Proposal Budgeting Fundamentals

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8th Annual Symposium for Research Administrators

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"MY PI WANTS ME TO DO WHAAAAATTTTTT ?!??"
DON'T BE AFRAID – WE GOT THIS !!!
Objectives

• What are the Cost Principles?
• Compiling your Budget
• Facilities and Administrative (F&A) Costs
• Overview of Cost Share
• "Building Your Budget" Case Studies
What are the Cost Principles?

PART I
Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards

• Commonly known as Uniform Guidance (UG), 2 CFR 200, or Supercircular
• Set of regulations which consolidated several OMB Circulars in 2014, including A-21, A-110, and A-133
• Regulations in Uniform Guidance:
  • Impact proposals requesting federal funding
  • Pre- and post-award management of Grants & Cooperative Agreements
  • Define cost principles applicable to research at Institutions of Higher Ed
The Cost Principles

**ALLOWABLE**
Conforms with any limitations or exclusions in agreement

**ALLOCABLE**
Provides a direct benefit to the project equal to the portion charged

**REASONABLE**
Meets what a prudent person would do in the same circumstances

**CONSISTENT**
Uniform treatment of cost types throughout institution
IS THIS AN ALLOWABLE EXPENSE?

Considerations for Expense Categories

**GENERALLY ALLOWABLE**
- Personnel & Fringe Benefits
- Capitalized Equipment
- Materials & Supplies
- Professional Services
- Publication Costs
- Core Facility (Recharge Center)
- Subrecipient
- Travel
- Other Direct Costs

**GENERALLY UNALLOWABLE**
- Alcohol
- Alumni Activities
- Bad Debts, Fines & Penalties
- Costs Covered by F&A (Indirects)
- Entertainment Costs
- Fundraising Activities
- Legal Proceedings
- Lobbying
- Others as defined by UG or UNC
Does this advice apply to you?

☐ Yes
☐ No
☑ Yes, but it depends
Cost Principles | Case Study #1

A lab has purchased pipettes for $1,000 for use by technicians working concurrently on three research projects. The projects need one pipette per experiment as follows:

- **Project 1** - 30 pipettes
- **Project 2** - 55 pipettes
- **Project 3** - 15 pipettes

- What cost principle does this relate to?
- What is a reasonable method of determining the cost of the pipettes for each project?
- What is the correct allocation to each project?
Cost Principles | Case Study #2

You are asked by your PI to stop at an office supply store on your way to work to pick up:

- Stapler
- Notebooks
- Pens
- Paperclips
- Binders
- Name tags

The PI also asked you to get some donuts for a lab meeting that morning. When you arrive at work, the PI tells you that all the items should be charged to the grant.

Should these expenses be charged to the grant?
Cost Principles | Case Study #2 continued...

• If the supplies are not specifically allocable to the grant, they are considered general office supplies and should not be charged as a direct cost to a grant.

• Entertainment costs, such as food, are generally unallowable either as a direct or indirect costs. However, it depends!
Cost Principles | Case Study #3

Dr. Miller needs to purchase a necessary piece of specialized equipment for her research on hypertension. When preparing the purchase request, she realizes the only account with enough funds is her grant for research on sleep disorders. As both grants are funded by NIH, she charges the equipment to the sleep disorder grant.

Is this allowable?
Cost Principles | Case Study #3 continued...

- Cannot charge the grant strictly based on availability of funds
- Must demonstrate direct benefit to the award being charged
- Must allocate appropriately if it benefits multiple projects
Can I charge this expense to an award?

Allowable? Allocable? Reasonable?

Direct vs Indirect? (Consistency)

Charge to award

Charge to non-sponsored account

STOP
Do you cringe every time you hear the word budget?

Or just maybe, the word "budget" brings out the ANIMAL in you?
Compiling Your Budget

PART II
First step in the process of submitting a proposal and building your budget is to identify, read, and understand the solicitation.

Solicitation Types:
- Research Funding Announcements (RFA)
- Requests for Proposals (RFP)
- Proposal Announcements (PA)
- Funding Opportunity Announcements (FOA)
- Broadband Announcements (BBA)
The Need to Know Points

Know your budgetary limitations
- Salary cap limits or sponsor-imposed effort requirements
- The project period for the availability of support
- Limits to direct and/or indirect costs
  - Limitations on indirects may require an F&A waiver

Know what type of budget is appropriate
- Detailed Budget
- Modular
- Other sponsor specific

Are there cost share requirements?
What are the Components of a Detailed Budget?
Facilities & Administrative
- General Office Supplies
- Administrative Support
  - Sponsored Projects Administration
- Grant preparation
  - Library
- Student Services
- And More…

Personnel
- Salary/Wages & Fringe
  - Stipends

Non-Personnel
- Materials/Supplies
  - Equipment
  - Travel
- Subrecipients
- Services
- Other Directs

Direct & Indirect Costs
Budget Categories

DIRECT COSTS
Costs that can be specifically identified with a sponsored project or activity with a high degree of accuracy

INDIRECT COSTS
Costs incurred for common or joint objectives that cannot be readily or specifically identified with a project
Budgeting for Personnel Costs

Who is working on the project?
- PD/PI, Investigator(s), Lab Technicians, Postdoctoral Research Associates, Graduate Students, etc.
  - PD/PI must be full-time, EHRA faculty and devote a minimum of 1% effort

When calculating personnel costs, consider the following:
- University appointment (12- or 9-Month | Academic/Summer)
- Institutional Base Salary plus Administrative Supplements
- Post-doc and graduate student effort
- Use appropriate fringe benefit based on type of appointment (UNC Healthcare faculty appointment)

Other considerations
- Will effort be funded or unfunded (cost share)?
- DHHS/PHS Salary Cap
- Annual escalations allowed up to 3%
- Budget for tuition costs for Graduate Students
Is the person affiliated with the University?
• If yes, then they are considered an employee and must be budgeted under Personnel section
• Have they been affiliated with the University within the last 12 months?

Considerations for budgeting consultants
• Compensation expressed as a daily rate or a fixed amount for the services to be provided. Fringe benefits don't apply.
• Can be reimbursed for travel expenses
  • Travel expenses must be in accordance with UNC allowances or State travel policies
• Review the solicitation and sponsor guidelines
  • Does the funding agency have a cap on consultants?

University procedure for determining independent contractors can be found at Finance policy 708 and Independent Contractor Checklist.
Budgeting for Equipment Costs

- PI must determine if the existing equipment would be sufficient to meet the needs of the project.

- Does the item meet the federal definition of equipment?
  - Stand-alone item with useful life of more than one year
  - Costs more than $5,000

- Specialized equipment should be identified at proposal stage and justified in the budget justification. At times, the sponsor may request pricing information at time of proposal.
Budgeting for Travel

*To be charged as a direct costs, travel must be directly related to & necessary for the project.*

- What type of travel is needed?
  - Domestic
  - Foreign
- Itemize travel costs in the budget
  - Airfare, meals/per diem, lodging
    - Airfare – Fly America Act, US Flag Carrier requirements
- Calculate based on travel allowances per University Policy or US State Department for foreign travel
  - If you use one of the above choices, be sure to use it consistently across the project

For more information on when to use UNC travel allowances or Federal rates, please visit this [link](#).
Subrecipient costs must meet cost principles allowable for the type of organization.

- Minimum required documents:
  - Letter of Intent
  - Scope of Work
  - Detailed Budget and Budget Justification
    - Identify all direct and indirect costs
    - Names and contributed effort of all personnel must be included - even if the Subrecipient PI effort is not paid by award
- Must complete any additional forms as required by the solicitation
- The total costs for the outgoing subrecipient are considered and written as a direct line-item costs in UNC's proposed budget, unless the solicitation states otherwise.
UNC Health Care System (UNC HCS) employees
- Not considered employees of the University and cannot be listed under Personnel. UNC HCS can be budgeted within the "Other" category

Tuition
- Budget based on rates provided by UNC Registrar's office
- Rates are provided per semester
- Multiply tuition costs by percentage of effort to determine budget on award

Research Patient Care Cost
- Routine and ancillary services provided by hospitals to individuals participating in research programs
  - Can cover regular room services, minor medical/surgical supplies, X-ray, operating room costs, laboratory costs, etc.
  - Does not include reimbursement for travel and subsistence
### Other Direct Costs continued...

<table>
<thead>
<tr>
<th>Other Direct Costs</th>
<th>*Excluded from F&amp;A per UNC Rate Agreement</th>
<th>Per Sponsor Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Subject Payments &amp; Reimbursements</td>
<td>Research Patient Care costs (in-patient &amp; outpatient)</td>
<td>In-state Tuition</td>
</tr>
<tr>
<td>Recharge Centers/Core Costs</td>
<td>Alterations and Renovations</td>
<td>Participant Support Costs</td>
</tr>
<tr>
<td>Animal Care and Purchase</td>
<td>Space Rental</td>
<td>Trainee Costs</td>
</tr>
<tr>
<td>Communications &amp; Teleconferencing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other Budgeting Considerations

Modular Budgets

• NIH budgeting mechanism allowing requests in modules of $25,000 up to a total of $250,000 in direct costs (less consortium F&A) per year.
  • R01, R03, R15, R21, R34, other RFA's
  • Requires only personnel justification, consortium justification, and option to add additional justification, if needed
• Subtract any consortium F&A from total direct costs and round to nearest $25,000
Other Budgeting Considerations cont.

Budget Justification
- An explanation of costs requested in the detailed budget in narrative form that clearly explains how the costs are calculated and why they are necessary for the project
- Matches detailed budget for dollars and language
- Conforms to sponsor's instructions – review the RFA!
Facilities & Administrative Costs

PART III

It's all about that “base” and it **CAN** cause trouble!!
Budgeting for F & A Costs

- **Activity Types:** rates will differ depending on type of work conducted w/project
- **Location:**
  - On-campus
  - Off-campus adjacent (within 10-mile radius)
  - Off-campus remote
- **F&A Restrictions:** Does the program announcement limit F&A recovery?
  - Non-profit & Government: acceptable if published in sponsor guidelines
  - For-profit: acceptable with submission and approval of a F&A waiver

Find UNC Current F&A Rates on [OSR Information Page](#)
## Indirect Cost Bases

<table>
<thead>
<tr>
<th>Total Direct Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Includes the entire amount budgeted for direct costs</td>
</tr>
<tr>
<td>• Commonly used when F&amp;A is reduced from the negotiated MTDC rate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modified Total Direct Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Select items are excluded from the direct costs when calculating F&amp;A</td>
</tr>
<tr>
<td>• Commonly used with Federally funded projects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reduced F&amp;A</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sponsor imposed limitations on F&amp;A</td>
</tr>
<tr>
<td>• Common with non-profit sponsors and select federal or state programs</td>
</tr>
<tr>
<td>• Read solicitation carefully</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Waived F&amp;A</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Approval for reduced F&amp;A when not required by the sponsor or their guidelines</td>
</tr>
<tr>
<td>• Reduced F&amp;A of for-profit entities is not allowed and must be approved via F&amp;A waiver process</td>
</tr>
</tbody>
</table>
Calculating MTDC Base
NSF Case Study

Dr. Benjamin wants to submit an NSF proposal with the following proposed budget. What is the MTDC Base?

Is the answer:

a. $95,500
b. $85,000
c. $89,500
d. $99,500
Facilities & Administrative (F&A) costs

Just where does that F&A go?!
What is the F&A Cost Rate?

What is the money used for?

A single number that reimburses the institution for the use of:

• Buildings
• Equipment
• Interest on Debt
• Operations & Maintenance
• General Administration
• Departmental Administration
• Sponsored Projects Administration
• Library
An Overview of Cost Share

"To share or not to share, That is the question..."
What is Cost Share?
Cost sharing or matching means the portion of the project costs not borne by the awarding agency or sponsor. Defined at 2 CFR 200.29

When to Cost Share?
Required/mandatory by the sponsor as made clear in the proposal guidelines.

What NOT to Cost Share?
In most cases, you should not voluntarily commit cost share in the proposal. *Cost share is a true cost to the institution – someone pays.*
Types of Cost Share

Contributed Effort (over the salary cap)
- Faculty and staff effort funded by non-sponsor sources documented in an Effort Certification System periodically

In-Kind Matching
- Non-cash third party contribution
- Donated/volunteered services
- Requires documentation from the third party

Cash Match
- Hard dollars or funds specifically appropriated for and allocated to the project.
- Using state or endowment funds, gift accounts

Unrecovered F&A
- If solicitation does not address unrecovered indirect costs, then the sponsor must give prior approval
- Must be provided for in the approved budget when application is submitted to the sponsor
Calculating Cost Share

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>$50k</td>
</tr>
<tr>
<td>Fringe</td>
<td>$12.5k</td>
</tr>
<tr>
<td>Supplies</td>
<td>$4.5k</td>
</tr>
<tr>
<td>Travel</td>
<td>$3k</td>
</tr>
<tr>
<td>Equipment</td>
<td>$5k</td>
</tr>
</tbody>
</table>

Total Direct Costs = $41,625

Indirect Costs = (55.5% of TDC less equipment)

Total award = $116,625

Cost share requirement = 20% match on total award

$116,625 * 0.20 = $23,325 cost share commitment
Building Your Budget: Case Studies

PART V
When would it be appropriate for UNC to accept a reduced F&A rate from our sponsor?

A. A reduced rate is acceptable if *published* in guidelines or on website of sponsor

B. If requesting a reduced rate that differs from the published rate an approved F&A waiver is required to accept a reduced rate

C. Industry proposals only

D. Both A and B

E. None of the above
Circumstances appropriate for accepting an F&A rate other than one of the University's federally-negotiated rates would be:

- If published in guidelines or on website of sponsor
- If requesting a reduced rate that differs from the published rate an approved F&A waiver is required to accept a reduced rate
- A reduced rate from an Industry partner is rarely accepted.
Calculating Subrecipient F&A

Dr. Jones has indicated that he wants to do a subcontract with Ohio State for five years on an NIH grant proposal.

<table>
<thead>
<tr>
<th>Budget Year</th>
<th>Direct Costs</th>
<th>Indirects (56%)</th>
<th>Total Budgeted</th>
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<tbody>
<tr>
<td>Year 1</td>
<td>$7,000</td>
<td>$3,920</td>
<td>$10,920</td>
</tr>
<tr>
<td>Year 2</td>
<td>$6,561</td>
<td>$3,674</td>
<td>$10,235</td>
</tr>
<tr>
<td>Year 3</td>
<td>$7,210</td>
<td>$4,038</td>
<td>$11,248</td>
</tr>
<tr>
<td>Year 4</td>
<td>$8,125</td>
<td>$4,550</td>
<td>$12,675</td>
</tr>
<tr>
<td>Year 5</td>
<td>$7,584</td>
<td>$4,247</td>
<td>$11,831</td>
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In what budget year does UNC no longer need to collect F&A on the subaward and what is the monetary limit for collecting F&A?

A. Year 4 - $25,000
B. Year 2 - No limits
C. Year 3 - $25,000
D. Year 1 - $10,000
Calculating Subrecipient F&A

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<th>Budget Year</th>
<th>Total Budgeted</th>
<th>Cumulative Total for UNC F&amp;A</th>
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<tr>
<td>Year 1</td>
<td>$10,920</td>
<td>$10,920</td>
</tr>
<tr>
<td>Year 2</td>
<td>$10,235</td>
<td>$21,155</td>
</tr>
<tr>
<td>Year 3</td>
<td>$11,248</td>
<td>$32,403</td>
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Calculating UNC Subrecipient F&A

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**How much F&A would UNC collect in Year 3 and what is the most F&A that UNC can collect on Ohio State’s subcontract?**

A. $2,134 | $13,875
B. $5,680 | $25,000
C. None of the above
D. It depends!
Calculating Subrecipient F&A

Dr. Jones has indicated that he wants to do a subcontract with Ohio State for five years on an NIH grant proposal.

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<th>Direct Costs</th>
<th>Indirect (56%)</th>
<th>Total Budgeted</th>
<th>Total Cumulative Budget</th>
<th>UNC F&amp;A Collected after meeting threshold</th>
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<td>Year 1</td>
<td>$7,000</td>
<td>$3,920</td>
<td>$10,920</td>
<td>$10,920</td>
<td>$6,061</td>
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<tr>
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<td>$10,235</td>
<td>$21,155</td>
<td>$5,681</td>
</tr>
<tr>
<td>Year 3</td>
<td>$7,210</td>
<td>$4,038</td>
<td>$11,248</td>
<td>$3,845</td>
<td>$2,134</td>
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</table>

<table>
<thead>
<tr>
<th>Detail</th>
<th>$</th>
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<tbody>
<tr>
<td>Threshold</td>
<td>$25,000.00</td>
</tr>
<tr>
<td>Cumulative Budget - Year 2</td>
<td>$(21,155.00)</td>
</tr>
<tr>
<td>Year 3 F&amp;A Base</td>
<td>$3,845.00</td>
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How much F&A would UNC collect in Year 3 and what is the most F&A that UNC can collect on Ohio State’s subcontract?

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B. $5,680 | $25,000  
C. None of the above  
D. It depends!
Annualizing Salary

When would there be a need to annualize salary while developing a budget?

A. For personnel with less than 1.0 FTE
B. For personnel with 1.0 FTE
Annualizing Salary

For personnel with less than 1 FTE, calculate by dividing the Institutional Base Salary (IBS) by FTE.

Calculate Annual Salary with IBS = $80,000 at 0.75 FTE

$80,000 / 0.75 = $106,667 at 1 FTE

Refer to Office of Sponsored Research – 300.07, Procedure 1 for Estimating Salary
Dr. Green is a faculty member with a 9-month appointment and is being proposed to work on Dr. Jones's research project for 1 FTE. What is the correct calculation for his summer salary if Dr. Green’s Institutional Base Salary is $100,000?

A. $8,333  
B. $11,111  
C. $33,333  
D. None of the above

Refer to Office of Sponsored Research – 300.07, Procedure 1 for Estimating Salary
Calculating Summer Salary

Summer Salary = Salary divided by length of appointment to determine monthly salary then multiplied by 3

For Example, Personnel at 1 FTE with a 9-month appointment

($100,000 / 9) * 3 = $33,333 Summer Salary

Refer to Office of Sponsored Research – 300.07, Procedure 1 for Estimating Salary
Tips for a successful partnership

- For budget paperwork, inclusive of subrecipients, be sure that the first and last names are listed.
- Submit proposals at least five days before the submission date for a full review. This step may make a difference in being funded or not.
- Alert your Sponsored Projects Specialists (SPS) if you are aware of large proposals that may be late for review so we can be prepared.
- Reach out to your SPS and ask questions. We are here to be part of your team and guide!!
CONTACT US

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Office Website: https://research.unc.edu/sponsored-research/