programs office
- NIH program and grants management staff
- Experienced PI

## But I asked for what I needed?

- Study section may recommend reductions
  - May provide information to funding institute to appeal IRG recommended reductions
- Funding institute may reduce budget further and cut years
  - Not appealable
  - Discuss with Program officer if causes hardship

## Take the Money and Run

- Build a budget for the dollars and years that are indicated on the Notice of Grant Award.
- For modular grants remember to build in any increases in spending over duration of grant
- Don't spend all your money in year 1
- Prioritize your work and get going

## Final Thoughts on \$\$

- We are all taxpayers and the \$1-2M you have just been awarded is a lot of money so spend wisely.
- Money saved may come in handy later. Personnel funds that accrue due to staffing delays may well get you past the renewal hump.
- If you have a problem, contact NIH. There may be a solution.

## Questions?



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