Writing a Proposal
Budget: Lab
April 10 2018

Introductions

• We are...
  • Chris Dye-Hixenbaugh, C&G Officer, Proposals
  • Kelly Musselman, C&G Analyst, Awards
  • Marlene Mooshian, C&G Analyst, Proposals
  • Kassie Obelleiro, Training Officer

• Please tell us..
  • Your name and department/unit
  • How many proposal budgets you have worked on
Sponsored Programs Office (SPO) Functions

• Reviewing and submitting research proposals
• Negotiating and accepting awards on behalf of the Regents
• Drafting, negotiating, and executing (outgoing) subawards for collaborative research

Source: Policy #PPM 230-01, PPM 230-02 and UCOP RAO-95-01
https://ucdavispolicy.ellucid.com/documents/view/131
http://researchmemos.ucop.edu/index.php/site/memoDetail/memo_id/RAO-95-01

Learning Objectives

After today’s class you should:
• Be able to identify common errors or “red flags” in a proposal budget
• Know the components of a proposal budget
• Know how to combine the components into a cohesive proposal budget
Class Materials
Available at: http://research.ucdavis.edu/proposals-grants-contracts/spo/spo-training/

- Exercise Packet
  - Instructions for today’s activities
- Exercise Workbook
  - Worksheet for today’s activities
- Writing a Proposal Budget Toolkit
  - Reference materials

Class Outline

- Case Study
- Budget Exercises
- Example Budget Justification Language
- OR Budget Templates
- Resources
Common Acronyms

• BAA: Broad Agency Announcement • PI: Principal Investigator
• BUA: Biological Use Approval • RCI: Research Compliance and Integrity
• CGA: Contracts and Grants Accounting • RCR: Responsible Conduct of Research
• COI: Conflict of Interest • RFA: Request for Applications
• F&A: Facilities & Administrative rates; also referred to as indirect cost rate (IDC or ICR) or "overhead" • RFP: Request for Proposals
• FOA: Funding Opportunity Announcement • SBIR: Small Business Innovation Research
• IACUC: Institutional Animal Care and Use Committee • SPO: Sponsored Programs unit in the Office of Research
• IP: Intellectual Property • STTR: Small Business Technology Transfer
• IPF: Internal Processing Form •
Case Study: What Else Could Be Wrong?

Case Study – What Else Could Be Wrong?

Dr. Wrongway just sent you the following budget. How many things can you find wrong?

This is a NIH proposal and my salary is capped so I’ll get the rest of that salary from my Department of Energy grant. I’ve no experience is overseesed so I’m asking nothing but additional compensation for our efforts, but he has agreed to name any associated things benefits. We will pay a stipend to my graduate students, but I am only requesting tuition (but no salary) for the undergraduate hourly employees. My department has budget problems, so I am requesting 99% of my administrative assistant’s salary and a new computer for her because she’s 3 years old and she deserves the upgrade. My department chair’s grant just ended so I’ll give me 89% of his Department Chair salary for cost share and we’ll be able to add his name to the grant although most of his time next year will be on sabatical.

Our lab machine is broken so it is a good time to upgrade to a fast computer/printer, which will be useful for my teaching too. I am going to use this grant to fund our office supplies, cable so I won’t have to ask the government for more office supplies for the next fiscal year. The other supplies I buy will be for my lab, but I’m not asking for too much because I have offered on my last two contracts. I will get my student to attend lab meetings, so I’ll save about $1,000 per quarter for just and a $500 dinner at Christmas. We’ll go with a small box, though.

I’ve got an old microwave that still works pretty well and the undergraduates use it for their experiments. It would save some money so I cut it. I’m going to use the savings to buy a new microwave for the grant which was bought on a DOC contract, both. Dr. Wright seems to give him 50% per month for supplies and maintenance just in case it breaks down. My family planned a weekend in Switzerland this winter and I know of a conference in Germany that might be interesting which is scheduled at the same time. We just moved and I need to pay my mileage to and from the university since we have to in the next county. Also, I’ll be working from home so I’m going to buy a new telephone and computer which are state of the art. I don’t believe I will be making anything but just in case, add $1,000 for postage.

We’ll pay each of the people who work on the grant a participant support stipend ($250) since they will be working hard to get the work done. My wife has agreed to be a consultant for a retainer of $2,000 and $0.50 per hour. She has an award already. I’ll use the research RIA rate for the travel for the work. I think in research and the lower RIA rate for the parts that look like other services. So, I’ll ask for the higher RIA rate in this proposal case I need some additional funds for contingency. The department is paying 4% on all proposals submitted so that they can make some extra money. I negotiated it down to 1% because that is such a big number.

Budget Exercises

Task 1: Budget Overview & Preparation
Task 2a: Personnel: Salaries & Wages
Task 2b: Percent Effort vs. Person Months
Tasks 3 - 7: Consultants and Equipment, Supplies, Travel, Other Direct Costs and Subawards
Tasks 8 & 9: F&A Cost and Total Budget
Task 1: Budget Overview & Preparation

• Budget Overview located on page 2 of the Exercise Packet
• Task 1 located on Page 3 in Exercise Packet
• Complete Exercise Sheet 1 in Exercise Workbook

Exercise Sheet 1: Budget Preparation

Period of Performance: 5/1/2014 – 12/31/2014

<table>
<thead>
<tr>
<th>Annual Salary</th>
<th>PI</th>
<th>Post Doc</th>
<th>GSR III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$131,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

START OF PROJECT

<table>
<thead>
<tr>
<th>Multiply by (1.00 + Interest)</th>
<th>PI</th>
<th>Post Doc</th>
<th>GSR III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Composite Benefit Rate

<table>
<thead>
<tr>
<th>FY 2013/14</th>
<th>PI</th>
<th>Post Doc</th>
<th>GSR III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FY 2014/15</th>
<th>PI</th>
<th>Post Doc</th>
<th>GSR III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F&A Rate

<table>
<thead>
<tr>
<th>Student Fee Escalation</th>
<th>FY 2013/14 Fees (per quarter)</th>
<th>Multiply by escalation</th>
<th>Multiply Esc. FY 2013/14 Fees (per quarter)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Task 2a: Personnel, Salaries and Wages

- Page 3 in Exercise Packet
- Use information from Exercise Sheet 1 in Exercise Workbook
- Complete Exercise Sheet 2 in Exercise Workbook

### Exercise Sheet 2: Budget Spreadsheet

#### Personnel

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Jett Jeffes</th>
<th>Effective Dates:</th>
<th>1/1/2014 to 12/31/2014</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Annual Salary</th>
<th>Effort (%)</th>
<th># of Months of Effort</th>
<th>AY</th>
<th>CY</th>
<th>Summer</th>
<th>Salary</th>
<th>Benefit Rate</th>
<th>Benefits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Jeffes (FY 2014)</td>
<td>$133,620</td>
<td>20%</td>
<td>8</td>
<td>59</td>
<td>1.2</td>
<td>$17,816</td>
<td>33.9</td>
<td>$6,293</td>
<td>$23,760</td>
<td></td>
</tr>
<tr>
<td>Professor Jeffes (FY 2015)</td>
<td>$133,620</td>
<td>35%</td>
<td>6</td>
<td>60</td>
<td>1.0</td>
<td>$15,436</td>
<td>33.9</td>
<td>$6,293</td>
<td>$23,760</td>
<td></td>
</tr>
<tr>
<td>Doyle (Post Doc) (FY 2014)</td>
<td>$38,748</td>
<td>50%</td>
<td>6</td>
<td>60</td>
<td>1.0</td>
<td>$19,374</td>
<td>33.9</td>
<td>$6,293</td>
<td>$23,760</td>
<td></td>
</tr>
<tr>
<td>Doyle (Post Doc) (FY 2015)</td>
<td>$38,748</td>
<td>50%</td>
<td>6</td>
<td>60</td>
<td>1.0</td>
<td>$19,374</td>
<td>33.9</td>
<td>$6,293</td>
<td>$23,760</td>
<td></td>
</tr>
<tr>
<td>TBN (OSR III) - (AY)</td>
<td>$38,748</td>
<td>100%</td>
<td>6</td>
<td>60</td>
<td>1.0</td>
<td>$38,748</td>
<td>33.9</td>
<td>$6,293</td>
<td>$38,748</td>
<td></td>
</tr>
<tr>
<td>TBN (OSR III) - (Summer)</td>
<td>$38,748</td>
<td>100%</td>
<td>2</td>
<td>4</td>
<td>0.5</td>
<td>$38,748</td>
<td>33.9</td>
<td>$6,293</td>
<td>$38,748</td>
<td></td>
</tr>
</tbody>
</table>

- **Amount you calculated on Task 1 Handout**
- **This is (Annual Salary) * (Effort %)**
- **This is (Salary) * (Benefit Rate)**
- **Sum of Salary and Benefits**
Task 2b: Percent Effort vs. Person Months

- Page 3 in Exercise Packet
- Complete Exercise Sheet 2 in Exercise Workbook
Exercise Sheet 2: Budget Spreadsheet

## Personnel

*This is (% effort)*(# of months)*

<table>
<thead>
<tr>
<th>Name</th>
<th>Annual Salary</th>
<th>Effort (%)</th>
<th>Of Month of Pay</th>
<th>CY Summer Salary</th>
<th>Benefit Rate</th>
<th>Benefits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Jeffries (FY 2014)</td>
<td>$133,620</td>
<td>20%</td>
<td>6/6</td>
<td>$17,915</td>
<td>33.3%</td>
<td>$5,883</td>
<td>$23,740</td>
</tr>
</tbody>
</table>

Task 3 - 7: Consultants, Equipment and Supplies, Travel, Other Direct Costs and Subawards

- **Tasks 3 and 4:** Consultants, Equipment and Supplies
  - Page 4 in Exercise Packet
  - Complete Exercise Sheet 2 in Exercise Workbook
- **Task 5, 6, 7:** Travel, Other Direct Costs and Subawards
  - Pages 4-5 in Exercise Packet
  - User information from Exercise Sheet 1
  - Complete Exercise Sheet 2 in Exercise Workbook
What Qualifies as (Capital) Equipment?

- Equipment must meet all the following:
  - Tangible
  - Non-consumable
  - Free-standing
  - Moveable
  - Useful life is at least 1 year
  - Stand-alone asset
  - Per unit costs is more than $5,000
Example Quote

<table>
<thead>
<tr>
<th>QTY</th>
<th>DESCRIPTION</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MVL-120 Real-time Back-reflection Laser System w/NovoStar v7.3 software</td>
<td>$105,699.00</td>
</tr>
<tr>
<td></td>
<td>operating on a Windows custom computer, including a gas regulator, (A Demmon)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>MVL-701A, Jack &amp; Translation Stage &amp; MVL-702 Beam Stop</td>
<td>$10,485.00</td>
</tr>
<tr>
<td>1</td>
<td>MVL-701 Three-axis motorized stage for operation with the MVL-732 controller</td>
<td>$9,995.00</td>
</tr>
<tr>
<td>1</td>
<td>MVL-710 Base Plate</td>
<td>$1,305.00</td>
</tr>
<tr>
<td>1</td>
<td>MVL-750 Multiline Automated Motor Controller with joystick control</td>
<td>$5,200.00</td>
</tr>
<tr>
<td>1</td>
<td>MVL-703 Motorized Bond/Burner Holder (optional)</td>
<td>$10,660.00</td>
</tr>
<tr>
<td></td>
<td>Position sensor upgrade for MVL-701A (optional)</td>
<td>$2,900.00</td>
</tr>
<tr>
<td>1</td>
<td>USB optical camera and monochromed estimator sample positioning system (optional)</td>
<td>$6,450.00</td>
</tr>
<tr>
<td>1</td>
<td>Fluorescence filter for high voltage operation (optional)</td>
<td>$1,995.00</td>
</tr>
<tr>
<td>1</td>
<td>Apertures (100 W x-ray Generator) with generator and generator</td>
<td>$7,590.00</td>
</tr>
<tr>
<td>1</td>
<td>DEXCO – Talsa with 16” Rack</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>1</td>
<td>DEXCO – Enclosure 35X6235”</td>
<td>$4,490.00</td>
</tr>
<tr>
<td>1</td>
<td>DEXCO – SPF-2000 Water Cooler 2000 Watt</td>
<td>$2,880.00</td>
</tr>
<tr>
<td>1</td>
<td>DEXCO – X-ray Tube Kit inc. Water Jacket, HV cable, (un) X-Ray Tube</td>
<td>$12,790.00</td>
</tr>
<tr>
<td></td>
<td>Sub-total Equipment cost</td>
<td>$182,880.00</td>
</tr>
<tr>
<td></td>
<td>Less 35% USA Educational Discount</td>
<td>($65,414.00)</td>
</tr>
<tr>
<td></td>
<td>Sub-total Equipment cost less Discount</td>
<td>$117,466.00</td>
</tr>
<tr>
<td></td>
<td>Estimated CA routing fee (3.25%)</td>
<td>$4,778.30</td>
</tr>
<tr>
<td></td>
<td>Installation of MVL-120 with above units</td>
<td>$3,000.00</td>
</tr>
<tr>
<td></td>
<td>Estimated Packing/Shipping/Insurance (subject to change based on actual)</td>
<td>$2,000.00</td>
</tr>
<tr>
<td></td>
<td>Total Estimated Cost</td>
<td>$114,695.30</td>
</tr>
</tbody>
</table>

What Qualifies as (Capital) Equipment?

- Ask the Principal Investigator:
  1. Which, if any, of the items are permanent, dedicated components?
     - If YES, may be Equipment
  2. Are there any items that function as independent, stand-alone assets?
     - If NO, may be Equipment
  3. Are any of the items undedicated components (will roam from asset to asset as needed)?
     - If NO, may be Equipment
  4. Are any of the items consumables?
     - If NO, may be Equipment
  5. Do any of the hardware items have an expected lifespan of less than one year?
     - If NO, may be Equipment
  6. Are any of the items replacement parts?
     - If NO, may be Equipment
Task 8 & 9: F&A Cost and Total Budget

• Page 5 in Exercise Packet
• Exercise Sheet 2

Some Definitions

• **Modified Total Direct Costs (MTDC)** - The Modified Total Direct Cost base, or MTDC, is used per the University's negotiated rate agreement. This includes most direct costs, including all salaries and wages, fringe benefits, materials and supplies, services, travel, and subgrants and subcontracts up to the first $25,000 of each subgrant and subcontract (regardless of the period covered by the subgrant or subcontract). Equipment, capital expenditures, charges for patient care and tuition remission, rental costs, scholarships, and fellowships, as well as the portion of each subgrant and contract in excess of $25,000 shall be excluded from modified total direct costs.

• **Total Direct Costs (TDC)** - Total Direct Costs are calculated the same way that we calculated MTDC. The difference is that there are no direct cost category exclusions. Because this is not the cost base on which our negotiated rate agreement is based, you should only use this cost base if the sponsor specifically requires you to do so.

• **Total Cost (TC)** - As with Total Direct Costs, you should only use Total Costs as a cost base if the sponsor specifically requires it. Calculating your indirect costs using a cost base of Total Costs is a bit more complicated than MTDC and Total Direct Costs. Your first step will be to determine your Total Costs.
Exercise Sheet 2

MTDC and F&A

<table>
<thead>
<tr>
<th>Total Direct Costs</th>
<th>F &amp; A Costs @</th>
<th>of MTDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Budget Period Costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Fees/Tuition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subawards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plus:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subawards - Stanford</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Modified Total Direct Costs:

We do not charge F&A to sister campuses

Example Budget Justification Language

Pages 31-36, Writing a Proposal Budget Toolkit
OR Budget Templates

https://docs.or.ucdavis.edu/spo/

OR Budget Templates and FAQs

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
<th>Last Modified</th>
</tr>
</thead>
<tbody>
<tr>
<td>TemplateA_SingleBudget.xlsx</td>
<td>Single budget template for use as a proposal budgeting tool.</td>
<td>October 03 2017 15:25:22</td>
</tr>
<tr>
<td>TemplateB_Costsharing_Budget.xlsx</td>
<td>Cost sharing budget template that sums both requested and cost-shared expenses.</td>
<td>October 03 2017 15:25:33</td>
</tr>
<tr>
<td>TemplateC_MultiBudget.xlsx</td>
<td>Multi-budget template for use with proposal budgets requiring multiple budgets such as NIH P01s and U54s.</td>
<td>October 03 2017 15:25:43</td>
</tr>
<tr>
<td>TemplateD_AB20.xlsx</td>
<td>Budget template for California State Model agreement (AB20) proposals.</td>
<td>October 03 2017 15:25:56</td>
</tr>
<tr>
<td>Budget_Sheet_FAQs.pdf</td>
<td>FAQs on budget template use.</td>
<td>August 30 2016 16:34:48</td>
</tr>
<tr>
<td>TemplateE_CIRMBudget.xlsx</td>
<td>Budget template for use with CIRM proposals.</td>
<td>October 03 2017 15:26:04</td>
</tr>
</tbody>
</table>
Resources

- Office of Research Website
- Guide to Research Compliance
- SPARK Training Website
- Listserv Subscriptions
- Research Administration Forums
- Other Classes

Office of Research Website
http://research.ucdavis.edu/
Guide to Research Compliance


SPARK Training Website

http://spark.ucdavis.edu/training/
Office of Research Listserv Subscriptions

• C&G Listserv: [https://lists.ucdavis.edu/sympa/info/ovcr-cg](https://lists.ucdavis.edu/sympa/info/ovcr-cg)

• Other Office of Research Listservs: [http://research.ucdavis.edu/resources/listserv-subscriptions/](http://research.ucdavis.edu/resources/listserv-subscriptions/)
  - Core Facilities Program
  - Digital Millennium Copyright Act (DMCA)
  - Funding
  - Institutional Review Board (IRB)
  - Research Compliance and Integrity (RCI)
  - Responsible Conduct of Research (RCR)
  - Research Unit Lists

Monthly Research Administration Forum

• The fourth Wednesday of each month from 8:30-10am (January – October)
• Located at Sponsored Programs office
  - 1850 Research Park Drive, Davis.
• Reminders are sent out via the OVCR-cg listserv (visit our website to sign up for this listserv)

**TIP:** CGA, IRB, RCI and other units provide important updates at the Forum too!
Other Classes Offered by SPO

• Sponsored Programs Essentials
• Proposal Preparation and Submission
• Understanding the Award Process
• Electronic Research Administration

Visit the SDPS website for a list of dates and times and to sign up. http://sdps.ucdavis.edu/

Q & A

• What questions do you have?

• Don’t forget your evaluation forms!
Thank You!

For research-related announcements, you can now follow SPO on Twitter and YouTube!

@UCDavis SPO

Sponsored Programs UC Davis