Amanda Hamaker
Director – Pre-Award
Sponsored Program Services

Kristyn Jewell
Operations Coordinator – Internal Research Support
Office of the Executive Vice President for Research and Partnerships

October 12, 2017



Proposal Budgeting 101

MORE THAN NUMBERS

Topics to be covered include:

- Being responsive to budget requirements by sponsor
- Describing the use of AY salary vs summer salary
- Budgeting with partners and/or subcontracts
- Defining F&A and why it's necessary
- Breaking down a sample budget
- Evaluating cost share requirements
- Defining Purdue's policy on cost sharing
- How to get assistance with your budget

PURDUE

Importance of a Budget

- Outlines the project in fiscal terms
- Budget items give an in-depth understanding of how the project will be structured and managed
- Helps reviewers determine if the project is:

FEASIBLE

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PURDUE

Proposal Budgeting 101

COSTING BASICS

- Costing Policy requires that all expenditures for sponsored projects meet the following criteria:
 - They must be **REASONABLE**
 - They must be **ALLOWABLE**
 - They must be **ALLOCABLE**

PURDUE

COSTING BASICS

- REASONABLE Cost a prudent person would have agreed to under the circumstances (newspaper test).
- ALLOWABLE Must be allowable under any limitations or exclusions within the announcement, award, sponsor, or university guidelines.
- ALLOCABLE Charges are assigned to benefiting accounts in accordance with the benefits received.
 May be assigned as either direct or indirect costs.

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PURDUE

Proposal Budgeting 101

COSTING BASICS

- Why is it important to make sure a proposal is properly costed?
 - Ensure processes and systems are designed in accordance with government regulations
 - Ensure sponsors bear their fair share of total project costs
 - Ensure consistency in proposal budgeting
 - Proposed budget should be sufficient to carry out all program deliverables
 PURDUE

KEY CONSIDERATIONS

- How does Pre-Award support Investigators in proposal preparation?
 - Investigators Know the RESEARCH
 - Pre-Award Knows the **BUDGET**
 - Investigators must be able to <u>communicate</u> the budget needs to Pre-Award in order to build a successful proposal budget.

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PURDUE

Proposal Budgeting 101

KEY CONSIDERATIONS

- Review the Program Announcement (PA, RFP) and the applicable budget guidelines for allowable and unallowable costs.
- Some sponsors have general budget considerations not specific to a program (NSF, NIH).
- Identify budget considerations:
 - Minimums/maximums
 - Unallowable costs
 - Salary limitations
 - Required budget items (travel, salary, etc)
 - Cost Share Requirement
- F&A Restrictions

PURDUE

KEY CONSIDERATIONS

- Identify the costs necessary to successfully complete the Scope of Work (SOW)
- Questions to Consider:
 - How and where will the project be completed?
 - Who is needed to complete the project? How much of their time?
 - What items are needed to complete the project?
 - Will any partners be involved?
 - Will any travel be necessary?
 - Do I have the equipment needed for the project?

PURDUE



COMPONENTS OF A BUDGET

- Direct Costs
 - Costs that can be identified specifically for a particular sponsored project
 - Costs that can be directly assigned to such activities relatively easily with a high degree of accuracy

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Proposal Budgeting 101

COMPONENTS OF A BUDGET - DIRECT COSTS

- Salaries and Wages
 - Fringe Benefits
 - Graduate Fee Remissions
- Consultants
- Participant Support
- Subcontracts
- Equipment
- Travel
- Supplies and Expense

PURDUE

COMPONENTS OF A BUDGET - DIRECT COSTS

- Salaries and Wages
 - Identify personnel needed to complete the work
 - Principal Investigators, Research/Professional Associates, Research Assistants, Post Docs, Grads, Technicians
 - Budgeted as a percentage of time. Examples:
 - 10% AY
 - 2 weeks summer 100%
 - Some sponsors require person months
 - Must follow college and/or department guidelines
 - Some require AY time for faculty
 - Specific starting salaries for grads and post docs

 PURDUE

Proposal Budgeting 101

COMPONENTS OF A BUDGET - DIRECT COSTS

- Salaries and Wages Summer vs AY
 - Summer Faculty with a 9 month appointment can budget up to 12 weeks of summer.
 - Summer salary is budgeted at an inflated rate to account for Purdue Summer Pay Policy.
 - Academic Year (AY) AY time should be budgeted as needed to complete the project and in accordance with departmental guidelines.
 - Most departments offer course releases if a specific amount of AY time is budgeted (example: 20% per course per semester)
 - Some departments have AY requirements

PURDUE

COMPONENTS OF A BUDGET – DIRECT COSTS

- Salaries and Wages
 - Fringe benefits budgeted as a percentage of salary at a rate determined annually by Managerial Accounting Services based on averages by employment category
 - Graduate Fee Remissions budgeted at a monthly rate based on the time budgeted per Grad
 - Inflated annually

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Proposal Budgeting 101

COMPONENTS OF A BUDGET – DIRECT COSTS

- Why should we not over-commit key personnel?
 - Budgeting 100%--are there no other responsibilities?
 - All activities must be taken into consideration
 - Look at commitment across all sponsored projects



COMPONENTS OF A BUDGET - DIRECT COSTS

Consultants

- Outside services necessary to complete the work
- Not provided by University personnel
- Service provided is routine in nature and not collaborative

• Participant Support

- Stipends or subsistence allowances, travel allowances, and registration fees paid to or on behalf of participants or trainees (not employees)
- Limited to conference or training grants

PURDUE

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Proposal Budgeting 101

COMPONENTS OF A BUDGET - DIRECT COSTS

Subcontracts

- Collaborations with other institutions/agencies
- Substantive, participating in the results,
 publications, and presentation of the research

Budget Considerations:

- Consider giving each partner/subawardee a target budget early in the process
- Purdue only collects indirect costs on the first \$25K of each subcontract

PURDUE

COMPONENTS OF A BUDGET - DIRECT COSTS

- Equipment
 - Specifically needed for the project
 - Must be a single unit over \$5,000
 - Are renovations needed? Will it fit through the door?

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PURDUE UNIVERSITY

Proposal Budgeting 101

COMPONENTS OF A BUDGET - DIRECT COSTS

- Travel
 - Field Work, Collaborative/Professional Meetings,
 Periodic Agency Meetings (Agency Required)
 - Include mileage, rental car expense, parking, airfare, per diem (meals)
- Supplies and Expenses
 - Resources necessary to complete the work
 - Estimate as close as possible
 - Sufficient supplies (lab, animals, chemicals, etc)

PURDUE

COMPONENTS OF A BUDGET – INDIRECT COSTS

- Costs that are incurred for common or joint objectives
 - Depreciation and Use Allowances (building and equipment)
 - General, Sponsored Programs, Student, and Departmental Administration
 - Operation and Maintenance Expenses
 - Library Expenses
 - Office Supplies and Copying
 - Basic Local Telephone Services On Campus
- Journals and Subscriptions, Memberships



Negotiated between Purdue

and Department of Health

and Human Sciences (DHHS)
every 3 years

Proposal Budgeting 101

Facilities & Administration (F&A)

- West Lafayette F&A Rates
 - Research = 55%
 - Instruction = 54%
 - Other Sponsored Programs (OSP) = 38%
 - Off-Campus = 26%
 - Uncapped Research Rate = 64.75%
- Other terms used to describe F&A
 - Indirect Costs, IDC, or overhead
- Criteria for off campus rate:
 - Activity necessitates an off campus location, is for a full semester or summer session, and in a project leased space

PURDUE

How do you Charge the F&A Rate?

MODIFIED YOTAL DIRECT COST

- F&A Costs are charged as a percentage of direct costs
- If a project is bearing the full negotiated F&A rate, that rate is always applied to the MTDC base. MTDC exclusions include:
 - o Capital equipment
 - o Participant Support Costs
 - o Tuition/Tuition Remissions
 - o Scholarships and Fellowships
 - o Alterations and Renovations
 - o Cost of renting/leasing project space or equipment
 - o Portion of each sub-award over \$25K
- Example:

Cost Category	Expense	Explanation
Salaries	\$150,000	
Supplies	10,000	
Equipment	40,000	MTDC Exclusion
Total Direct	\$200,000	
Indirect Cost (55%)	<u>88,000</u>	\$200,000-\$40,000 = \$160,000 * 55%
Total Sponsor Cost	\$288,000	

How do you Charge the F&A Rate?

MODIFIED TOTAL DIRECT COST

• Example:

Cost Category	(Expense	Explanation
Faculty Salaries	\$150,000	
Grad Salaries	25,000	
Grad Fee Remits	12,000	MTDC Exclusion
Supplies	10,000	
Subcontract	100,000	>\$25,000 excluded from MTDC
Equipment	40,000	MTDC Exclusion
Total Direct	\$337,000	
Indirect Cost (55%)	<u>115,500</u>	\$337,000-\$127,000 = \$210,000 * 55%
Total Sponsor Cost	\$452,500	

Facilities & Administration (F&A)

- When will Purdue accept limitations on F&A?
 - Accepted when limited in published guidelines by Not-for-Profits and Foundations
 - Mission/goals of these types of organizations are to benefit the public well being as a whole
 - Industrial proposals less than or equal to \$10K*
 - *When considered seed funding
- Why can't Purdue accept limitation on F&A for Forprofit entities?
 - F&A costs are REAL costs to the University
 - If granted, PU would be subsidizing a For-Profit entity

PURDUE

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Proposal Budgeting 101

BUDGET JUSTIFICATION

- Budget narrative must be provided to support the proposed budget
 - Explains the financial picture of the project
 - Budget should be realistic and justified by the aims and methods of the project
 - Provide any other information that will aid the sponsor in evaluating and funding the proposed item or cost
 - Needs to match what is in the budget

PURDUE

SAMPLE BUDGET

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<u>Proposal Budgeting 101</u>

Cost Sharing - Types

- 1. Mandatory cost sharing: institutional support that is required in writing by the granting agency, and the amount is specified in a granting agency's written solicitation.
- 2. Voluntary committed cost sharing: institutional support committed to the project solely at the discretion of the institution. These resources are pledged formally in a proposal and thereby become binding commitments that the granting agency may audit.
- 3. Institutional support/leverage: institutional resources not specified as mandatory or committed specifically yet discussed in the proposal as organizational resources or infrastructure necessary for, and available to enable, a project. Such resources are not quantified or allocated to a specific project. Institutional support/leverage is communicated to demonstrate Purdue's capacity or capability.
- 4. Voluntary uncommitted cost sharing: institutional support provided by Purdue but not pledged formally in the proposal usually because of agency restrictions against cost sharing. Such cost sharing is subsequently made available to the project upon receipt of the award and is not binding or auditable. Such resources can be internally quantified and solely support a specific project, but they are not normally shared with the sponsor prior to award.

Cost Sharing - General Guidelines

- Handled consistently and in accordance with the Uniform Guidance (<u>2 CFR</u> 200.306),
 - Voluntary committed cost sharing is not expected and cannot be used as a factor during the merit review of applications.
 - o It may be considered if it is both in accordance with Federal awarding agency regulations and *specified* in the notice of funding opportunity.
 - Criteria for considering voluntary committed cost sharing and any other program
 policy factors that may be used to determine who may receive a Federal award
 must be explicitly described in the notice of funding opportunity.
- Mandatory and voluntary committed cost-sharing commitments offered by the University in support of a sponsored project must be:
 - o Allowable costs
 - o Expended during the award period
 - o Quantifiable
 - o Auditable
 - o Not allocated to more than one sponsored project
- Treated consistently by the University



Proposal Budgeting 101

Cost Sharing - Process

- Starting Point Understand the Big Picture
 - An initial budget should be established for the total project costs, regardless of funding contributions.
 - Assess whether and/or how cost sharing should be part of the project budget.
- Requests for cost sharing should originate through discussions among the PI(s), their Department Head(s) and Associate Dean(s) for Research.
 - o Early in the proposal development process, but no later than **two weeks** before the due date.
 - o In accordance with intra-college/school/department processes or procedures.
 - o For multi-college proposals, ADRs of **all units** involved must be included in all communications involving inter-college/school cost sharing early in process.
- EVPRP staff facilitates the process of developing and approving cost sharing requests during the
 proposal development process. However, department/school/college-level support should be in place
 prior to requesting EVPRP involvement and approval.
- Tentative cost sharing plans developed and approved within the originating unit or college should be communicated to the Pre-Award Office for their inclusion in the proposal budget.
- · All cost sharing commitments must be fully documented on Univ. Form 32(s), prepared by Pre-Award.
- Each letter-of-intent, new or renewal submission stands on its own, and cost sharing is typically re-evaluated for each resubmission.



Cost Sharing - Priorities

The following priorities guide the allocation of central cost sharing funds for research proposals:

- Top priority will be given to mandatory cost sharing. Voluntary cost share support will be provided only in exceptional cases and primarily by the department-level unit.
- A mandatory cost sharing requirement does not ensure a University contribution.
- Strategic research areas are given top priority among competing projects.
- Units must prioritize the proposed project through their contribution to the cost share:
 - o Typically: 1/3 University and 2/3 provided by PI, Dept(s), and College(s). Contributions of external contributors will be evaluated on a case-by-case basis.
 - o High matching requirement: Dept(s) and external contributors provide matching closer to 50% with balance split between the college(s) and EVPRP.
- Proposed equipment/facility projects should add new capability to the infrastructure of the university, and/or help to build future competitiveness.
- For more resources:
 - or more resources:

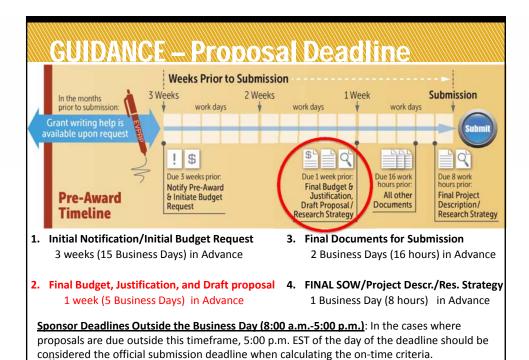
 o https://www.purdue.edu/research/funding-and-grant-writing/cost-sharing.php
 PURDUE

Proposal Budgeting 101

FINAL CONSIDERATIONS

- Plan Early So that you do not get pushed for time.
- Read the Program Announcement (PA, RFP)
 - Read It, High Light Items, Question, Read It Again
 - Watch for minimum and maximum funding levels
 - Do not guess or deviate from the proposal instructions
- Work with your Pre-Award Specialist

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Pre-Award Services

Contacting Pre-Award for Help

- E-mail or Phone or Visit
 - To Center Address (see link next slide)
 - To Specific Specialist (see link next slide- consider availability risk)
 - Include as much information as possible
- TIMING Contact as early as possible (as soon as you even think about doing a proposal). It is never too early! Do not wait until you are ready to submit!

More detailed one-on-one orientations are available for new faculty at any time. Please contact your Pre-Award Center to schedule.

PURDUE

RESOURCES

- Cost Accounting Guidelines
 - http://www.purdue.edu/business/mas/costing/CAS Guidelines/index.html
- Pre-Award Website (Budget Guidelines)
 - https://www.purdue.edu/business/sps/preaward/menu/2.proposalprepare/basic_elements /budget.html
- Cost Sharing
 - https://www.purdue.edu/research/funding-and-grant-writing/cost-sharing.php
- Facilities & Administrative (F&A) Costs
 - https://www.purdue.edu/business/sps/doc/FA costs policy definition use ratedeterminati on.docx
- Pre-Award Staff Call Us!
 - https://www.purdue.edu/business/sps/doc/PreAward Handout.docx



${\color{red} \textbf{Coeus Proposal Development -} \textbf{Budget_Total}}$

Proposal Number: 00075139 Budget Version: 1

Proposal Title: Proposal Budgeting 101 - budget example

Investigator Name: TBA, Tenure/tenure track (8210), 1

Period: 01/01/2018 - 12/31/2020

Cost Element	Description	Period 1	Period 2	Period 3	Total
008210	Personnel - Tenure/Tenure Track Faculty	\$42,836.28	\$44,121.37	\$45,374.06	\$132,331.71
008211	Personnel - Post Doc/Visiting Faculty	\$55,756.08	\$56,871.20	\$58,008.63	\$170,635.91
008215	Personnel - Professional/Professional Assistant w/ TIAA	\$51,549.79	\$52,838.53	\$54,159.49	\$158,547.81
008230	Personnel - Grad Staff (.50 FTE)	\$26,762.92	\$27,298.18	\$27,844.14	\$81,905.24
008241	Personnel - Undergraduate Student	\$5,200.00	\$5,200.00	\$5,200.00	\$15,600.00
008270	Grad Fee Remissions	\$10,512.00	\$11,022.00	\$11,562.00	\$33,096.00
008430	Travel Domestic	\$2,500.00	\$2,500.00	\$2,500.00	\$7,500.00
008431	Travel Foreign	\$3,000.00	\$3,000.00	\$3,000.00	\$9,000.00
008435	Printing & Duplication	\$500.00	\$500.00	\$500.00	\$1,500.00
008499	Other Supplies & Expenses	\$25,000.00	\$25,000.00	\$25,000.00	\$75,000.00
008510	Equipment - Scientific & Instruction Equipment	\$100,000.00	\$25,000.00		\$125,000.00
008996	Other - Included in Base	\$4,000.00			\$4,000.00
420600	Subcontracts (w/o PU F&A)	\$25,000.00	\$50,000.00	\$50,000.00	\$125,000.00
420620	Subcontracts (with PU F&A)	\$25,000.00			\$25,000.00
	OH - MTDC	\$160,621.55	\$147,652.68	\$150,657.17	\$458,931.40
	Employee Benefits - Grad Staff (.50 FTE)	\$2,007.22	\$2,047.37	\$2,088.31	\$6,142.90
	Employee Benefits - Tenure/Tenure Track Faculty	\$12,037.00	\$12,398.11	\$12,750.11	\$37,185.22
	Employee Benefits - Undergraduate Student	\$431.60	\$431.60	\$431.60	\$1,294.80
	Employee Benefits - Post Doc/Visiting Faculty	\$18,343.75	\$18,710.63	\$19,084.84	\$56,139.22
	Employee Benefits - Professional/Professional Assistant w/ TIAA	\$17,114.53	\$17,542.39	\$17,980.95	\$52,637.87
	Total	\$588,172.72	\$502,134.06	\$486,141.30	\$1,576,448.08

Proposal Number: 00075139 **Budget Version:** 1

Proposal Title: Proposal Budgeting 101 - budget example

Investigator Name: TBA, Tenure/tenure track (8210), 1

Period: 1 01 Jan 2018 - 31 Dec 2018

Period: 1	01 Jan 2018 - 31 Dec 2018	Otani Dai	- F I B. (-	ED D -1-	. Van Data	Percentage	Fringe	Salaries &
	Personnel Category	Start Dat	e End Date	EB Rate	e Vac Rate	Charged/ Effort	Benefits	Wages
Senior Personnel								
TBA, Tenure/tenure track (8210), 1	Personnel - Tenure/Tenure Track Faculty	01/01/18	05/14/18	28.10%		10.0 / 10.0	\$1,852.96	\$6,594.15
TBA, Tenure/tenure track (8210), 1	Personnel - Tenure/Tenure Track Faculty	07/01/18	08/14/18	28.10%		75.78 / 75.78	\$4,716.18	\$16,783.56
TBA, Tenure/tenure track (8210), 1	Personnel - Tenure/Tenure Track Faculty	08/15/18	12/31/18	28.10%		10.0 / 10.0	\$1,950.04	\$6,939.63
Tenure/Tenure Track Faculty, 02	Personnel - Tenure/Tenure Track Faculty	01/01/18	05/14/18	28.10%		5.0 / 10.0	\$805.63	\$2,867.02
Tenure/Tenure Track Faculty, 02	Personnel - Tenure/Tenure Track Faculty	07/01/18	08/14/18	28.10%		34.45 / 34.45	\$1,864.35	\$6,634.69
Tenure/Tenure Track Faculty, 02	Personnel - Tenure/Tenure Track Faculty	08/15/18	12/31/18	28.10%		5.0 / 10.0	\$847.84	\$3,017.23
					Total Sei	nior Personnel	\$12,037.00	\$42,836.28
Postdoctoral								
Post Doc/Visiting Faculty, 01	Personnel - Post Doc/Visiting Faculty	01/01/18	06/30/18	32.90%		100.0 / 100.0	\$9,081.06	\$27,602.02
Post Doc/Visiting Faculty, 01	Personnel - Post Doc/Visiting Faculty	07/01/18	12/31/18	32.90%		100.0 / 100.0	\$9,262.69	\$28,154.06
					Tota	l Postdoctoral	\$18,343.75	\$55,756.08
Other Professionals								
Professional/Professional Assistant w/ TIAA, 01	Personnel - Professional/Professional Assistant w/ TIAA	01/01/18	06/30/18	33.20%		75.0 / 75.0	\$8,451.62	\$25,456.68
Professional/Professional Assistant w/ TIAA, 01	Personnel - Professional/Professional Assistant w/ TIAA	07/01/18	12/31/18	33.20%		75.0 / 75.0	\$8,662.91	\$26,093.10
					Total Other	Professionals	\$17,114.53	\$51,549.78
Graduate Students						_		-
Graduate Staff, 01	Personnel - Grad Staff (.50 FTE)	01/01/18	06/30/18	7.50%		50.0 / 50.0	\$993.67	\$13,248.97
Graduate Staff, 01	Personnel - Grad Staff (.50 FTE)	07/01/18	12/31/18	7.50%		50.0 / 50.0	\$1,013.55	\$13,513.95
					Total Grad	luate Students	\$2,007.22	\$26,762.92
Undergraduate Students								_
Undergraduate Student, 01	Personnel - Undergraduate Student	01/01/18	06/30/18	8.30%		25.0 / 25.0	\$215.80	\$2,600.00
Undergraduate Student, 01	Personnel - Undergraduate Student	07/01/18	12/31/18	8.30%		25.0 / 25.0	\$215.80	\$2,600.00
				Tota	I Undergrad	luate Students	\$431.60	\$5,200.00
TOTAL SALARIES & WAG								\$182,105.06
J	al Fringe Benefits and Vacation Acc	rual:					-	\$49,934.10
TOTAL SALARIES & WAG	GES & FRINGE BENEFITS							\$232,039.16
Equipment								
Equipment - Scientific	& Instruction Equipment					-	· · · · · · · · · · · · · · · · · · ·	100,000.00
					٦	Total Equipment	\$	100,000.00
Materials								
Other Supplies & Expe	enses					-		\$25,000.00
						Total Materials		\$25,000.00
Other Operating Expense	es							

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Other - Included in Base - 2 computers - \$2,000 each		\$4,000.00
Official included in base 2 computers \$2,000 cach	Total Other Operating Expenses	\$14,512.00
Publication Costs/Documentation/Dissemenation		Ψ11,012.00
Printing & Duplication - Printing		\$500.00
G i	Total Publication Costs/Documentation/Dissemenation	\$500.00
Subcontracts		<u> </u>
Subcontracts (w/o PU F&A)		\$25,000.00
Subcontracts (with PU F&A)		\$25,000.00
	Total Subcontracts	\$50,000.00
Travel - Domestic		
Travel Domestic		\$2,500.00
	Total Travel - Domestic	\$2,500.00
Travel - Foreign		
Travel Foreign		\$3,000.00
	Total Travel - Foreign	\$3,000.00
Total Direct Costs		\$427,551.17
F&A (Indirect) Costs		
ON-CAMPUS		\$160,621.55
Total F&A (Indirect) Costs		\$160,621.55
Total Cost to Sponsor		\$588,172.72
Total Underrecovery Amount		\$0.00
Total Cost Sharing Amount		\$21,683.47
TOTAL COST OF PROJECT		\$609,856.19

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00075139 **Proposal Number: Budget Version:** 1

Proposal Title: Proposal Budgeting 101 - budget example

Investigator Name: TBA, Tenure/tenure track (8210), 1

Period: 1 01 Jan 2018 - 31 Dec 2018

Calculation Methodology

The full F&A (Indirect) Cost Rate is applied to the total direct costs, less the following exclusions

Subcontracts (w/o PU F&A) \$25,000.00

Equipment - Scientific & Instruction Equipment \$100,000.00

> **Grad Fee Remissions** \$10,512.00

Total exclusions from F&A base

\$135,512.00

The Allocated Administrative Support and Allocated Lab Expense Rates are applied to the total direct costs, less the following exclusions.

.00

			Total exclu	usions from Allocate	ed Expense base		\$0.0
F&A (Indirect) Cos	st Rates and Base						
Start Date	End Date	Campus	Rate	Rate Type	Base	Indirect Cost	
01 Jan 2018	31 Dec 2018	On	55.00	MTDC	\$292,039.16	\$160,621.55	
					Total	\$160,621.55	
Employee Benefit	Rates and Base						
Start Date	End Date	Campus		Rate	Base	Calculated Cost	
Grad Staff (.50 FTI	≣)						
01 Jan 2018	31 Dec 2018	On		7.50	\$26,762.92	\$2,007.22	
Post Doc/Visiting	Faculty						
01 Jan 2018	31 Dec 2018	On		32.90	\$55,756.08	\$18,343.75	
Professional/Profe	essional Assistant v	v/ TIAA					
01 Jan 2018	31 Dec 2018	On		33.20	\$51,549.78	\$17,114.53	
Tenure/Tenure Tra	ck Faculty						
01 Jan 2018	31 Dec 2018	On		28.10	\$42,836.28	\$12,037.00	
Undergraduate St	udent						
01 Jan 2018	31 Dec 2018	On		8.30	\$5,200.00	\$431.60	
					Total	\$49,934.10	

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Proposal Number: 00075139 **Budget Version:** 1

Proposal Title: Proposal Budgeting 101 - budget example

Investigator Name: TBA, Tenure/tenure track (8210), 1

Period: 2 01 Jan 2019 - 31 Dec 2019

Terrou. 2	51 Juli 2017 - 31 Dec 2017					Percentage		
	Personnel Category	Start Dat	e End Date	EB Rate	e Vac Rate	•	Fringe Benefits	Salaries & Wages
Senior Personnel								
TBA, Tenure/tenure track (8210), 1	Personnel - Tenure/Tenure Track Faculty	01/01/19	05/14/19	28.10%		10.0 / 10.0	\$1,908.54	\$6,791.97
TBA, Tenure/tenure track (8210), 1	Personnel - Tenure/Tenure Track Faculty	07/01/19	08/14/19	28.10%		75.78 / 75.78	\$4,857.67	\$17,287.07
TBA, Tenure/tenure track (8210), 1	Personnel - Tenure/Tenure Track Faculty	08/15/19	12/31/19	28.10%		10.0 / 10.0	\$2,008.54	\$7,147.82
Tenure/Tenure Track Faculty, 02	Personnel - Tenure/Tenure Track Faculty	01/01/19	05/14/19	28.10%		5.0 / 10.0	\$829.80	\$2,953.03
Tenure/Tenure Track Faculty, 02	Personnel - Tenure/Tenure Track Faculty	07/01/19	08/14/19	28.10%		34.45 / 34.45	\$1,920.28	\$6,833.73
Tenure/Tenure Track Faculty, 02	Personnel - Tenure/Tenure Track Faculty	08/15/19	12/31/19	28.10%		5.0 / 10.0	\$873.28	\$3,107.75
					Total Ser	nior Personnel	\$12,398.11	\$44,121.37
Postdoctoral								
Post Doc/Visiting Faculty, 01	Personnel - Post Doc/Visiting Faculty	01/01/19	06/30/19	32.90%		100.0 / 100.0	\$9,262.69	\$28,154.06
Post Doc/Visiting Faculty, 01	Personnel - Post Doc/Visiting Faculty	07/01/19	12/31/19	32.90%		100.0 / 100.0	\$9,447.94	\$28,717.14
					Tota	l Postdoctoral	\$18,710.63	\$56,871.20
Other Professionals								
Professional/Professional Assistant w/ TIAA, 01	Personnel - Professional/Professional Assistant w/ TIAA	01/01/19	06/30/19	33.20%		75.0 / 75.0	\$8,662.91	\$26,093.10
Professional/Professional Assistant w/ TIAA, 01	Personnel - Professional/Professional Assistant w/ TIAA	07/01/19	12/31/19	33.20%		75.0 / 75.0	\$8,879.48	\$26,745.43
					Total Other	Professionals	\$17,542.39	\$52,838.53
Graduate Students								
Graduate Staff, 01	Personnel - Grad Staff (.50 FTE)	01/01/19	06/30/19	7.50%		50.0 / 50.0	\$1,013.55	\$13,513.95
Graduate Staff, 01	Personnel - Grad Staff (.50 FTE)	07/01/19	12/31/19	7.50%		50.0 / 50.0	\$1,033.82	\$13,784.23
					Total Grad	luate Students	\$2,047.37	\$27,298.18
Undergraduate Students								
Undergraduate Student, 01	Personnel - Undergraduate Student	01/01/19	06/30/19	8.30%		25.0 / 25.0	\$215.80	\$2,600.00
Undergraduate Student, 01	Personnel - Undergraduate Student	07/01/19	12/31/19	8.30%		25.0 / 25.0	\$215.80	\$2,600.00
				Tota	al Undergrad	luate Students	\$431.60	\$5,200.00
TOTAL SALARIES & WAG								\$186,329.28
•	al Fringe Benefits and Vacation Acc	rual:						\$51,130.10
TOTAL SALARIES & WAG	GES & FRINGE BENEFITS							\$237,459.38
Equipment								_
Equipment - Scientific	& Instruction Equipment				_			\$25,000.00
Materiala						Total Equipment		\$25,000.00
Materials Other Supplies & Expe	ancac							\$25,000.00
outer Supplies a Expe	, 1000 11000					Total Materials		\$25,000.00
Other Operating Expense	25					- Juli materials		Ψ_0,000.00

Publication Costs/Documentation/Dissemenation Printing & Duplication - Printing \$500 Total Publication Costs/Documentation/Dissemenation \$500 Subcontracts (w/o PU F&A) \$50,000 Travel - Domestic Total Subcontracts \$50,000 Travel - Domestic \$2,500 Travel - Foreign \$3,000 Travel - Foreign \$3,000 Total Foreign \$3,000 Total Direct Costs \$354,481 F&A (Indirect) Costs \$147,652 Total F&A (Indirect) Costs \$147,652 Total F&A (Indirect) Costs \$502,134	Grad Fee Remissions		\$11,022.00
Printing & Duplication - Printing \$500 Total Publication Costs/Documentation/Dissemenation \$500 Subcontracts \$50,000 Total Subcontracts \$50,000 Travel - Domestic \$2,500 Travel - Domestic \$2,500 Travel - Foreign \$3,000 Travel Foreign \$3,000 Total Direct Costs \$354,481 F&A (Indirect) Costs \$147,652 ON-CAMPUS \$147,652 Total Cost to Sponsor \$502,134		Total Other Operating Expenses	\$11,022.00
Subcontracts \$500 Subcontracts (w/o PU F&A) \$50,000 Total Subcontracts \$50,000 Travel - Domestic \$50,000 Travel - Domestic \$2,500 Travel - Foreign \$3,000 Travel Foreign \$3,000 Total Direct Costs \$354,481 F&A (Indirect) Costs \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134	Publication Costs/Documentation/Dissemenation		
Subcontracts Subcontracts (w/o PU F&A) \$50,000 Total Subcontracts \$50,000 Travel - Domestic \$2,500 Travel Pomestic \$2,500 Travel - Foreign \$3,000 Travel Foreign \$3,000 Total Direct Costs \$354,481 F&A (Indirect) Costs \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134	Printing & Duplication - Printing		\$500.00
Subcontracts (w/o PU F&A) \$50,000 Travel - Domestic \$2,500 Travel Domestic \$2,500 Total Travel - Domestic \$2,500 Travel - Foreign \$3,000 Travel Foreign \$3,000 Total Direct Costs \$354,481 F&A (Indirect) Costs \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134		Total Publication Costs/Documentation/Dissemenation	\$500.00
Travel - Domestic \$50,000 Travel Domestic \$2,500 Total Travel - Domestic \$2,500 Travel - Foreign \$3,000 Total Direct Costs \$33,000 Total Direct Costs \$354,481 F&A (Indirect) Costs \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134	Subcontracts		
Travel - Domestic \$2,500 Travel - Foreign Total Travel - Domestic \$3,000 Travel Foreign \$3,000 \$3,000 Total Direct Costs \$354,481 F&A (Indirect) Costs \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134	Subcontracts (w/o PU F&A)		\$50,000.00
Travel Domestic \$2,500 Travel - Foreign \$3,000 Travel Foreign \$3,000 Total Direct Costs \$354,481 F&A (Indirect) Costs \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134		Total Subcontracts	\$50,000.00
Travel - Foreign \$2,500 Travel Foreign \$3,000 Total Travel - Foreign \$3,000 Total Direct Costs \$354,481 F&A (Indirect) Costs \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134	Travel - Domestic		
Travel - Foreign \$3,000 Total Direct Costs \$354,481 F&A (Indirect) Costs \$147,652 Total F&A (Indirect) Costs \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134	Travel Domestic		\$2,500.00
Travel Foreign \$3,000 Total Direct Costs \$354,481 F&A (Indirect) Costs \$147,652 ON-CAMPUS \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134		Total Travel - Domestic	\$2,500.00
Total Direct Costs \$3,000 F&A (Indirect) Costs \$354,481 ON-CAMPUS \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134	Travel - Foreign		
Total Direct Costs \$354,481 F&A (Indirect) Costs \$147,652 ON-CAMPUS \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134	Travel Foreign		\$3,000.00
F&A (Indirect) Costs ON-CAMPUS \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134		Total Travel - Foreign	\$3,000.00
ON-CAMPUS \$147,652 Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134	Total Direct Costs		\$354,481.38
Total F&A (Indirect) Costs \$147,652 Total Cost to Sponsor \$502,134	F&A (Indirect) Costs		
Total Cost to Sponsor \$502,134	ON-CAMPUS		\$147,652.68
	Total F&A (Indirect) Costs		\$147,652.68
	Total Cost to Sponsor		\$502,134.06
Total Underrecovery Amount \$0	Total Underrecovery Amount		\$0.00
Total Cost Sharing Amount \$12,033	Total Cost Sharing Amount		\$12,033.99
TOTAL COST OF PROJECT \$514,168	TOTAL COST OF PROJECT		\$514,168.05

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00075139 **Proposal Number: Budget Version:** 1

Proposal Title: Proposal Budgeting 101 - budget example

Investigator Name: TBA, Tenure/tenure track (8210), 1

Period: 2 01 Jan 2019 - 31 Dec 2019

Calculation Methodology

The full F&A (Indirect) Cost Rate is applied to the total direct costs, less the following exclusions

Subcontracts (w/o PU F&A) \$50,000.00

Equipment - Scientific & Instruction Equipment \$25,000.00

Grad Fee Remissions \$11,022.00

Total exclusions from F&A base

\$86,022.00

The Allocated Administrative Support and Allocated Lab Expense Rates are applied to the total direct costs, less the following exclusions.

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			Total exclu	usions from Allocat	ed Expense base		\$0.0
F&A (Indirect) Cos	st Rates and Base						
Start Date	End Date	Campus	Rate	Rate Type	Base	Indirect Cost	
01 Jan 2019	31 Dec 2019	On	55.00	MTDC	\$268,459.38	\$147,652.68	
					Total	\$147,652.68	
Employee Benefit	Rates and Base						
Start Date	End Date	Campus		Rate	Base	Calculated Cost	
Grad Staff (.50 FT	E)						
01 Jan 2019	31 Dec 2019	On		7.50	\$27,298.18	\$2,047.37	
Post Doc/Visiting	Faculty						
01 Jan 2019	31 Dec 2019	On		32.90	\$56,871.20	\$18,710.63	
Professional/Profe	essional Assistant v	v/ TIAA					
01 Jan 2019	31 Dec 2019	On		33.20	\$52,838.53	\$17,542.39	
Tenure/Tenure Tra	ack Faculty						
01 Jan 2019	31 Dec 2019	On		28.10	\$44,121.37	\$12,398.11	
Undergraduate St	udent						
01 Jan 2019	31 Dec 2019	On		8.30	\$5,200.00	\$431.60	
					Total	\$51,130.10	
					_		

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Proposal Number: 00075139 **Budget Version:** 1

Proposal Title: Proposal Budgeting 101 - budget example

Investigator Name: TBA, Tenure/tenure track (8210), 1

Period: 3 01 Jan 2020 - 31 Dec 2020

Period: 3	01 Jan 2020 - 31 Dec 2020							
	Personnel Category	Start Date	e End Date	EB Rate	e Vac Rate	Percentage Charged/ Effort	Fringe Benefits	Salaries & Wages
Senior Personnel								
TBA, Tenure/tenure track (8210), 1	Personnel - Tenure/Tenure Track Faculty	01/01/20	05/13/20	28.10%		10.0 / 10.0	\$1,951.56	\$6,945.04
TBA, Tenure/tenure track (8210), 1	Personnel - Tenure/Tenure Track Faculty	06/30/20	06/30/20	28.10%		75.78 / 75.78	\$111.55	\$396.96
TBA, Tenure/tenure track (8210), 1	Personnel - Tenure/Tenure Track Faculty	07/01/20	08/13/20	28.10%		75.78 / 75.78	\$4,892.21	\$17,410.00
TBA, Tenure/tenure track (8210), 1	Personnel - Tenure/Tenure Track Faculty	08/14/20	12/30/20	28.10%		10.0 / 10.0	\$2,068.79	\$7,362.25
Tenure/Tenure Track Faculty, 02	Personnel - Tenure/Tenure Track Faculty	01/01/20	05/13/20	28.10%		5.0 / 10.0	\$848.50	\$3,019.58
Tenure/Tenure Track Faculty, 02	Personnel - Tenure/Tenure Track Faculty	06/30/20	06/30/20	28.10%		34.45 / 34.45	\$44.09	\$156.92
Tenure/Tenure Track Faculty, 02	Personnel - Tenure/Tenure Track Faculty	07/01/20	08/13/20	28.10%		34.45 / 34.45	\$1,933.93	\$6,882.33
Tenure/Tenure Track Faculty, 02	Personnel - Tenure/Tenure Track Faculty	08/14/20	12/30/20	28.10%		5.0 / 10.0	\$899.48	\$3,200.98
					Total Ser	nior Personnel	\$12,750.11	\$45,374.06
Postdoctoral								
Post Doc/Visiting Faculty, 01	Personnel - Post Doc/Visiting Faculty	01/01/20	06/30/20	32.90%		100.0 / 100.0	\$9,447.94	\$28,717.14
Post Doc/Visiting Faculty, 01	Personnel - Post Doc/Visiting Faculty	07/01/20	12/31/20	32.90%		100.0 / 100.0	\$9,636.90	\$29,291.48
					Tota	l Postdoctoral	\$19,084.84	\$58,008.62
Other Professionals								
Professional/Professional Assistant w/ TIAA, 01	Personnel - Professional/Professional Assistant w/ TIAA	01/01/20	06/30/20	33.20%		75.0 / 75.0	\$8,879.48	\$26,745.43
Professional/Professional Assistant w/ TIAA, 01	Personnel - Professional/Professional Assistant w/ TIAA	07/01/20	12/31/20	33.20%		75.0 / 75.0	\$9,101.47	\$27,414.07
					Total Other	Professionals	\$17,980.95	\$54,159.50
Graduate Students								
Graduate Staff, 01	Personnel - Grad Staff (.50 FTE)	01/01/20	06/30/20	7.50%		50.0 / 50.0	\$1,033.82	\$13,784.23
Graduate Staff, 01	Personnel - Grad Staff (.50 FTE)	07/01/20	12/31/20	7.50%		50.0 / 50.0	\$1,054.49	\$14,059.91
					Total Grad	luate Students	\$2,088.31	\$27,844.14
Undergraduate Students								
Undergraduate Student, 01	Personnel - Undergraduate Student	01/01/20	06/30/20	8.30%		25.0 / 25.0	\$215.80	\$2,600.00
Undergraduate Student, 01	Personnel - Undergraduate Student	07/01/20	12/31/20	8.30%		25.0 / 25.0	\$215.80	\$2,600.00
				Tota	ıl Undergrad	luate Students	\$431.60	\$5,200.00
TOTAL SALARIES & WAG	SES							\$190,586.32
•	al Fringe Benefits and Vacation Acc	rual:						\$52,335.81
TOTAL SALARIES & WAG	SES & FRINGE BENEFITS							\$242,922.13
Materials								
Other Supplies & Expe	enses					-		\$25,000.00
						Total Materials	,	\$25,000.00

Grad Fee Remissions		\$11,562.00
	Total Other Operating Expenses	\$11,562.00
Publication Costs/Documentation/Dissemenation		
Printing & Duplication - Printing		\$500.00
	Total Publication Costs/Documentation/Dissemenation	\$500.00
Subcontracts		
Subcontracts (w/o PU F&A)		\$50,000.00
	Total Subcontracts	\$50,000.00
Travel - Domestic		
Travel Domestic		\$2,500.00
	Total Travel - Domestic	\$2,500.00
Travel - Foreign		
Travel Foreign		\$3,000.00
	Total Travel - Foreign	\$3,000.00
Total Direct Costs		\$335,484.13
F&A (Indirect) Costs		
ON-CAMPUS		\$150,657.17
Total F&A (Indirect) Costs		\$150,657.17
Total Cost to Sponsor		\$486,141.30
Total Underrecovery Amount		\$0.00
Total Cost Sharing Amount		\$12,351.23
TOTAL COST OF PROJECT		\$498,492.53

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00075139 **Proposal Number: Budget Version:** 1

Proposal Title: Proposal Budgeting 101 - budget example

Investigator Name: TBA, Tenure/tenure track (8210), 1

Period: 3 01 Jan 2020 - 31 Dec 2020

Calculation Methodology

The full F&A (Indirect) Cost Rate is applied to the total direct costs, less the following exclusions

Subcontracts (w/o PU F&A) \$50,000.00

Grad Fee Remissions \$11,562.00

Total exclusions from F&A base \$61,562.00

The Allocated Administrative Support and Allocated Lab Expense Rates are applied to the total direct costs, less the following exclusions.

			Total exclu	usions from Allocat	ed Expense base		\$0.0
					<u> </u>		
F&A (Indirect) Cos	st Rates and Base						
Start Date	End Date	Campus	Rate	Rate Type	Base	Indirect Cost	
01 Jan 2020	31 Dec 2020	On	55.00	MTDC	\$273,922.13	\$150,657.17	
					Total	\$150,657.17	
Employee Benefit	Rates and Base						
Start Date	End Date	Campus		Rate	Base	Calculated Cost	
Grad Staff (.50 FT	E)						
01 Jan 2020	31 Dec 2020	On		7.50	\$27,844.14	\$2,088.31	
Post Doc/Visiting	Faculty						
01 Jan 2020	31 Dec 2020	On		32.90	\$58,008.62	\$19,084.84	
Professional/Profe	essional Assistant v	v/ TIAA					
01 Jan 2020	31 Dec 2020	On		33.20	\$54,159.50	\$17,980.95	
Tenure/Tenure Tra	ack Faculty						
01 Jan 2020	30 Dec 2020	On		28.10	\$45,374.06	\$12,750.11	
Undergraduate St	udent						
01 Jan 2020	31 Dec 2020	On		8.30	\$5,200.00	\$431.60	
					Total	\$52,335.81	
					_		

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