

GRANT A.I.D.

BUDGET DEVELOPMENT

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AG RESEARCH

TODAY'S AGENDA



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TODAY'S AGENDA

- Importance of Proper Budgeting
 - What Governs Budgets?
 - DASN Budget Template
 - Basic Budget Components
 - Personnel
 - F&A Basics
 - Problem Areas
 - Budget Justifications
 - Agency Specific Topics
 - Faculty Perspective
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IMPORTANCE OF PROPER BUDGETING



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IMPORTANCE OF PROPER BUDGETING

At proposal time ...

- Creates proper alignment between scope of work and budget
 - Develop the WHOLE budget
 - What will it take to accomplish the scope of work.
 - If necessary, reduce the scope of work to fit the budget limitations.
 - In a perfect world, build the budget around the project, not the project around the budget.
 - Is a tool for the reviewers.
 - How is your project structured and managed?
 - How well planned is your project?
 - How feasible is your project?
 - Reviewers can recognize a padded budget.
 - Reviewers can recognize a budget that's too small.
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EXAMPLES OF REVIEWER COMMENTS

The travel budget for year three dissemination activities is excessive. It is overly ambitious to budget for eight conference presentations in three years.

Insufficient information is provided to determine the reasonableness of costs in relation to achieving project objectives.

Without adequate justification, the proposal appears to request support for resources already in place.

IMPORTANCE OF PROPER BUDGETING

If funded ...

- Reduces audit risk through
 - Compliance with the Uniform Guidance (2CFR 200)
 - Compliance with OSU P&P
- Reduces need for later modifications
- Reduces risk of expense being deemed unallowable
- Becomes the financial plan used by the funding agency
- Becomes a management tool for the PI and financial/grants staff

WHAT GOVERNS BUDGETS?



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WHAT GOVERNS BUDGETS?

- Uniform Guidance (2CFR 200)
 - SubPart E – Cost Principles
 - § 200.403 Factors affecting allowability of costs.
 - OSU Policy & Procedure
 - 1-0112: Distribution and Use of Funds Received as Facilities and Administrative Cost Reimbursements, Fixed Price Agreement Residuals, and Other Recovered Fees
 - 1-0113: Cost Sharing in Sponsored Research and Service Projects
 - 3-0146: Purchasing Equipment on Grants & Contracts
 - 3-0201: Fiscal Procedures & Accounting Systems
 - 3-0251: Grants & Contracts Financial Administration
 - 3-0321: Monthly Time & Effort Confirmation
 - 3-0420: Purchase of Food and Non-Alcoholic Beverages on Sponsored Project Funding
 - 4-0105: University Research
 - 4-0135: Costing Practices for Sponsored Research and Service Projects
 - 4-0136: Retroactive Cost Transfers Relating to Sponsored Agreements
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WHAT GOVERNS BUDGETS?

- Agency Policy
 - RFP/RFA
 - Award Terms & Conditions
 - All costs included should be:
 - Necessary and reasonable
 - Allocable
 - Allowable
 - Consistently treated
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DASNR BUDGET TEMPLATE



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DASNR BUDGET TEMPLATE

Why the DASNR template is required

- Calculations
 - Fringe benefits
 - F&A
 - MTDC vs TDC
 - Collected
 - Waived
 - Target cost share
 - Relationship to Banner
 - vs Agency Budgets
-

BASIC BUDGET COMPONENTS



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BASIC BUDGET COMPONENTS

- Personnel
 - Travel
 - Materials and Supplies
 - Equipment
 - Capitalized >\$5000
 - \$500 = \$4999 are supplies not equipment
 - Subawards
 - F&A considerations
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BASIC BUDGET COMPONENTS

- Participant Support
 - Other Direct
 - Contractual services
 - Tuition remission
 - Publications
 - Postage
 - Speaker fees
 - Indirect/F&A
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PERSONNEL



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PERSONNEL

- Salary wrt time & effort
 - Availability of funds/effort
 - Realistic estimate of effort/role on the project
 - Based on current IBS
 - Only OSU employees; outside persons should either be included in a subaward budget or included as contractual services
 - What happens when grant funding ends?
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F&A BASICS



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F&A BASICS

- What is F&A?

Indirect (F&A) costs means those costs incurred for a common or joint purpose benefitting more than one cost objective, and not readily assignable to the cost objectives specifically benefitted, without effort disproportionate to the results achieved. To facilitate equitable distribution of indirect expenses to the cost objectives served, it may be necessary to establish a number of pools of indirect (F&A) costs. Indirect (F&A) cost pools must be distributed to benefitted cost objectives on bases that will produce an equitable result in consideration of relative benefits derived.

- Examples:

- Utilities
 - General office supplies
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F&A BASICS

- F&A Waivers
 - Mandatory – Requires documentation from the funding agency
 - Voluntary – Requires specific approval from the VPR
 - As cost share – Not allowed unless specifically stated by the agency
 - F&A Base
 - MTDC
 - TDC
 - TFF
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PROBLEM AREAS



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PROBLEM AREAS

- Office supplies and other general use expenses
 - Usually allowable only as an indirect cost
 - To be included as a direct cost
 - Must be able to allocate the use with a high degree of accuracy
 - Special, unordinary circumstances must exist
 - Meals/food
 - Must be specifically included in budget & justification
 - In many cases, must be necessary for the continuity of the meeting
 - Or be a participant support cost
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PROBLEM AREAS

- Speaker fees – are NOT participant support costs
- Participant support costs
 - Employees of OSU or any subawardee or vendor are NOT participants
 - Excluded from F&A
 - Stipends
 - Travel
 - Materials & Supplies
- Unusual costs

BUDGET JUSTIFICATIONS



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BUDGET JUSTIFICATIONS

- Justify vs explain vs narrative
 - Importance during review process
 - Importance to accuracy of budget
 - Importance to allowability, modifications, etc
 - Balance between sufficiently detailed justification and too much detail
 - Who is traveling? (employees vs non-employees who are not participants vs participants)
 - *Earn the extra review points – make it compelling.*
-

BUDGET JUSTIFICATION EXAMPLES

- \$4000 for out-of-state travel for presentation at professional conferences.
 - *\$4000 - Out-of-state travel to*
 - *attend and participate in the Crop Science Society of America Annual Meetings and the Tri-Societies Annual Conference, which would include a project and stakeholder meeting directly related to the objectives of this project,*
 - *attend an on-site project meeting each summer, or attend a summer SCRI meeting.*
 - *In addition, travel funds may be used for travel to attend a project and stakeholder meeting at one of the five University research locations at North Carolina State University, the University of Georgia, the University of Florida, or Texas A&M University.*

These travel funds will be used for meeting registration, airline travel tickets and fees, baggage fees, university car rental, hotel, local transportation, parking, mileage, and per diem reimbursement according to university travel guidelines and procedures.
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BUDGET JUSTIFICATION EXAMPLES

- Travel - \$2500: The PI and one student researcher will travel each year to conferences such as the regional meeting of the American Gootch Society to disseminate project results. Costs include airfare (\$450), lodging (\$150/night x 3 night), conference registration (\$100), per diem (\$50/day x 4 day), and ground transportation/parking (mileage to/from airport: 65 miles \$.575/mile; parking \$50).
 - *Travel - \$2500: The PI and one student researcher will travel each year to conferences such as the regional meeting of the American Gootch Society to disseminate project results. Costs follow standard university travel policies and are estimated at \$1,250 per person and include airfare, lodging, conference registration, per diem, and ground transportation/parking.*
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BUDGET JUSTIFICATION EXAMPLES

- \$8500 for field supplies and lab consumables, such as specimen containers and field notebooks.
 - *\$8500- Supply costs are budgeted at \$4,250 per year and include field supplies (\$1,250) for data collection, such as specimen containers, labels, disposable gloves, and field notebooks, and laboratory expenses (\$3,000) for data analysis, such as chemicals, reagents, and glassware. These costs are reasonable based on the PI's experience with prior research projects that have a comparable scope and number of undergraduate students.*
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BUDGET JUSTIFICATION EXAMPLES

- \$72,000 for graduate student salaries.
- *\$72,000- The graduate student budget line includes funding for three 0.5 FTE PhD students at 100% effort. One student will be supervised by Dr. Smith and will focus on ecophysiological crop model (ECM) development and implementation. A second student will be supervised by Dr. Brown and will focus on next-gen sequencing data analysis, association statistics and candidate gene discovery analysis. The third student will be supervised by Dr. Green and will focus on gene marker development and QTL analysis.*

BUDGET JUSTIFICATION EXAMPLES

Total Salaries and Wages requested - \$7,000

- **One Undergraduate Research Assistant (TBN)**, 700 hours are requested at a rate of \$10/hour for a total of \$7,000.

Total Salaries and Wages requested - \$7,000

- *One Undergraduate Research Assistant (TBN)*, 700 hours are requested at a rate of \$10/hour for a total of \$7,000. *An undergraduate research assistant will be recruited to supervise and fly UAV aircraft to collect regular digital and thermal imagery at one Oklahoma site in year 1 and two sites in years 2 through 4.*

BUDGET JUSTIFICATION EXAMPLES

- EQUIPMENT: \$8500 for soil probe system.
- *EQUIPMENT: \$8500 for Veris P4000 soil probe system, which will be used to extract soil cores for laboratory analysis and collect EC, insertion force, and near infra-red spectral data for multiple soil profile depths. Dr. Smith's lab does not currently have access to a soil probe system.*

AGENCY SPECIFIC ISSUES



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AGENCY SPECIFIC ISSUES

- Follow the budget instructions in the RFP. *READ THE RFP.*
 - NIFA (F&A limits)
 - NSF
 - NIH (modular vs detailed; justification)
 - DoE (worksheet)
 - Private industry
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WHO?

- Associate Dean for Research
 - Executive Director, Oklahoma EPSCoR/IDeA
 - Steering Committee, Oklahoma Center for Adult Stem Cell Research
 - Health Research Committee, Oklahoma Center for the Advancement of Science and Technology
 - Panelist, USDA, NSF
 - Funded USDA, NIH, NSF, DOD
 - *I read a lot of grant proposals*
-

SOME OF THE QUESTIONS

- How to negotiate with collaborators (within OSU or at other institutions/ subawards) to determine their available budget?
 - How to balance between anticipated budgetary needs of the project and the limits/restrictions placed by the agency or OSU?
 - How to reduce scope of work when over budget?
 - What are “hidden” or “unknown” or overlooked costs?
 - The budget from the viewpoint of the agency? (reviewer)
-

IN THE GRANT PROPOSAL

- The aims should be to fill a knowledge gap in the field
 - The narrative should:
 - Document this gap in the literature
 - Promote this as an important gap to fill; an important, relevant problem
 - Demonstrate that you are the best positioned researcher to do the work
 - Training
 - Resources
 - Experience
 - It's a sales pitch in many ways
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IN THE GRANT PROPOSAL

- Demonstrate that you understand how to do the work and understand what it will cost to do the work.
 - Preliminary data, previous work
 - Budget and Budget justification
 - Propose only what you are absolutely sure you can accomplish with the time and budget you request.
 - If you find yourself trying to squeeze too much into your Research Plan, i.e., overloading on the Aims, step back and reassess.
 - Take into account that research usually takes longer than people plan for, so build in extra time by proposing less work.
 - Take into account whether there are any policy areas that have special requirements.
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IN THE GRANT PROPOSAL

- Rather than write a single overreaching application whose aims you are unlikely to achieve, propose only what you are absolutely sure you can accomplish in the time you request.
 - Ultimately, your goal is to be funded with multiple grants that overlap in time with significantly different renewal dates but are distinct projects that do not overlap scientifically.
 - *Credibility is important.*
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PURPOSE OF THE GRANT BUDGET

- Detail the costs of the program or project you're proposing.
 - Show the funder exactly what their money will pay for; *and that you care about their investment.*
 - List other sources of income for costs not covered by the grant being requested.
 - Reviewers look at grant proposal budget details to determine how your project will be structured and managed.
 - Budgets often reveal how well planned a project is and how feasible it will be to execute. It's important to the success of your grant proposal that the budget be comprehensive, clear and well written.
 - Demonstrate your ability to manage the project; elements beyond the scientific goals.
-

BEGIN WITH WHAT THE BUDGET NEEDS TO DO

- What will it take to accomplish the scope of work. If necessary, reduce the scope of work to fit the budget limitations, not vice versa. ***Build the budget around the project***, not the project around the budget.
 - Make a clear connection between your budget and the program's goals and objectives.
 - Applicants should be sure to “match the budget with the goals and objectives.” (*both in money and in time*)
 - Doing this requires from the writer precision and context – for example, a concise explanation why the hiring of a bioinformaticist will be necessary to achieve targets in metagenomics project.
 - Without making a clear, explicit connection to a program objective, the applicant risks the reviewers potentially misjudging – or mis-underestimating – a budget expense's value to the overall success of the project. (and your ability *to plan and manage* the project)
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BEGIN WITH WHAT THE BUDGET NEEDS TO DO

- Identify all the costs that are *necessary* and *reasonable* to complete the work described in your proposal. The best strategy is to request a reasonable amount money to do the work, not more and not less:
 - Reviewers look for reasonable costs and will judge whether your request is justified by your aims and methods.
 - Reviewers will consider the person months you've listed for each of the senior/key personnel and will judge whether the figures are in sync with reviewer expectations, based on the research proposed.
 - If you deliberately under- or over-budget, reviewers will recognize this as naiveté. A request that misses its mark will undermine their confidence not only in your money smarts but also in your ability to manage a major independent project.
 - *Be realistic.*
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BEGIN WITH WHAT THE BUDGET NEEDS TO DO

- *Communicate* - As you begin to develop a budget for your research grant application and put all of the relevant costs down on paper, many questions may arise.
 - Your best resources for answering these questions are the grants office within your college, your departmental administrative officials, and your *selected* peers. They can answer questions such as:
 - What should be considered a direct cost or indirect cost?
 - What is the fringe benefit rate? (variable)
 - What is the graduate student stipend rate? Tuition remission?
 - What Facilities and Administrative (F&A) costs rate should I use?
 - What rates for travel?
 - If necessary, reduce the scope of work to fit the budget limitations.
 - *Think budget at the beginning. Plan ahead.*
-

NEGOTIATION WITH COLLABORATORS

- What will it take to accomplish the scope of work? Build the budget around the project.
 - Make a clear connection between your budget and the program's goals and objectives. *Be transparent with the collaborator.*
 - What is the collaborator's task?
 - Why is it important for the collaborator to do this? What does he/she bring?
 - Without making a clear, explicit connection to a program objective, the applicant risks the reviewers potentially misjudging collaborator's value to the overall success of the project.
 - Put yourself in the reviewer's position and think about the credibility of your proposal. Why are you putting this collaborator in the proposal?
 - If necessary, reduce the scope of work to fit the budget limitations.
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BALANCE NEEDS & LIMITS/RESTRICTIONS

- Identify all the costs that are *necessary* and *reasonable* to complete the work described in your proposal.
 - *Communicate* during the process. Be sure you have accounted for “indirect” or “hidden” costs.
 - Despite popular myth, proposing a cost-sharing (matching) arrangement where you only request that the sponsor support some of the funding while your organization funds the remainder does not normally impact the evaluation of your proposal. Only a few select programs require cost-sharing, and these programs will address cost-sharing in the program description.
 - As you develop the Aims, think about what will it take to accomplish the scope of work. (*cost and time*)
 - Use an Excel spreadsheet, as it allows you to update the estimate of the budget easily while working on the scientific part of the grant proposal.
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REDUCING SCOPE WHEN OVER BUDGET

- Staff costs are almost always the most expensive part of the project, so first identify how much staff time is required to achieve the research objectives.
 - This involves considering what skills are needed and whether those skills are embodied in one researcher or more, whether the project should be given to Ph.D. students or more experienced—and therefore more costly—researchers, and how much time they will need to dedicate to ensure the research objectives are met.
 - Then assess other essential costs, which may include buying lab equipment, computer software, and research consumables; gaining access to specialized research facilities; and traveling for fieldwork, collaborations, or conferences. Factor in how you will disseminate your findings during the project, knowing that organizing workshops or conferences, for example, tends to be costly.
 - *Think about your overall plan. Maybe an Aim can be pushed into next ...*
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WHAT THE BUDGET NEEDS TO DO

- The budget should be sufficiently detailed and accurate to reassure reviewers that the investigators have a realistic sense of what it will cost and what it will take to complete the work proposed. *Reflects ability to manage the project.*
 - Although overestimating expenses can be a red flag to reviewers who have expertise in your field, underestimating expenses and effort is *ultimately more detrimental*, as this is difficult to reverse and the project may end up under-resourced.
 - Underestimating may compromise your ability to deliver the research, and it will also be picked up by reviewers.
 - *This is not LOW-BID wins.*
 - *Plan ahead, no surprises at the end.*
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WHAT THE BUDGET *JUSTIFICATION* NEEDS TO DO

- An effective budget narrative tells the sponsor exactly how you will spend its investment and gives confidence that you did diligence and that your project costs are reasonable and well thought-out.
 - Being thorough helps build credibility with reviewers.
 - Ensure your language conveys a sense of stewardship for the sponsor's investment.
 - Being direct and straightforward about expenses is important.
 - Also bear in mind that a common mistake is to miss a detail by not paying close enough attention to the program requirements. (read the instructions)
 - Find a trusted mentor who has experience with funded projects. Find examples of funded proposals, including the budget and its justification, so that you may see how it's done.
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