# Developing Grant Proposal Budgets and Data Management Plans



California Alliance for Hispanic-serving Social Science Advancement

#### Today's Speakers



Dr. Holly Hapke Director of Research Development UC Irvine



Dr. Wasila Dahdul Data Curation Librarian UC Irvine



#### Today's Agenda



#### **Grant Proposal Budgets**

Data Management Plans



**Networking Time** 



### **Networking Topics**

Type in the Chat 1-2 topics around which you would like to network with colleagues from other institutions who are attending today.

#### **Upcoming Webinar**

Describing Social Science Methods in Proposals **May 19, 12:00 – 2:00** Register Here: https://cahssa.ucsb.edu/programs/



## **Grant Proposal Budgets**



## What is a grant budget? Why is it important?

- Outlines intended expenditures specific to your proposed project or program
- Important because it shows a funder exactly what the funding will be sued for – it paints a clear picture of your intentions
- A well-crafted budget instills trust on the part of reviewers and funders that the project will be conducted by a competent individual or team
- And it provides you with a financial plan for the project if funded, which will make project management easier



### Key Terms

- **Direct Costs:** Expenses directly related to project activities and/or production of items or services (e.g., salaries, travel, equipment, research subject compensation)
- Indirect Costs (aka Overhead, F&A): Expenses required for the institution to operate but not directly related to a single activity (e.g., rent, utilities, security); usually calculated as a % of direct costs (federally negotiated rate 35-65%; de minimis 10%)
  - **F&A:** Facilities and Administration
- Total Costs: Direct costs + indirect costs



### **Types of Budgets**

• **Detailed:** a budget that outlines detailed costs of project; each expense is listed for each year



#### Sample Grant Proposal Budget

A. Personnel	Year 1	Year 2	Year 3
<ol> <li>Jose Ramirez, Principal Investigator</li> <li>2017-18 AY salary is \$72,000</li> </ol>			
a. 10% effort during AY (3 units)	\$7,200	\$7.416	\$7.63
b. 100% effort for 2 summer months	\$16,000	\$16,480	\$16,97
E. Too ye end that 2 seminer manage	\$10,000	\$10,400	\$10,07
2. Graduate Research Assistants - TBN			
Yr 1: 1 x 36 wks x 15 hrs/wk x \$14/hr	\$7,560	ALE 400	A
Yrs 2 & 3: 2 x 36 wks x 15 hrs/wk x \$14/hr		\$15,120	\$15,12
3. Rebecca Wong, Data Assistant (ASC II)			
50% effort, 12 months*	\$19,750	\$20,343	\$20,95
3. Rebecca Wong, Data Assistant (ASC II) 50% effort, 12 months*	\$50,510	\$59,359	\$60,68
B. Fringe Benefits			
57.8% of Item A1a - Faculty AY rate**	\$4,082	\$4,353	\$4,637
12 % of Item A1b - Faculty Add'I Employment Rate	\$1,920	\$1,978	\$2,037
10.5% of Item A2 - Student Rate	\$794	\$1,588	\$1,588
57.8% of Item A3 - Fully Benefited Staff Rate**	\$11,198	\$11,941	\$12,718
Total Fringe Benefits	\$17,994	\$19,859	\$20,979
C. Equipment			
Tektronics Recorder - Model 1245	\$5,200		
Total Equipment	\$5,200		
D. Materials and Supplies			
Data Recorder Packs (20 x \$150)	\$3,000	\$3,000	\$3,000
Recorder Disks (10,000)	\$2,000	\$2,000	\$2,000
Total Materials and Supplies	\$5,000	\$5,000	\$5,000
E. Travel			
Travel to Project Director's Meeting in Washington DC in Yrs 1 & 3	\$1,463		\$1,463
Airfare @ \$600; Lodging @ \$205 x 3; Per diem @ \$62/day x 4 days			
Total Travel	\$1,463	\$0	\$1,463
F. Contractual Agreements			
Subcontract to University of Oklahoma (OU)			
OU PI - Jenkins at 5% AY effort	\$4,750	\$4,750	\$4,750
OU PI's Fringe Benefits @ OU's rate of 49%	\$2,328	\$2,328	\$2,328
Graduate student @ 36 wks x 15 hrs/wk x \$17/hr	\$9,180	\$9,180	\$9,180
Student Fringe Benefits @ OU's rate of 15%	\$1,377	\$1,377	\$1,377
OU F&A at 55% of MTDC	\$9,699	\$9,699	\$9,699
Total Contractual	\$27,333	\$27,333	\$27,333
G. Other Direct Costs			
Publication Costs (page charges)		\$500	\$500
Computer Access Costs	\$500	\$500	\$500
Total Other Direct Costs	\$500	\$1,000	\$1,000

H. TOTAL DIRECT COSTS	\$108,001	\$112,551	\$116,462	
I. FACILITIES AND ADMINISTRATIVE COSTS 42% of Modified Total Direct Costs (MTDC) (excludes equipment and amount of sub over \$25,000)	\$42,197	\$35,792	\$37,434	
J. TOTAL PROJECT BUDGET	\$150,197	\$148,343	\$153,895	

\*Includes a 3% salary increase in years 2 & 3 to cover potential cost of living and/or merit increases. \*\* 2% increase in subsequent years for fully-benefited faculty and staff positions.

**Example Detailed Budget** 

https://www.csus.edu/experience/innovationcreativity/oried/documents/sample-proposalbudget\_v2.pdf



### **Types of Budgets**

• **Modular:** a budget written in modules, or increments – e.g., \$25,000-250,000 – used only by NIH

#### Calculation of Modules

- Prepare a detailed line-item budget, including annual escalation of costs.
- Total all the direct costs for the life of the project, excluding subcontract F&A.
- Divide the total direct costs by number of project years.
- Round up to the next \$25,000 module.



#### Example Modular Budget

UA Budget	09/01/2014- 08/31/2015	09/01/2015- 08/31/2016	09/01/2016- 08/31/2017	09/01/2017- 08/31/2018	09/01/2018- 08/31/2019	
onbudget	YR1	YR2	YR3	YR4	YR5	TOTAL
Salaries	50,000	50,000	50,000	50,000	50,000	250,000
ERE	15,000	15,000	15,000	15,000	15,000	75,000
Operations	45,000	45,000	45,000	45,000	45,000	225,000
Equipment	6,000	6,000	6,000	6,000	6,000	30,000
Travel	7,000	7,000	7,000	7,000	7,000	35,000
SUBTOTAL DIRECT COSTS	123,000	123,000	123,000	123,000	123,000	615,000
Module Amount						
(round up to nearest \$25k)	125,000	125,000	125,000	125,000	125,000	625,000
F&A Base						
(start w/ module amount)	125,000	125,000	125,000	125,000	125,000	625,000
less exclusions (equipment)	6,000	6,000	6,000	6,000	6,000	30,000
MTDC Base	119,000	119,000	119,000	119,000	119,000	595,000
F&A Rate - 52.5% (07/01/14-06/30/15)	52,063	-	-	-	-	52,063
F&A Rate - 53.0% (07/01/15-06/30/16)	10,512	52,559	-	-	-	63,071
F&A Rate - 53.5% (07/01/16-06/30/18)	-	10,611	63,665	63,665	63,665	201,606
TOTAL INDIRECT COSTS	62,575	63,170	63,665	63,665	63,665	316,740
Total Direct Costs	125,000	125,000	125,000	125,000	125,000	625,000
Total Indirect Costs (F&A)	62,575	63,170	63,665	63,665	63,665	316,740
TOTAL COSTS	187,575	188,170	188,665	188,665	188,665	941,740

https://research.arizona.edu/sites/default/files/nih\_modular\_budget\_examples\_updated\_121 52014.pdf



### Steps to Preparing a Budget

- Review funder guidelines:
  - Eligibility
  - Areas of funding & typical award amounts
  - Allowable expenses & Limitations
  - Use template if provided
- Sketch out scope of work and activities for each year of project— start with ideal/best science, scale back as necessary (vs reverse calculations)
- Identify project costs investigate, don't guess
- Include project revenue (if applicable)
- Align budget, budget justification/narrative, and project description
- Have someone review your budget for errors and inconsistencies



Objectiv	ves & Activities	Performed by	Output/ Deliverable	Timeline	Budget/Cost
Objective 1	Activity 1a Activity 1b Activity 1c	<ul> <li>PI</li> <li>Co-PI</li> <li>Consultant</li> <li>Qty of students</li> </ul>		Step 1: Months 1-3, Year 1 Step 2: Months 2-5, Year 2 Step 3: mm/yyyy – mm/yyyy	Time, materials, equipment required, estimated cost
	Impact:				
Objective 2	Activity 2a Activity 2b Activity 2c	<ul> <li>PI</li> <li>Co-PI</li> <li>Qty of students</li> </ul>		Step 1: mm/yyyy – mm/yyyy Step 2: mm/yyyy – mm/yyyy Step 3: mm/yyyy – mm/yyyy	
	Impact:				
Objective 3	Activity 3a Activity 3b Activity 3c	<ul> <li>Co-Pl</li> <li>Qty of students</li> <li>External Evaluator</li> </ul>		Step 1: mm/yyyy – mm/yyyy Step 2: mm/yyyy – mm/yyyy Step 3: mm/yyyy – mm/yyyy	
	Impact:				

### Budget Categories – Items to Include

- Personnel (salaries or equivalent for course release & benefits)
  - Principal investigators/Sr. Personnel
  - Research Assistants stipends/hourly wages, tuition/fees
  - Administrative support/Project management (if required)
  - Consultants (an "Other Direct Costs" line item)
- Equipment e.g., computers, software, cameras, etc.
- Supplies
- Travel for research/project activities; for dissemination (e.g., conferences)
- Publication costs
- Research Costs
  - Survey Design, Distribution, Analysis costs apart from project personnel
  - Translation, Recorder, Transcription Costs
  - Secondary Data Purchase, Subscriptions
  - Research Subject Compensation
- Event Costs e.g., workshop, focus group discussions venue rental, meals, travel reimbursement, supplies
- Project Evaluation (external evaluator rate 15% total direct costs)
- Data Repository Costs



### **Estimating Costs**

- Personnel
  - Senior Personnel time usually salary months, parameter usually set by funder (e.g., NSF 2 months unless exceptions justified)
  - Support Staff estimate effort \* compensation rate
- Travel Budget Cheat Sheet
  - Airfare/Train/Car Expedia/Travelocity or travel agent quotes; institutional mileage rates
  - Ground Transport/Parking online quotes
  - Hotel federal per diem rates or online quotes
  - Meals & Incidentals federal or university per diem rates
  - Conference Registration Fees
  - International Travel Visa Fees
- Other Items get quotes





### Include Revenue

- For example:
  - Workshop registration fees
  - User fees
  - Cost shares
  - In-kind contributions
  - Additional sources of support

Subtract from Total Request



### **Budget Narratives/Justifications**

- Provides space for explaining how your arrived at estimated expenses, expand upon line-item descriptions, share additional sources of funding – gives context and meaning
- It describes and *justifies* the expenses, provides a rationale
- Should align closely with budget and project description develop iteratively with project description
- Tips:
  - Provide detail on how costs were determined e.g., travel: destination, #people/#days/cost per night (hotel and M&IE), miles/mileage rate, number of trips
  - Make clear why you need item e.g., computers
  - Use best reasonable estimate don't inflate, don't underestimate



### **Example Budget Narrative**

#### PERSONNEL

**Dr. Phlapyer Wings** (2 calendar months' effort per year) is the Director of the My-T Mouse Center. He has extensive experience with generating knockout mice and developed the Zymogwin procedure which is used world-wide for transilectomies. He has published prolifically on the development of sharwings and ebbernoodles. Dr. Wings collaborates with ornithologists, zoologists, and educators on projects related to mammalian flight. He will be directly responsible for statistical analyses of data collected in experiments in aims 1, 3, and 4. He will coordinate the work done at Terrytoons University, the subcontracted work done at Unique University, and the Cores. He will also be responsible for writing all progress reports and supervising the postdoctoral fellow. (\$120,000/year base salary × 2/12 = \$20,000 per year).

**Dr. Pearl Pureheart**, Postdoctoral Fellow (12 calendar months' effort per year) has been a part of the Wings lab for two years, bringing experience with the Maximowz procedure as well as extensive work with anthropomorphism. Dr. Pureheart will perform the gene replacement regimen and other experiments for Aims 1 and 3 as well as assisting with data management. She will also supervise the undergraduate student researchers. (\$40,000/year base salary  $\times$  12/12 = \$40,000 per year).

**Two Undergraduate Student Researchers** (1 calendar month effort each per year) will assist with basic lab procedures and preparing mice for surgery. (\$10/hr. × 175 hours × 2 students = \$3,500 per year).



Webcast Resource: Licklider, et al. 2012b.

#### **FRINGE BENEFITS**

Fringe benefits are calculated at the University's federally negotiated rate of 30 percent for full-time employees. No fringe benefits are calculated for the undergraduate student researchers.

#### EQUIPMENT

A Flimsadiddle microscope will be purchased in Year 1 for use in the insertion phase of the Maximowz procedure. A quote of \$11,200 for this microscope is attached. Having this microscope in the Wings lab relieves the team from paying fees to use the Biochemistry Department's microscope which would add more than \$8,000 in fees over the course of the project. As this equipment would be used for other projects as well, the University will fund half of the cost, requesting only \$5,600.

#### TRAVEL

**Collaboration travel funds:** Funds are requested for the PI and Postdoctoral Fellow to coordinate research efforts with the team at Unique University in Iowa. This subcontract team will be responsible for Aim 2 in Years 2 and 3 of the project. Two 2-day trips a year are planned for Years 2 and 3 (600 miles per round trip × \$0.525/mile × 2 trips; 2 hotel rooms × \$100 per night × 1 night × 2 trips; \$42 per diem × 2 days × 2 people × 2 trips) for a total request of \$1,366 per year for Years 2 and 3.

**Travel to scientific conferences:** Funds are requested to support participation in the US Knockout Science Conference where research results from this project will be presented. Estimated costs for a three-day trip to this conference include \$800 for airfare, \$42 per diem, \$100/night for lodging, \$50 for ground transportation, and \$300 for conference registration (\$1,476 per year).



### Sticky Issues

- Food expenses be careful about what's allowed
- Participant support costs
- Payments to outside individuals above \$600
- Speaker fees vs honoraria
- Subawards & collaborators at other institutions
- International travel
- International collaborators and payments



#### Resources

- M.M. Licklider and the University of Missouri Grant Writer Network. 2012a. Cheat Sheet for Calculating Travel Expenses. Grant Seeking in Higher Education: Strategies and Tools for College Faculty. Jossey-Bass.
- Licklider, M.M. 2012b. Budget Justification for Terrytoons University. Grant Seeking in Higher Education: Strategies and Tools for College Faculty. Jossey-Bass.



#### Questions?



## **Data Management Plans**

Dr. Wasila Dahdul, UCI Libraries See separate slide deck "Data Management Plans"



#### **Future Webinar**

 Describing Social Science Methods in Proposals May 19, 2022, 12:00 – 2:00

REGISTER HERE: https://cahssa.ucsb.edu/programs/



## Networking

1. Introduce yourselves

2. Ice Breaker - If you could live anywhere in the world for a year, where would it be?



## Thank you for attending!

A recording of this webinar, slide deck and links to resources will be available at: https://cahssa.ucsb.edu/programs/.

