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Understand the Task
The Sponsored Programs office has developed tools that will help you to get the information you need from the Principal Investigator and from the funding announcement or other sponsor guidelines. These materials are available on the Sponsored Programs website (http://research.ucdavis.edu/proposals-grants-contracts/spo/spo-proposal/budget/).

What is a Proposal Budget and Why is it Needed?
A budget is a financial proposal that reflects the work proposed. It outlines the expected project costs in detail, and should mirror the project description. A budget is presented as a categorical list of anticipated project costs that represent the researcher’s best estimate of the funds needed to support the proposed work. It is important to remember, however, that costs and plans will change between proposal submission and award, and even after an award is made (post award). Therefore, it is important to view the budget as a flexible tool to help you and your scientific team plan for the project and understand what can and cannot be accomplished with the available funding.

The budget is used by sponsors during the Technical Review of the project and should include details of how the Principal Investigator plans to complete the project. The budget will be evaluated to determine the reasonability of the project costs. Budgets should include just enough funding to complete the proposed work.

Prepare a detailed budget even for sponsors that accept lump sum budgets. Throughout the review process, sponsors request additional details about how the overall figure was determined or where the money will be going. You may also need the details to help you complete the UCOP required budget justification.

Know the General Guidelines/Cost Accounting Standards
Researchers at UC Davis have a variety of cost accounting standards they must adhere to when spending extramural funds. This class only provides enough background information to help put the budget items in context. Extramural Funds Accounting offers a class focusing on Uniform Guidance and cost accounting standards.

Office of Management and Budget – Uniform Guidance
Because the majority of UC Davis’ research dollars are from the federal government, most of our cost accounting standards are based on federal regulations. These are listed in circulars provided by the Office of Management and Budget (https://www.whitehouse.gov/omb/circulars) in the executive branch of the federal government. The most relevant circular for UC Davis is OMB Uniform Guidance (https://www.gpo.gov/fdsys/pkg/FR-2013-12-26/pdf/2013-30465.pdf). All Federal sponsor policies that govern grant management (such as the NIH Grants Policy Statement) are based on the Uniform Guidance.

All costs in your budget should be consistent, allocable, reasonable and allowable. Uniform Guidance establishes principles for determining allowability of costs applicable to grants, contracts, & other agreements with educational institutions.
**Consistent**

Consistent treatment of costs is a basic cost accounting principle and is specifically required by Uniform Guidance to assure that the same types of costs are not charged to federally sponsored agreements both as direct costs and as facilities and administrative (F&A) costs. These cost elements cannot, under routine circumstances, be both. So, consistency in this context means that costs, incurred for the same purpose, in like circumstances, must be treated uniformly as either direct costs or as F&A costs. For example, charging local phone charges to some grants, and not others, would not be consistently treating the charges as direct or F&A.

**Allocable**

Allocable costs are clearly associated with the particular project. For example, chemicals purchased for use on a specific project should only benefit that project. Restocking general chemical supplies used for a variety of purposes would benefit many projects and may not be easily allocated to individual projects. Consider whether the cost will be incurred solely to advance the work under the sponsored agreement. For example, travel costs incurred for the Principal Investigator to obtain data on the topic of the research would generally qualify, but travel costs to attend a conference on a topic not related to the research would not.

**Reasonable**

Reasonable costs would generally be accepted as necessary per a “prudent” person’s review. For example, compensation for the time spent by a graduate student researcher on the project would generally be accepted as necessary while the purchase of a pleasure cruise would not be reasonable.

**Allowable**

Allowable expenses are permitted by institutional and sponsor regulations and are consistent with UC Davis charging practices. There are some costs which are specifically prohibited from being charged to a sponsored project, such as alcoholic beverages, advertising, lobbying or entertainment charges. These are known as "unallowable" costs. It is important to ensure that a cost is allowable before including it in a proposal budget because UC Davis will be spending the public’s money and is responsible for the proper stewardship of public funds and for upholding public trust.

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**Code of Federal Regulations**

The Code of Federal Regulations (CFR) ([http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR](http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR)) is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government. It is divided into 50 titles that represent broad areas subject to Federal regulation. Each volume of the CFR is updated once each calendar year and is issued on a quarterly basis. At the department level you will encounter these rules in the certifications and representations portion of a call for proposals or general sponsor guidelines. The Sponsored Programs review of the proposal includes ensuring that the proposal meets the requirements set forth in the Code of Federal Regulations.
UC Davis Charging Practices


Cost Accounting Standards Board Areas of Consistency

As a recipient of federal awards, UC Davis is required to meet all of the guidelines in the applicable OMB circulars, such as Uniform Guidance. The federal Cost Accounting Standards Board (CASB) (https://obamawhitehouse.archives.gov/omb/procurement_casb/) has four cost accounting standards applicable to UC Davis which help to clarify what costs must be treated consistently.

Estimating, Accumulating, and Reporting Costs

In order to permit comparisons of estimates to actual costs, the first standard requires that the expenditure classifications used to estimate costs in contract and grant proposals be consistent with those used to accumulate and report costs.

Allocating Costs Incurred for the Same Purpose

The second standard requires that costs incurred for the same purpose, in like circumstances, be treated consistently as either direct or indirect costs. If a private industry sponsor allows us to direct-charge a cost that the Federal government says must be considered an indirect cost, in both cases, we must treat the cost as indirect to demonstrate consistency.

Accounting for Unallowable Costs

The third standard requires that unallowable costs be identified and accounted for independently from allowable costs.

Cost Accounting Period

The fourth standard requires the consistent use of the same cost accounting period for purposes of estimating, accumulating, and reporting costs.

Chapter 7 of the UCOP Contracts and Grants Manual

Chapter 7 of the UCOP Contracts and Grants Manual (http://www.ucop.edu/research-policy-analysis-coordination/resources-tools/contract-and-grant-manual/chapter7/index.html) provides details about the University of California's policies and procedures related to budgets and expenditures. This chapter includes details about what costs are allowable, justifying and documenting expenditures, cost transfers, fixed price agreements and service facilities. Many of these are similar to the federal guidelines. However, it is important to read through these so in order to identify areas where the UC's policies differ (and are usually more cautious) than the federal guidelines.
Understand Specific Sponsor Rules
Each sponsor agency or entity will, in general, have their own guidelines about how the funding they provide can be spent.

Federal Sponsors
Many federal sponsors, such as the National Science Foundation (NSF) and the United States Department of Agriculture (USDA), have guidelines under the Federal Demonstration Partnership (FDP) (http://sites.nationalacademies.org/PGA/fdp/index.htm). The FDP is an association of federal agencies, academic research institutions with administrative, faculty and technical representation, and research policy organizations that work to streamline the administration of federally sponsored research. Through their partnership with federal agencies, the FDP has developed costing guidelines which are consistent throughout the various participating federal agencies. As a member of FDP, UC Davis is able to utilize these guidelines. In addition to the standard guidelines through the FDP, each agency often has additional restrictions. These are often only referenced in the funding announcement, with directions to read the guidelines posted to the agency's website. For example, NSF's funding announcement states: "Proposals submitted in response to this program announcement should be prepared and submitted in accordance with the general guidelines contained in the NSF Grant Proposal Guide."

State of California Sponsors
Assembly Bill 20 (AB20 2009-2010) (http://uknowledgeshare.com/cma/) allowed for model contract terms for research, training and public service projects funded by State of California agencies and performed by the UC and California State University systems. However, not all State agencies has negotiated a model agreement. Check each funding announcement and funding agency website to determine whether there are any restrictions. Keep in mind that if the dollars are federal flow through (meaning that the federal government gave the money to the state, which would in turn be giving it to us), then all of the federal guidelines apply, in addition to the state agency guidelines.

Private Sponsors
Private sponsors often have the most restrictions on how money can be spent, especially overhead costs. Because not all private sponsors list their costing restrictions in their funding announcements, review the sponsor's website for any other guidelines. With any sponsor, if you are unclear about whether a cost is or is not allowed, call the contact person listed in the funding announcement or on the sponsor's funding website. Starting the Budget

Discuss the Budget with the Principal Investigator
Communication is the Key! Make sure that you get any materials needed to begin the budget development process. This might include things such as the funding announcement, any other sponsor guidelines, and an outline of the proposed project. Department administrators or coordinators, may not know the answers to all of the questions that come up when beginning a budget. Therefore, it is important to learn more from the Principal Investigator about the proposed project before beginning budget development.
A checklist (see Appendix) can be very helpful in organizing the process. As clarity regarding potential projects costs is gained from the Principal Investigator, begin an outline of the budget categories and develop a list of specific budget line items. This list should include all of the things or people the researcher will need for the project to be successfully completed. Before these items are compiled into a budget, evaluate which items will be allowed on the budget and where they should go on the budget form. Principal Investigators can use this checklist to help organize the information that the department administrator will need to assist you with your budget.

**Review the Sponsor Guidelines**
Read the program guidelines to make certain the budgeted expenses are allowable. This includes the general sponsor rules noted in the previous section and guidelines included in the program solicitation. It may be helpful to complete the Call for Proposals Checklist (http://research.ucdavis.edu/wp-content/uploads/03-Call-for-Proposals-Checklist.pdf) while performing this step. This tool helps identify budget areas to pay special attention to or sponsor restrictions. For example, certain expenses may not be allowed, certain expenses may be required (such as travel to meetings) and certain expenses may have limits.

Is there a maximum amount of budget you can request from the sponsor? Is it a total cost limitation (direct plus indirect costs) or a direct cost limitation? Are there other restrictions in the solicitation regarding what must be charged such as travel to an annual meeting? Or does it list specific costs that cannot be charged such as PI salary? Keep the limitations in mind or make a note of them, so they can inform your work as you develop the budget.

**Determine the Project Period**
The project period is important as it determines what fringe rates, F&A rates and salary amounts to use. Project periods may be specified in the solicitation (earliest start date), the Principal Investigator may have a specific project period in mind (season or event dependent), or there may be start and end dates specified by the sponsor. Usually, the start date is no sooner than 9 months from submission of the proposal but it varies greatly by opportunity.
Direct Costs
Direct costs on a project will vary according to what is in the actual program or project. They do, however, have three things in common, they:

1) Benefit the specific project for which the budget is written
2) Are necessary to complete the budget
3) Are charged or recharged directly to the sponsored project

Salaries and Wages
One of the major components of any budget will be accounting for the people who will be working on the project. The budget category "salaries and wages" is designed to account for ONLY UC Davis faculty or staff. Non-UC Davis employees will be listed on their appropriate subaward budget.

Determine the Personnel Needs
Senior/key personnel are all your “non-replaceable” expertise on the project. These are usually all your faculty level investigators, but can also include others at the discretion of the Principal Investigator.

Common types of senior personnel:

- Faculty-level investigators: These are the individuals who will design and conduct the project and have overall responsibility for its compliance and its success.

- Consultants: Consultants can be said to contribute to a project with “brains and briefcases.” They offer advice, but do not have responsibility for completing the scope of work of a project. Sometimes investigators will indicate someone is a “consultant” when they are really a collaborator. It is, therefore, important to ask what the consultants tasks will be - is their role advice-based or are they responsible for a portion of the work? For example, a consultant could provide an opinion indigenous culture but would not be responsible for recruiting participants or recording histories.

- Unpaid collaborators: Unpaid collaborators may be integral to the project and listed as senior personnel or may simply offer occasional advice. It is important to find out their role on the project before determining which way to classify. If a non-paid collaborator will be senior personnel and is employed outside of UC Davis, it is important to get a letter from his or her university or institution approving the collaboration. This allows his or her institution to record committed effort and approve use of facilities for the project.

- Co-PIs vs. Co-Investigators: Sometimes Investigators call all senior personnel on a project a “co-PI.” However, the various sponsoring agencies have very distinct definitions of Principal Investigators. For example, for NSF allows one overall Principal Investigator plus 4 co-PIs. The Principal Investigator and Co-PIs have equal administrative authority. Senior personnel not in the official Co-PI or Principal Investigator role can be termed Co-Investigator (Co-I). This role is not scientifically diminutive; it just denotes a lessor administrative or management role for the project.
Calculate Salaries and Wages
If you know the specific person who will be working on a project, use their actual salary to calculate the total cost. If you do not have this information, ask the person in your department or area who processes payroll. You may also need to talk to the payroll staff in another department if an employee on the project works outside of your department.

If the position is not filled, use the relevant salary listed on the appropriate salary scale. When listing the salary of an employee, always make sure to use the Institutional Base Salary (IBS). This is the total amount of compensation (not including benefits) that the University provides for an individual in a given classification.

- UCOP Academic Salary Scales (http://www.ucop.edu/academic-personnel/compensation/index.html)
- UC Davis Staff Salary Scales (http://www.hr.ucdavis.edu/Salaryscales)

Also report the salary or wage in the way that it is actually paid. For example, if someone is a salaried employee, list their salary. If someone is paid hourly, list their hourly wage.

When calculating the salary or wage for an employee, determine whether there are any known upcoming wage adjustments or merit increases for that person or classification. For example, was a new collective bargaining agreement signed which increases wages during the project period? Will the person be getting a promotion during the project period? If there is not a specific increase known, do not include one. In this case, use the UCOP standard 3 to 5% escalation rate.

Make sure to find out the type of appointment for each academic employee. Are they 9, 12, or summer months only? Ask the person in your office in charge of payroll if necessary.

Calculate Effort Commitment
Depending on the sponsor budget format, you may need to provide either the percent or the months effort for each employee. For example, 10% equals 1.2 calendar months of a 12-month appointment. Keep in mind whether this is academic year, calendar year or summer only. Remember that determining amount of effort is the responsibility of the Principal Investigator. The local campus policy of the Office of Research requires that all federal research awards require some level, of a reasonable amount, of committed effort. The Principal Investigator is responsible for determining what constitutes a reasonable level of effort for each project. This does not apply to non-research projects.

Remember that if you state in the proposal that a certain amount of effort will be committed, and that proposal becomes an award, the people listed on the budget have now committed that effort to the project. This means that they are responsible for ensuring they meet that effort commitment. Uniform Guidance requires a certification as to the actual effort spent by all key personnel that committed effort to a sponsored project in a proposal. At UC Davis, this is done through our online effort reporting system. For more details about how this works, you should contact Extramural Funds Accounting, or view their Effort Commitment and Cost Share Tracking page (http://afs.ucdavis.edu/systems/effort-commitment-system/effort-commitment-defined.html).
Using the percent or months effort and the salary or wage, calculate the total amount of money requested for each employee. One of the most common misconceptions about effort on sponsored projects is that it is equal to FTE. This may be true for staff or other personnel (such as programmers or lab technicians) but not for senior personnel. Regardless of the appointment percent or the number of hours a faculty member works, 100% effort equals all the activities for which he or she is compensated by the university. For example, if an investigator works 80 hours a week, 100% effort equals 80 hours. If he or she works 20 hours, then 100% effort equals 20 hours. Effort should be seen as a best estimate of the time it will take to complete the investigators work on the project.

**How do I know how much effort to include for senior personnel?**

Sometimes a solicitation will indicate a certain % effort is required due to the size of the project, but more commonly your faculty member will tell you what percent effort they plan to commit to a specific project, such as 10%. Sometimes Principal Investigators may not know how much effort to indicate; a best estimate is fine.

**What do I need to know to calculate faculty salary on a sponsored project?**

Once you determine the % effort a faculty member plans to spend on a project, determine how to calculate salary and translate percentage of effort into person months if needed. To do so, you need to understand appointment types. At UC Davis, the three academic appointments you will see are

- **9/12**: Academic year faculty that have 3 summer months. For 1 summer month or 1 academic month, calculate 1/9 of his or her salary.
  
  \[
  \text{Annual Salary} \times \left(\frac{1}{9}\right) = \text{Summer Salary}
  \]
  
  Example: $133,620 \times \left(\frac{1}{9}\right) = $14,847

- **11/12**: Fiscal year faculty that have 1-month summer (e.g. most College of Agriculture and Environmental Sciences faculty). 1 summer month or 1 academic month is 1/11th in this case.
  
  \[
  \text{Annual Salary} \times \left(\frac{1}{11}\right) = \text{Summer Salary}
  \]
  
  Example: $133,620 \times \left(\frac{1}{11}\right) = $12,147

- **12/12**: Most staff and School of Medicine and School of Veterinary Medicine faculty. 1 summer month of a 12-month appointment is 1/12th of the annual salary.
  
  \[
  \text{Annual Salary} \times \left(\frac{1}{12}\right) = \text{Summer Salary}
  \]
  
  Example: $133,620 \times \left(\frac{1}{12}\right) = $11,135

If a faculty member is committing 10% effort to a project, this could be 0.9 academic, 0.9 summer months or 1.2 calendar months depending on his or her appointment. The type of salary determines the fringe benefit rate to use.

Accounting & Financial Services site has additional information on calculating effort ([http://afs.ucdavis.edu/systems/effort-commitment-system/scenarios.html](http://afs.ucdavis.edu/systems/effort-commitment-system/scenarios.html)).
Fringe Benefits

Fringe benefits are listed on a proposal budget as a set percent of salary. For all employees, use the Composite Benefit Rate schedule ([http://afs.ucdavis.edu/our_services/costing-policy-e-analysis/composite-benefit-rates/](http://afs.ucdavis.edu/our_services/costing-policy-e-analysis/composite-benefit-rates/)) provided by Accounting and Financial Services. Each employee is assigned to a benefit rate code based on his or her title code. You can look up the benefit rate code for each title code at the link above, using the Excel sheet link on the left of the page: “Rates summary for Charts 3&S/Look up by title code.” The main page of the Excel workbook will show a summary of rates by fringe benefit code, the subsequent tabs will show rate code by title code. Looking up fringe codes may seem time consuming at first, but you will soon memorize the rate codes for the titles you use most often. Some common codes are as follows:

<table>
<thead>
<tr>
<th>Personnel Category</th>
<th>Code</th>
<th>FY 17/18 Rate</th>
<th>FY 18/19 Rate</th>
<th>Escalate by 3% for FY 19/20 +</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor/faculty AY &amp; FY (Not for SOM, GSM, Law)</td>
<td>C</td>
<td>38.9%</td>
<td>40.1%</td>
<td>41.3%</td>
</tr>
<tr>
<td>Professor/Faculty in GSM, Law, SOM (&lt;$200K/Yr)</td>
<td>B</td>
<td>30.5%</td>
<td>31.45%</td>
<td>32.3%</td>
</tr>
<tr>
<td>Faculty Summer Salary</td>
<td>F</td>
<td>17.3%</td>
<td>17.8%</td>
<td>18.3%</td>
</tr>
<tr>
<td>SOM faculty (&gt;=$200K/Yr)</td>
<td>A</td>
<td>19.5%</td>
<td>20.1%</td>
<td>20.7%</td>
</tr>
<tr>
<td>Postdocs</td>
<td>F</td>
<td>17.3%</td>
<td>17.8%</td>
<td>18.3%</td>
</tr>
<tr>
<td>GSRs and Undergrads</td>
<td>G</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Academic Coordinators, Project Scientists, and Jr. Specialists</td>
<td>C</td>
<td>38.9%</td>
<td>40.1%</td>
<td>41.3%</td>
</tr>
<tr>
<td>Staff- analysts, SRAs, programmers</td>
<td>D</td>
<td>51%</td>
<td>52.5%</td>
<td>54.1%</td>
</tr>
</tbody>
</table>
How do I calculate fringe benefit rates for project periods spanning multiple fiscal years?

Our fiscal years run from July 1st through June 30th. All rates — both fringe and indirect — are valid for this period of time. How do you calculate fringe benefits when your project period spans more than 1 fiscal year and is subject to more than 1 rate?

1. Determine how many months are at each rate. If your budget starts October 1st, you will have 9 months (October through June) at the first rate, and 3 months (July through September) at the second rate.

2. You calculate:
   a. Salary/12*9*Rate 1 + Salary/12*3*Rate 2
   b. For example, a programmer (rate D) is employed at 100% time (10/01/2015 through 09/30/16) for a salary of $45,000. What amount of benefits should you budget?

   \[
   \frac{45,000}{12} \times 9 \times 0.514 + \frac{45,000}{12} \times 3 \times 0.518 = \$23,175
   \]

Whether or not you break the composite benefit rates out by fiscal year on your budget, you will be charged the applicable benefit rate in place for each month of the project. Breaking out the information on your budget simply helps you to ensure you are not short of funds at the end of the project.

Unlike salary and wages, do not apply any escalation other than what is listed on the schedule of the fringe benefit rate. Because fringe benefits are listed as a percent, the dollar amount will increase at the same rate as the salary escalation. Escalation of costs has already been determined, and is represented in the rate for each fiscal year.
Equipment and Capital Assets

It is important to understand what the university classifies as equipment or other capital asset because these items of cost receive special treatment in your budget. The three most common capital costs you will run into are equipment, software and renovations or facilities improvements.

Equipment

According to UC Davis PPM 350-50 (https://ucdavispolicy.ellucid.com/documents/view/489/509/), equipment is:

- Non-expendable (not used only one time)
- Standalone (not built into a wall; it has to be moveable.)
- Has normal useful life of one year or more
- Qualifies as tangible personal property with an acquisition cost of $5,000 or more. (If an item costs $4,200, it is a supply even if it would otherwise be termed equipment.”)

The following can be included in the equipment total when a new piece of equipment is initially purchased:

- ✔ Invoice price of equipment, including any modifications, attachments, accessories or auxiliary apparatus necessary to make it usable for the purpose for which it was acquired
- ✔ The cost to put it in place (excluding renovations)
- ✔ Minor spare parts and software acquired with the initial purchase can be included in the price of the equipment if they are not itemized separately
- ✔ Taxes, freight and installation

An add-on can be considered equipment if it is an intricate functioning part of the equipment, significantly extends the useful life of the inventoriable equipment or significantly increases capacity, productivity, or output of the existing inventoriable equipment and if the cost of the add-on is $5,000 or more. These must be specifically approved by the sponsor to be allowable.

Items that are NOT considered equipment include:

- ✗ Replacement or spare parts purchased subsequent to the initial equipment acquisition are not added to the value of the equipment unless they significantly extend the useful life, increase productivity, or increase the value of the equipment.
- ✗ Repairs are considered normal, regularly recurring disbursements to keep property in an efficient operating condition, neither adding to the value of the property nor appreciably prolonging its life, and are therefore not added to the value of the equipment.
Software

Generally, software expenses will be budgeted one of two ways.

1) Capitalized and excluded from F&A. For example:
   a. Software purchase (not license) price is $5,000 or more per copy (can include consultant costs associated with readying the software for use.)
   b. Licenses where no period is mentioned (i.e., perpetual licenses) if the cost per license is $5,000 or more and the useful life of the license exceeds one year.
   c. Software costs included with the purchase cost of hardware (not separately identified on the vendor’s invoice) will be capitalized as hardware costs.

2) Treated as supplies and subject to F&A. For example:
   a. Annual software license fees and maintenance costs. This applies to software “leases” where the university does not own the software, but may operate it for as long as the license/maintenance fees are paid.

Renovations/Facilities Improvements

These are rarely included in proposals, but there are specific solicitations for these costs; for example, animal facilities renovation grants, or upgrades to research facilities grants.

When deciding whether or not to capitalize facility expenditures, consider the following definitions (from Accounting Manual P-415-1: http://policy.ucop.edu/manuals/accounting-manual.html).

✔ Improvements or Betterments - Significant alterations or structural changes which increase the usefulness, enhance the efficiency, or prolong the life of property. This type of expenditure should be capitalized. If expenditures are determined to be capitalized (per the definitions above) the last threshold is that the total cost (total cost of the job not per item) must be $35,000 or more.

✘ Repairs - Regularly recurring expenses to keep property in an efficient operating condition, that does not significantly add to the value of the property or significantly lengthen the life of the entire asset (rather these costs ensure the asset retains its value). This type of expenditure should NOT be capitalized.

✘ Replacements - Replacing component parts of buildings or structures that do not significantly lengthen the life of the entire asset (again these costs help the asset retains its value). This type of expenditure should NOT be capitalized.
Materials and Supplies

Materials and supplies are tangible items of expense that do not meet the definition of equipment, such as lab supplies and specialty supplies, which the researchers need to complete the project.

If a lump dollar sum for “general supplies” is requested with your justification at time of proposal, you will most likely be asked by the sponsor to provide more detail by supply category before an award can be made — usually with very little turnaround time (1 to 2 days.)

To preempt this request, it is beneficial to include a breakdown of dollars by supply category (a best estimate is fine!) - along with your justification for the costs - via a table or after each item listed in paragraph form.

Remember that you should not include miscellaneous or department (general) supplies, like copy paper, office chairs, or pens, because these are included as Facilities and Administrative, or overhead, costs.

See example table below:

<table>
<thead>
<tr>
<th>Estimated Expense Item</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer: A laptop computer is necessary to record the histories of village inhabitants</td>
<td>$1,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Storage Devices will enable the storage of all histories and data associated with the project.</td>
<td>$2,000</td>
<td>$4,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software: Specialized software will be purchased to catalog personal histories of village inhabitants.</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$8,500</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$9,000</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

5 Year Total: $32,500

How do supplies differ from expenses?

It is important to note that the federal government, and therefore our proposal budgets (even foundations for consistency), should distinguish between supplies and expenses even though in the university accounting system both costs are budgeted under Sub3-supplies and expense. Ideally, expenses (recharges, printing costs, publication costs, services) should be separated from supplies (tangible supply items.) If it is difficult to separate supplies from expenses, using a best estimate will work. Always check non-federal sponsor guidelines to see if they have alternative instructions.
What if my supply costs vary per year?

Varying supply costs across years of a project is common, but an explanation should be noted. Indicating you are using this category to balance the budget to the limit is not a sufficient nor recommended justification (even if based on reality.) Some common reasons supply budgets may vary by year include- supplies are bought in bulk initially and used over more than one year (to obtain a discount or best pricing), or the scope of work requires more supplies in some years than others based on needed sample size, etc.

Travel

General travel costs include a variety of expenses, including ground and air transportation, communications, lodging and subsistence or per diem, foreign travel, currency exchange fees, and passport and visa costs. Travel and accommodations for non UC Davis personnel can be charged directly to a sponsored project, instead of sending them the money via a subaward.

Use UC travel guidelines to determine the appropriate travel rates. Some sponsors may insist on using some other rates which is acceptable. However, these are often lower than the rates used by the UC, so make sure you can manage the travel expenses before agreeing to the alternate rates.

For foreign travel, use US State Department travel rates. When booking flights, remember that to the maximum extent possible, US flag carriers must be used. In your actual budget, you need to make sure that you list the total cost of domestic and foreign travel separately. You can find more details about allowability of travel expenses, rates, and other travel related restrictions and guidelines on the UC Davis Travel & Entertainment website (http://afs.ucdavis.edu/our_services/travel-e-entertainment/index.html).

As a general guideline, a national 2-3-day trip can be budgeted at $1,500 to $2,000; an in-state trip can be budgeted at around $1,200; and an international trip at $3,000 to $4,000 depending on location. These guidelines are just a suggestion based on usual practice, but it is always better to cost out a trip if possible.

It is often important to show how you have costed out your trip in your justification, or to help you plan your travel in general. Consider the cost of:

- Mileage: Usually $.575 per mile for 2015 (remember to check for updates!)
- Airfare: Based on actual cost; check online for rates for estimated time of year and destination
- Hotel: Domestic - Based on actual, reasonable costs; Foreign - up to max per diem (https://aoprals.state.gov/web920/per_diem.asp)
- Meals and Incidentals (domestic): Currently $71 per day with some restrictions based on length of travel. Check guidelines for details.
- Meals Per diem (foreign): Budget by destination city (https://aoprals.state.gov/web920/per_diem.asp)
- Registration Fees: $300 to $600 dollars or more. Ask your investigator the usual cost for his or her society meetings, or look up meetings online and budget an average rate.
A sample travel table in a budget justification looks as follows:

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Destination</th>
<th>Item</th>
<th>Rate</th>
<th># travelers</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel to relevant XY meeting to collaborate and disseminate information on research results.</td>
<td>TBD</td>
<td>Airfare</td>
<td>$779/Flight</td>
<td>2</td>
<td>$1,558</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lodging</td>
<td>$224/night x2</td>
<td>2</td>
<td>$896</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Meals &amp; Incid.</td>
<td>$71 per day x3</td>
<td>2</td>
<td>$426</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Registration</td>
<td>$300 per person</td>
<td>2</td>
<td>$600</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Taxi/shuttle</td>
<td>$60 per person</td>
<td>2</td>
<td>$120</td>
</tr>
</tbody>
</table>

**Trip Total** $3,600

**Participant Support Costs**

Some contract and grant sponsors such as NSF include a budget category called “participant support costs,” which are defined as direct costs for items such as stipends or subsistence allowances, travel allowances and registration fees paid to or on behalf of participants or trainees (but not employees) in connection with meetings, conferences, symposia or training projects. These costs are allowable with the prior approval of the awarding agency. Amounts must be reasonable, based on type and duration of the activity, and may be outlined in the program solicitation.

**Who is a participant?**

A participant is an individual who is receiving a service or training opportunity from a workshop, conference, seminar, symposium or other short-term instructional or information sharing activity funded by a sponsored award. A participant may be a UC Davis student/scholar, a student/scholar from another institution, a private sector company representative, a K-12 teacher, or state or local government agency personnel.

Some personnel categories are NOT considered participants:

- Employees of UC Davis
- Students or project staff who receive compensation directly or indirectly from the grant
- Research subjects receiving incentive payments
- Federal employees

A participant does not perform work or services for the project or program other than for their own benefit. The participant is not required to deliver anything or provide any service to the university in return for these support costs.
Expenses

Determining what is allowable as a participant support cost is sometimes difficult. The guidance below is provided to assist you with classifying the most common types of participant support. However, be sure to analyze the solicitation requirements and/or check with the program to ensure allowability.

Participant support costs may include the following expenses:

- Tuition and registration fees if required to participate in the project
- Event registration fees
- Stipend (predetermined amount regardless of actual costs) for housing and subsistence allowance
- Travel costs when the sole purpose of the trip is to participate in the project activity
- Event support costs for lodging and meal expenses paid directly to the event facility, only if the payment is made on behalf of, or reimbursed directly to, the participant
- Meals and incidentals when on travel status
- Training materials paid directly on behalf of the participant
- Lab supplies paid directly on behalf of the participant

All costs that are reimbursed or paid on behalf of the participant must be incurred within the project period and be specifically allowed by the sponsoring agency. Participant support costs are budgeted on a separate line and must be accounted for separately. Funds provided for participant support costs that are not spent cannot be rebudgeted for use in other categories except with the prior written approval of the sponsor. In most cases, unspent participant costs must be returned to the sponsor.

Equally important, there are costs that should NOT be budgeted as participant support costs, except when specifically allowed by the award:

- Travel for project Principal Investigator or staff
- Multi-purpose travel (i.e., to perform research in addition to attending a project related meeting)
- Travel for a consultant who is providing service to the university
- Event support cost (e.g., facility rentals, media equipment rentals, food/refreshments) not made on behalf of or paid to participants
- Entertainment/food for non-participants
- Honoraria paid to a guest speaker or lecturer
- Incentive payment to encourage an individual to participate as a research subject
- Subaward to a provider for multiple training events (i.e., an ongoing contract with specific terms and conditions)
- Payments to a participant’s employer for reimburse for the costs related to sending the employee to the project event
- Expenses related to meetings of an administrative nature
Patient Care Costs

For budgeting purposes, "Patient Care Costs" are the costs of routine and ancillary services provided by hospitals to individuals participating in research programs. The costs of these services normally are assigned to specific research projects through the development and application of research patient care rates or amounts.

The following are examples of what are not considered “patient care costs“:

- First doctor-patient visit
- Follow-up visits (Physician /Nurses)
- Physical Exam performed by the Physician
- Physical Exam performed by a Nurse
- Taking "patient's history" by a Physician or a Nurse
- Any other services provided by a Nurse, or a Medical Technician
- Referrals to other doctors within the hospital or department

Projects with patient care costs always involve human subjects, so the project must have IRB approval.

Graduate Student Fees and Tuition

Graduate students employed on a sponsored project are entitled to have their fees or tuition remitted on their behalf by the University. To be eligible for tuition and fee remittance, the student must have at least a 25% appointment. This can be a combined total of appointments across all sponsored projects. The fees and tuition remitted must be charged to the contracts or grants on which the student is appointed. The fees and tuition must also be charged in proportion to the effort charged to the project. For budgeting purposes, GSR tuition and fees can be escalated up to 10% per year. Because this rate of escalation can consume a large portion of the budget, some investigators choose to use a lower rate of 5% to 7% in their projections. See table below for options:

<table>
<thead>
<tr>
<th>Tuition and Fees Projections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different rates can significantly change your budget, as shown below</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Escalation</th>
<th>Current</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resident Student: (Fees + Health Ins)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5%</td>
<td>$17,118</td>
<td>$17,974</td>
<td>$18,873</td>
<td>$19,817</td>
</tr>
<tr>
<td>7%</td>
<td>$17,118</td>
<td>$18,316</td>
<td>$19,598</td>
<td>$20,970</td>
</tr>
<tr>
<td>10%</td>
<td>$17,118</td>
<td>$18,830</td>
<td>$20,713</td>
<td>$22,784</td>
</tr>
<tr>
<td><strong>Non-Resident: (Fees + Health Ins)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5%</td>
<td>$32,220</td>
<td>$33,831</td>
<td>$35,523</td>
<td>$37,299</td>
</tr>
<tr>
<td>7%</td>
<td>$32,220</td>
<td>$34,475</td>
<td>$36,888</td>
<td>$39,470</td>
</tr>
<tr>
<td>10%</td>
<td>$32,220</td>
<td>$35,442</td>
<td>$38,986</td>
<td>$42,885</td>
</tr>
</tbody>
</table>

Consultants

Consultants are often referred to as “brain and briefcase”, and typically work on an hourly basis. They don't use resources of an entity or own the resources of the entity for which they are consulting. If someone is labeled as a "consultant" in your budget, but they will be utilizing University resources, evaluate whether they are, in fact, a subcontractor. Consultants provide advice, counsel, or recommendations and NOTHING more. They do not have any authority over how their advice is acted upon.

Per UC, the use of consultants should be rare, because UC is the home of the experts. Before using a consultant, consider whether a person or department on campus can provide the same service. As a part of the budget, you will obtain a written scope of services and fee schedule from any consultants. Finally, determine whether there is any conflict of interest between the institution or PI and the consultant. In general, you'll examine whether the consulting agreement is with a current or recent employee, their near relatives, or an entity in which an employee controls or owns a financial interest. Read the UC Davis Policy and Procedures Manual, Chapter 350, Section 90 (https://ucdavispolicy.ellucid.com/documents/view/507/527/) which discusses UC policy in regards to employee vendor relationships.
**Subagreements**

There are two basic types of subagreements: subawards and procurement contracts.

The table below provides some basic guidance to help you determine, or help you ask your investigators the correct questions to determine, if you need to budget as a subaward or service agreement. This is an important determination because indirect costs are charged on the entire amount of service agreements — just as if they were a purchase of supplies.

<table>
<thead>
<tr>
<th>Subaward vs. Procurement Contract</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subaward</strong></td>
<td><strong>Procurement Contact/Service Agreement</strong></td>
</tr>
<tr>
<td>Subaward organization lead is senior personnel on the project</td>
<td>Management at organization is not senior personnel</td>
</tr>
<tr>
<td>Subject to federal audit requirements associated with Prime Award</td>
<td>Work at organization is not subject to audit monitoring</td>
</tr>
<tr>
<td>Typically issued to an organization such as a university or other non-profit</td>
<td>Issued to individual or organization; entity may or may not be identified on proposal</td>
</tr>
<tr>
<td>Requires a detailed statement of work</td>
<td>Requires a statement of work, but might be less detailed</td>
</tr>
<tr>
<td>Budget is detailed and effort of senior personnel is specified</td>
<td>Budgeted amount is usually only a lump sum or by sample cost; personnel not usually listed</td>
</tr>
<tr>
<td>Intellectual property ownership is shared when jointly created; publication is encouraged</td>
<td>Service provider does not own (or create) intellectual property stemming from sponsored project</td>
</tr>
<tr>
<td>Subrecipient performs substantive programmatic work as described in the proposal</td>
<td>Service provider provides the services to many different purchasers as part of its normal business operations</td>
</tr>
<tr>
<td>Services are not commercially available on the open market</td>
<td>Operates in a competitive environment; services are commercially available on the open market</td>
</tr>
<tr>
<td>Subrecipient bears responsibility for programmatic decision making and has measureable performance requirements</td>
<td>Organization does not make programmatic decisions related to the project; UC Davis does not provide oversight or management over activities performed at subrecipient</td>
</tr>
<tr>
<td>Terms and conditions flow down from prime</td>
<td>Terms and conditions do not flow down</td>
</tr>
<tr>
<td>Subrecipient has responsibility for adherence to applicable program compliance requirements (IACUC, IRB, COI)</td>
<td>Vendor is not subject to compliance requirements of the program</td>
</tr>
</tbody>
</table>
Subawards
Subawards can be in either the form of a grant or a contract and are typically to another research institution or to a non-profit organization. Subawards outsource all or portions of the project tasks to another entity and typically include terms and conditions of the prime award. Subawardee costs will appear on our budget as a lump sum per year by institution. This lump sum will be based on the Subawardee’s detailed budget, which will usually be placed in the proposal directly after UC Davis’s budget. It is important to know that all of the subawardee’s costs are UC Davis’s direct costs. Therefore, when you have a direct cost limit, usually you must include all subaward costs within that limit (both direct and indirect). Always check the solicitation or with the program if you have questions regarding what costs comprise the limit.

This provides UC Davis with information needed to make compliance certifications to the sponsor, as well as identifying any areas where special attention must be paid. This form must be received by Sponsored Programs before a subaward can be given to a non-FDP institution. To determine whether the institution you are working with is a member of the FDP (http://sites.nationalacademies.org/PGA/fdp/PGA_055518), To expedite award processing time, it is suggested that PIs working with non-FDP institutions request the Proposal-Specific Commitment Form (http://research.ucdavis.edu/wp-content/uploads/UCD_Subrecipient-Commitment-Form_final.pdf) when other subrecipient information is requested (e.g., scope of work and budget). When UC Davis provides a subaward to an institution that is not a part of the Federal Demonstration Partnership (FDP), the subawardee is required to complete a proposal-specific commitment form.

Finally, you will need to obtain institutional approval from the receiving institution. Approval from the receiving institution generally consists of a short letter agreeing to the terms and conditions and any required cost share. It should come from an institution contact with signature authority. For example, at UC Davis, this would be the Sponsored Programs office.

Procurement Contracts
Procurement contracts are typically to a self-employed individual or for profit organization, and can be for individuals or for-profit or not-for-profit corporations. Procurement contracts secure goods and services needed to support a project and typically do not include any of the terms and conditions of the prime award. The bottom line is that determining which category a subagreement belongs to is a gray area. Call the Sponsored Programs office to be sure!

Remember that when you write your budget, all costs associated with a subagreement should be listed separately from the costs incurred by UC Davis.

Lease Costs
When lease costs are charged directly to a sponsored project, you may use off-campus indirect cost rates for your budget calculations. Remember that the lease charges must still be allowable, allocable and consistent. You must also be able to document the lease and other associated charges.
Other Direct Costs

Your budget may have other direct costs which do not have their own budget categories. This may include items such as equipment repair and maintenance, computing time, publication costs, animal care or other costs associated with completing the project. You should list these costs on your budget and describe them in detail in your budget justification.

Common types of other expenses include:

- **Tuition and Fees:** These costs are budgeted as “other expenses” but are explained above in a separate section.

- **Fee-for-Service Costs:** On-campus recharges such as those for Information & Education Technology, MediaWorks, Campus Event Services, Reprographics; and off-campus services such as printing, survey costs, web design, evaluation, and photography should be included in “Other Costs” and will likely be determined via quotation or historical cost.

- **Publication Costs:** Page charges, book costs, or other media costs are usually allowable, but should serve a specific program purpose such as dissemination of research results.

- **Workshop Costs:** Costs for workshops are often divided between travel and other costs. Workshop costs may include facility rental, campus event services recharges, catering*, and printing. Note that Campus Event Services offers a full menu of event planning support including registration services and assisting with facilities and housing (http://www.cevs.ucdavis.edu/Public/).

Cost Sharing

Cost sharing occurs when costs of a sponsored project are borne by the applicant institution (UC Davis) instead of by other institutions or agencies. Cost sharing usually occurs with direct costs, but if the sponsor allows it, indirect costs can be used to meet a mandatory cost share requirement.

Cost sharing may be in-kind, such as uncompensated effort or a “new” piece of equipment for the project or it can be cash.

Make sure that cost sharing is appropriate before you commit to it. UC Policy: APM – 020 (http://ucop.edu/academic-personnel-programs/_files/apm/apm-020.pdf) says that UC must recover all direct and indirect costs from extramural sponsors. When we cost share, the campus is essentially subsidizing the research. This is why it is not appropriate to cost share on most government contracts or in proposals to for-profit companies. You should never cost share when it is not allowed by the department or Dean’s office. You should also not cost share when you cannot afford it. If your proposal includes cost sharing that you (or your department) cannot afford, the University may not be able to accept any subsequent awards.

When you submit a proposal with cost sharing, make sure you have a formal letter or memo from the party that has authority to commit to the cost share, such as the Dean or department chair. In some cases, the authorizations on the Cayuse SP Internal Processing Form (IPF) can serve this purpose. If you are unsure who has the authority to commit to a cost share, contact
your Proposal Team Leader in the Sponsored Programs Office. Always keep in mind that if cost sharing is in your proposal, and your proposal gets awarded, that cost sharing is now mandatory as part of the award agreement.


Estimating Costs
Once you know your budget categories, determine what numbers to use in the budget. This is the process of identifying and projecting the costs for a sponsored project using generally accepted cost estimation methods. For salaries and wages, use the methods discussed earlier. However, estimate your costs for other categories. Depending on the cost category, there may be multiple ways to do this. One way is to review historical costs for similar projects. Another method is to obtain current cost information. If using this method, the internet is a great source of information. If you are looking for supplies and materials, catalogues are especially useful. You might also use vendor quotes. Make sure to obtain a written copy of what the quote includes, so you can verify that all the costs are included in the quote. You may need a service which can be performed on campus. In this case, you may be able to obtain approved campus recharge rates. Other methods for estimating your costs are appropriate as long as the process is logical, can be explained to someone else and can be documented.

Escalating Costs
When you estimate your costs, remember that costs increase over time. Because of this, we recommend that you include a modest escalation in the estimate of costs for direct charges.

Escalating costs is consistent with the University's cost principles and with the University's policy of recovering all costs of conducting sponsored projects. Escalation helps to ensure that your project receives adequate funding. Use an escalation rate of 3% to 5% for most direct costs. There are two exceptions to this. As mentioned, tuition and fees should be escalated at a rate of 10% per year. You should also not include any escalation in your budget for subcontracts. The subcontracting institution or agency should include the appropriate escalation within their own budget.

Documenting Cost Estimation
Keep detailed documentation that supports how the costs were estimated and the reasons why costs were proposed. This is our proof that we are not just making up all of the numbers.

Auditors rely on this information and will need more than just your memory to support your costs. Auditors will focus on the source documents that were relied upon during the preparation of the budget and budget justification. It is also possible that you will not be in your current position when an audit is conducted, so documentation should be clear and organized so that another person can follow the logic. You can use any of the materials you used for your
cost estimation as documentation, such as payroll records, published merit and range increases, catalogues, vendor quotes, proposals or documentation of historical costs for similar projects.

If you are using web-based information as your documentation, save either a printed copy or PDF version of the page, not just the link. The auditors will need to see the information you used when you wrote your proposal budget, and the website will most likely update the information, or may not be available at the time of an audit.
Facilities and Administrative (F&A) Costs
As discussed earlier, allowable costs can be either direct or indirect. Indirect costs are also known as facilities and administrative (F&A) costs or overhead. The determination that a cost is indirect, rather than direct is primarily determined by its allocability with a specific cost objective (i.e., project) and consistency in how the cost is applied across the organization. F&A costs are associated with the general operation of UC Davis and cannot be readily assigned to individual projects. These costs include facilities and maintenance, general and departmental administration, clerical and administrative salaries and fringe benefits, general office supplies, general purpose equipment, routine postage, building maintenance and utilities and library expenses.

The F&A rate is a federally approved rate, applicable to all sponsors. The Federal government expects to pay the same or less for projects than other sponsors, not more! This includes overhead. The Office of Research website (http://research.ucdavis.edu/proposals-grants-contracts/helpful-links/indirect-cost-fringe-benefit-rates/fa-rates/) provides details about indirect cost rates, as well as the Federally Negotiated F&A Rate Agreement.

Sponsored Activity Categories
The federal rate agreement lists three major sponsored activity categories, each with its own F&A rate. Understanding how these functional areas are defined will aid in determining which F&A rate applies to a proposed sponsored project.

Instruction
Instruction is all the teaching and training activities of an institution. This consists of departmental research, development and scholarly activities that are not separately budgeted and accounted for. It excludes research training, which is part of organized research.

Organized Research
Organized Research is all research and development activities of an institution that are separately budgeted and accounted for. This includes sponsored research, which is all research and development activities that are sponsored by Federal and non-Federal entities, including activities involving the training of individuals in research techniques where such activities utilize the same facilities as other research and development activities.

Other Sponsored Activities
Other Sponsored Activities are programs and projects financed by Federal and non-Federal agencies and organizations that involve the performance of work other than instruction and organized research. This might be activities such as health service projects, like a community vaccination clinic, or community service projects, like literacy programs.
**Location of Research**

The appropriate F&A rate is also determined by where the research or project will be conducted.

**On-Campus Rates**

This is the most commonly used rate. If the project is research based (not a service) and involved faculty have offices on campus this is the rate you will likely use as it requires resources to provide the infrastructure required for successful completion of research and other projects. As you can see on this graph, much of the F&A monies on the UC Davis campus are apportioned to what might be considered "upkeep" or "keeping the lights on"; things such as operations and maintenance, or general purpose equipment, such as office computers and copiers.

**On-Campus Organized Research (Rate = 57%)**

- 17.5% Dept. Admin
- 13.5% Operations & Maint.
- 5.2% Building
- 5.0% Depreciation General Admin
- 4.5% Equipment
- 3.5% Sponsored Programs Admin
- 2.8% Building Interest
- 2.0% Library
- 5.0% Dept. Admin
- 3.5% Operations & Maint.
- 2.8% Building
- 2.0% Depreciation General Admin
- 1.7% Equipment
- 1.2% Sponsored Programs Admin
- 0.5% Building Interest
- 0.3% Library
- 0.2% Dept. Admin
- 0.1% Operations & Maint.
- 0.1% Building
- 0.1% Depreciation General Admin
- 0.1% Equipment
- 0.1% Sponsored Programs Admin
- 0.1% Building Interest
- 0.1% Library
Off-Campus Rates

The off-campus rate applies to research and services primarily conducted somewhere other than a UC Davis facility. Lease costs are usually directly charged to the project. Projects with a subaward or with field work do not automatically count as off-campus, but rather all of the research has to be primarily associated with off-campus locations and resources. To ensure you have made the appropriate on/off campus classification for your particular project, it is important that you contact your Sponsored Programs analyst early, so he or she can assist you based on the specific details of your project.

Off-Campus Organized Research (Rate = 26%)

F&A Rate Exceptions

Sometimes, researchers ask to use a rate other than the Federal Negotiated rate for their sponsored research. This should be avoided if at all possible! Remember that the money from the F&A portion of the budget is essentially reimbursing the University for costs related to the sponsored project. If a lower F&A rate is used, the expenses are still being generated, but the cost is absorbed by the University, rather than by the sponsor. This is especially problematic if the sponsor is for-profit. Allowing a lower F&A rate would essentially mean the University was subsidizing research for a private company which would be able to make money off of the results.

Some sponsors have established policies of not paying above a particular rate for overhead charges. If you encounter this situation, first ask the sponsor for their indirect cost policy. This policy must be an actual, written policy which applies to all sponsored projects funded by that sponsor. If a sponsor does not ordinarily place a cap on the F&A rate used, asking for special consideration for this one project is not the same as an actual policy. Sponsored Programs requests exceptions from UCOP on a case-by-case basis.
F&A Rates

COLLEGES AND UNIVERSITIES RATE AGREEMENT

BIN: DATE: 06/27/2017
ORGANIZATION: FILING REF.: The preceding
University of California (UCD) agreement was dated
Davis Campus 06/21/2016
Davis, CA

The rates approved in this agreement are for use on grants, contracts and other
agreements with the Federal Government, subject to the conditions in Section III.

SECTION I: INDIRECT COST RATES
RATE TYPES: FIXED FINAL PROV. (PROVISIONAL) PRED. (PREDETERMINED)

<table>
<thead>
<tr>
<th>TYPE</th>
<th>FROM</th>
<th>TO</th>
<th>RATE(%)</th>
<th>LOCATION</th>
<th>APPLICABLE TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRED.</td>
<td>07/01/2013</td>
<td>06/30/2014</td>
<td>54.50</td>
<td>On-Campus</td>
<td>Organized Res.</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2014</td>
<td>06/30/2015</td>
<td>55.50</td>
<td>On-Campus</td>
<td>Organized Res.</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2015</td>
<td>06/30/2016</td>
<td>56.50</td>
<td>On-Campus</td>
<td>Organized Res.</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2016</td>
<td>06/30/2018</td>
<td>57.00</td>
<td>On-Campus</td>
<td>Organized Res.</td>
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<tr>
<td>PRED.</td>
<td>07/01/2013</td>
<td>06/30/2018</td>
<td>26.00</td>
<td>Off-Campus</td>
<td>Organized Res.</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2013</td>
<td>06/30/2014</td>
<td>37.00</td>
<td>On-Campus</td>
<td>Other Spons Act</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2013</td>
<td>06/30/2014</td>
<td>24.00</td>
<td>Off-Campus</td>
<td>Other Spons Act</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2014</td>
<td>06/30/2015</td>
<td>38.00</td>
<td>On-Campus</td>
<td>Other Spons Act</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2014</td>
<td>06/30/2015</td>
<td>24.50</td>
<td>Off-Campus</td>
<td>Other Spons Act</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2015</td>
<td>06/30/2016</td>
<td>38.50</td>
<td>Off-Campus</td>
<td>Other Spons Act</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2015</td>
<td>06/30/2016</td>
<td>24.50</td>
<td>Off-Campus</td>
<td>Other Spons Act</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2016</td>
<td>06/30/2018</td>
<td>39.00</td>
<td>On-Campus</td>
<td>Other Spons Act</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2016</td>
<td>06/30/2018</td>
<td>25.00</td>
<td>Off-Campus</td>
<td>Other Spons Act</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2013</td>
<td>06/30/2018</td>
<td>50.00</td>
<td>On-Campus</td>
<td>Instruction</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2013</td>
<td>06/30/2018</td>
<td>26.00</td>
<td>Off-Campus</td>
<td>Instruction</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2013</td>
<td>06/30/2018</td>
<td>22.70</td>
<td>Primate Ctr</td>
<td>Core Grant (1)</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2013</td>
<td>06/30/2018</td>
<td>54.40</td>
<td>Primate Ctr</td>
<td>Non-Core Fed(1)</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2013</td>
<td>06/30/2018</td>
<td>8.00</td>
<td>Off-Campus</td>
<td>IPA (2)</td>
</tr>
</tbody>
</table>
Calculating F&A

Multiply the cost base by the appropriate F&A rate. The resulting number is the dollar amount of your indirect costs.

How do I calculate F&A across multiple fiscal years?

Project budgets are often subject to multiple indirect cost rates over the funding period.

1. Determine how many months are at each rate. If your budget starts October 1st, you will have 9 months (October through June) at the first rate, and 3 months (July through September) at the second rate.

2. Calculate:
   a. \( \text{IC Base/12} \times 9 \times \text{Rate 1} + \text{IC Base/12} \times 3 \times \text{Rate 2} \)
   b. For example, your project costs for year 1 are $100,000 in supplies (10/01/2015 through 09/30/16). What amount of indirect costs should you charge?

\[
100,000/12 \times 9 \times 0.565 + 100,000/12 \times 3 \times 0.57 = 56,625
\]

Modified Total Direct Costs

All negotiated rates at UC Davis are applied on a Modified Total Direct Cost (MTDC) basis. This means we do not charge our indirect cost % on all the costs listed on the budget. We define this as:

"Modified total direct costs, consisting of all salaries and wages, fringe benefits, materials, supplies, services, travel and subgrants and subcontracts up to the first $25,000 of each subgrant or subcontract (regardless of the period covered by the subgrant or subcontract). Modified total direct costs shall exclude equipment, capital expenditures, charges for patient care, student tuition remission, rental costs of off-site facilities, scholarships, and fellowships as well as the portion of each subgrant and subcontract in excess of $25,000".

This means if we had $10,000 in salary, $20,000 in supplies, and $20,000 in equipment, we would charge indirect costs only on Salary and Supplies:

<table>
<thead>
<tr>
<th>Budget- MTDC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>$10,000</td>
</tr>
<tr>
<td>Supplies</td>
<td>$20,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>$20,000</td>
</tr>
<tr>
<td>Total Direct Costs</td>
<td>$50,000</td>
</tr>
<tr>
<td>Indirect Cost Base</td>
<td>$30,000</td>
</tr>
<tr>
<td>Indirect Costs MTDC @57%</td>
<td>$17,100</td>
</tr>
<tr>
<td>Total Budget</td>
<td>$67,100</td>
</tr>
</tbody>
</table>
Total Direct Costs

Some sponsors limit our indirect costs, but allow us to charge indirect costs on all of our direct costs. This is a total direct cost basis (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. In this case, our budget above might look like:

<table>
<thead>
<tr>
<th>Budget-TDC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>$10,000</td>
</tr>
<tr>
<td>Supplies</td>
<td>$20,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>$20,000</td>
</tr>
<tr>
<td><strong>Total Direct Costs</strong></td>
<td><strong>$50,000</strong></td>
</tr>
<tr>
<td>Indirect Cost Base</td>
<td>$50,000</td>
</tr>
<tr>
<td><strong>Indirect Costs TDC @20%</strong></td>
<td><strong>$10,000</strong></td>
</tr>
<tr>
<td><strong>Total Budget</strong></td>
<td><strong>$60,000</strong></td>
</tr>
</tbody>
</table>

Total Costs

As with Total Direct Costs, only use Total Costs (TC) as a cost base if the sponsor specifically requires it. This can seem complicated, but you can determine your indirect costs with the following formula if you only know direct costs: TDC/(1-IC%) and this if you know only your total budget limit: TC*(1-IC%). Your simplified budget table would look like this:

<table>
<thead>
<tr>
<th>Budget-TC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>$10,000</td>
</tr>
<tr>
<td>Supplies</td>
<td>$20,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>$20,000</td>
</tr>
<tr>
<td><strong>Total Direct Costs</strong></td>
<td><strong>$50,000</strong></td>
</tr>
<tr>
<td>Indirect Cost Base =50,000/(1-.20)</td>
<td>$62,500</td>
</tr>
<tr>
<td><strong>Indirect Costs TC @20%</strong></td>
<td><strong>$12,500</strong></td>
</tr>
<tr>
<td><strong>Total Budget</strong></td>
<td><strong>$62,500</strong></td>
</tr>
</tbody>
</table>

Sponsors such as USDA require us to charge the lessor of our negotiated rate or a certain % TC. You can see from the example above, using our negotiated rate of 57% MTDC could result in a smaller budget than using 20% TC if many costs were excluded from the MTDC base such as subawards and equipment.

*Note:* We never charge indirect costs on subawards to other UC campuses — even if the base is TC or TDC.
Budget Justification

After you have completed your budget, UCOP requires the researcher to create a written description of the estimated costs used to prepare a project budget, as well as an explanation and description of the types of individual costs that make up each larger budget category. This is known as a budget justification, and is required by the University, even if not required by the sponsor.

The budget justification provides the reviewer, and potentially an auditor, with an explanation of the cost estimation methods used to project the costs, an explanation of why the projected costs are necessary for the research or project, a description of the types of costs that make up a larger budget category such as "other" or "supplies", and a rationale for why this situation is special. Your budget justification should also include some sort of accommodation for payment of unusual costs. This last portion is especially important if your budget includes something that might raise a flag for sponsors or auditors, like equipment (especially any equipment that sounds like general purpose equipment), or non-resident graduate student fees and tuition, which is required by the UC Davis remission policy. Make it clear that all budget requests are reasonable and consistent with sponsor and UC Davis policies.

Remember that the person who is conducting the research is the person who should be justifying the project costs! If you are assisting a researcher in creating the budget justification, it may be helpful to discuss the project budget with them, using prompt questions such as "What will graduate student A be doing on the project?" or "How did you determine that piece of equipment B would cost $6,525?" The materials and information used during cost estimation will be invaluable in creating the budget justification, so you may find it helpful to have them on hand.

Formatting and Completing the Justification

There is no University-required format for budget justifications, but in general, they should follow the same line item format and contain the same costs as the budget form. A reviewer should be able to place the two documents next to each other and see the connection between each item.

For each person listed on the budget, describe their role, their % effort, any changes to personnel costs (such as for merit increases), anything else needed to explain why that person is needed on the project and how you determined the cost of their salary and benefits. The justification is not the appropriate section of the budget for a lengthy explanation of an individual’s qualifications. This information should be provided in the biosketch and/or management plan of the technical proposal. In most cases, two or three sentences are sufficient to address someone’s qualifications in the budget justification.

You should also justify your materials and supplies. Remember that the more general your categories are, and the higher the dollar amount of each category, the more detail you should provide in your justification about specific items and how they relate to the research or project.

If you have any items in your budget that would ordinarily be considered indirect costs, such as general office equipment or administrative support, provide details in the justification about
why this project requires those items in greater quantity than would be considered "normal" use. The direct relationship of these items to the actual work of the project should be made extremely clear, as this information may eventually be reviewed by an auditor. You want to avoid an auditor not being able to determine a clear relationship if you have already spent the money. You will also want to provide details about any unusual categories or items on the budget, and explain in detail how they relate to the research or project.

**Examples Budget Justification Language**

<table>
<thead>
<tr>
<th>Personnel Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Senior/Key Personnel</strong></td>
</tr>
<tr>
<td>- <em>Name of Researcher</em>, PhD (1 summer months effort; 1 academic month effort)</td>
</tr>
<tr>
<td>o Dr. <em>Researcher</em>, an associate professor of X and an expert in A and B, will lead this project, providing oversight and management, designing and conducting the research, and ensuring success.</td>
</tr>
<tr>
<td>- <strong>PI Researcher</strong></td>
</tr>
<tr>
<td>o 0.25 summer months support per year are requested to support the PI’s effort toward the program, providing general management and oversight, and leading the research efforts.</td>
</tr>
<tr>
<td>- <strong>Co-PI Researcher</strong></td>
</tr>
<tr>
<td>o 0.25 summer months support per year is budgeted to support Co-PI <em>Researcher</em> in directing the education and training components of the program.</td>
</tr>
<tr>
<td>- <strong>Senior Participant Researcher</strong></td>
</tr>
<tr>
<td>o Dr. <em>Researcher</em> is a soft-funded professional researcher; we request 2.0 months support- commensurate with his/her effort toward the program- to enable his/her work on remote collaboration and related outreach activities through soft-funded program.</td>
</tr>
<tr>
<td>- <em>Name of Researcher</em> DVM, MPVM PhD. (Principal Investigator, Deputy Director, 80%)</td>
</tr>
<tr>
<td>o Expertise: <em>Area of expertise</em> and large scale program administration.</td>
</tr>
<tr>
<td>o Role: As Principal Investigator and Deputy Director, Dr. <em>Researcher</em> will work hand-in-hand with the Director (Dr. <em>Researcher</em>) to manage and administer the overall program. He/she will supervise the administrative support staff at UC Davis, and oversee all UC Davis activities and work related to Objectives 1-5.</td>
</tr>
</tbody>
</table>
## Personnel Costs

<table>
<thead>
<tr>
<th>Postdoctoral Researchers</th>
</tr>
</thead>
</table>
| • **Postdoctoral Researchers** *(2.25 calendar months effort)*  
|   o Postdoctoral researchers will be funded for up to 2.25 calendar months per year to supplement their independent research effort (which is funded from other sources) with project-specific activities and training and interdisciplinary collaboration. Providing multiple postdocs with a few months of funding will allow the program to have a broader reach, influencing a greater number of postdocs by exposing them to cybertraining, interdisciplinary career paths, and team-projects. Postdocs will also have the opportunity to assist on rapid response activities as they occur. |

<table>
<thead>
<tr>
<th>Graduate Student Researchers</th>
</tr>
</thead>
</table>
| • 3 graduate student researchers (GSRs) will be employed in year 1, and 1 GSR will be employed in year 2. All three will work 50% time during the academic year and 100% time in the summer. In year 1, the GSRs will assist with data coding, cleaning, reliability testing, and preparation of the database for data analysis; during the second year, the GSR will assist with data analysis and manuscript preparation.  
• **Graduate Student Researchers** *(4 FTE @ 7.5 calendar months effort each)*  
|   o We request support for graduate student researchers, who will work 50% time in the academic year and 100% time in the summer. The graduate students, anticipated from Dept. A, Dept. B, and the Dept. C will participate on interdisciplinary research teams, developing visualization tools, software frameworks, and their career skills. It is anticipated that several students will each be supported with these funds for an academic quarter at a time in order to maximize the project’s reach and broaden its impact. The remainder of the participating students’ effort will go toward complementary projects with independent funding, providing year-round support and a robust training program for all students.  
• **Graduate Student Researchers** – Two graduate students, one with programming expertise and the other with humanities and/or social science expertise, are allocated to the project to assist in development of the X application, maintenance of the prototype S module, testing of the platform and the module, and evaluation of the project as a pedagogical and research tool. |
### Personnel Costs

<table>
<thead>
<tr>
<th>Undergraduate Researchers</th>
<th>Fringe Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Undergraduate Student Researchers (500 hours per year)</strong></td>
<td><strong>Fringe Benefits</strong></td>
</tr>
<tr>
<td>o Funds are budgeted to allow undergraduate researchers from a variety of disciplines to fully participate in the project, including contributing to the specific visualization modules of the project, exploring cyberinfrastructure tools, and entering and manipulating data. Undergraduate researchers on the project will be strongly encouraged to present their work as a poster or talk at the UC Davis annual undergraduate research conference, which is modeled after professional research conferences.</td>
<td>o Fringe Benefits are calculated using the UC Davis composite rates developed by the UC Davis Costing and Policy office as required per institutional policy. Rates are applied by title code and fiscal year.</td>
</tr>
<tr>
<td></td>
<td>o Fringe benefits are calculated using UC Davis’s composite rates, which were developed under the requirements of OMB Uniform Guidance, and are applied by employee group and fiscal year.</td>
</tr>
<tr>
<td></td>
<td><strong>Fringe Benefits</strong> - Fringe benefits are budgeted at UC Davis’ federally negotiated rates, which are applied by fiscal year and title code.</td>
</tr>
</tbody>
</table>
Travel

- Travel funds for domestic travel in the amount of $9,500 per year are requested for travel to Center workshops, clinics, pilot courses, meetings at collaborating intuitions, meetings with industrial and other partners, and engineering education technical meetings.

- External Advisory Board Travel
  - $2,000 per year will allow the external advisory board to meet in person for planning, decision making, and advising.

- **Domestic Travel** – $6000 ($1500 per person) is budgeted to allow the principal investigators and two ATS/MediaWorks consultants to attend the two-day conference in Chicago to showcase the work they have accomplished through the period of funding.

- **Domestic - Administrative**
  - Name of staff – 2 trips per year from Davis to Name of location to coordinate with Technical Advisor and Director; airfare @ $600, hotel @ $300/day for 5 days = $1500, per diem at $50/day for 5 days = $250, ground transportation @ $50/day for 5 days = $250; 2 trips @ $2,600 = $5,200/yr; (total of 5 years $5,200/yr = $26,000).

- **Objective Team Meetings**
  - An annual 3-day meeting will be scheduled to coordinate and plan activities for each of the 5 objectives. Five participants from key partner institutions will travel to UC Davis or Name of location for each of the 5 yearly meetings. Objective Team meetings will be scheduled to coincide with other senior management meetings as a cost efficiency. Cost per meeting includes airfare @ $600, hotel @ $200/day for 3 days = $600, per diem at $50/day for 3 days = $150, ground transportation @ $50/day for 3 days = $150; 5 trips/meeting @ $1,500 = $7,500; 5 meetings/yr @ $7,500 = $37,500/yr (total of 5 years $37,500/yr = $187,500).
## Travel

<table>
<thead>
<tr>
<th>Foreign Travel</th>
<th>• International – Administrative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o  <strong>Name of staff</strong> – 4 foreign trips per year from Davis to 4 surveillance hotspot regions in name of countries to conduct site visits and coordination/facilitation with country coordinators and partners; as a cost efficiency one of these trips will correspond to the Annual Meeting each year; airfare @ $2,500, hotel @ $150/day for 10 days = $1500, per diem at $50/day for 10 days = $500, ground transportation @ $50/day for 10 days = $500; 4 trips @ $5,000 = $20,000/yr; (5 years @ $20,000/yr = $100,000)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conferences</th>
<th>• <strong>Professional Conferences</strong> – Funds in the amount of $1,500 per domestic trip and $3,000 per international trip are requested to enable the principal investigator to attend 4 related professional conferences in year 1, and 2 in year 2, to disseminate the results of the study. Planned conferences are as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o American Sociological Association, Denver, Colorado, August 2012</td>
</tr>
<tr>
<td></td>
<td>o American Psychological Association, Orlando, Florida, August 2012</td>
</tr>
<tr>
<td></td>
<td>o International Sociological Association, Research Committee on Social Stratification (RC28), Hong Kong, May 2012</td>
</tr>
<tr>
<td></td>
<td>o Association for the Study of Higher Education, Las Vegas, Nevada, November, 2012</td>
</tr>
<tr>
<td></td>
<td>o American Sociological Association, New York City, New York, August 2013</td>
</tr>
<tr>
<td></td>
<td>o American Psychological Association, Honolulu, Hawai`i, August 2013</td>
</tr>
</tbody>
</table>
### Materials and Supplies

<table>
<thead>
<tr>
<th>Computer/Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>• In year 1, $1,145 is requested to purchase a Stata/SE license with PDF documentation, which will be used to conduct the statistical analysis necessary for completion of the study. $650 is also requested in year 1 to purchase NVivo, a qualitative data analysis program that will be used for the coding and qualitative analysis of the content of the evaluation reports. Both licenses will remain valid for the 2 years of the project.</td>
</tr>
<tr>
<td>• Software Licenses - We have budgeted funds to cover the costs of the licensing fees associated with the necessary software programs for the module.</td>
</tr>
<tr>
<td>• Materials and Supplies</td>
</tr>
<tr>
<td>o Computer Supplies – $1,500 is budgeted to cover the costs of necessary computer supplies, such as back-up media, peripherals, and supporting applications.</td>
</tr>
<tr>
<td>o Servers – $4,000 is budgeted for the purchase of three servers for hosting, distributing and maintaining the x platform and related software, data, and materials.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Laboratory Supplies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Laboratory supplies are requested for evaluating and validating diagnostic tests used for wildlife surveillance (PCR reagents @ $100/sample x 3000 samples = 30,000/yr; 5 year total = $150,000)</td>
</tr>
</tbody>
</table>

### Other Costs

<table>
<thead>
<tr>
<th>ATS/MediaWorks Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Funds in the amount of $22,000 have been budgeted to cover the recharge fees of ATS/MediaWorks programmers and instructional designers. Their recharge rate is $77.50 an hour and we have estimated our use at 284 hours.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduate Student Tuition and Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Graduate student tuition and fees are budgeted for the GSR employed on the project per UC Davis’ policy. Amounts are based on current rates in year 1 with projected rates in years 2 through 5.</td>
</tr>
</tbody>
</table>

### Indirect Costs

<table>
<thead>
<tr>
<th>Indirect Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Indirect costs are budgeted at UC Davis’ federally negotiated rates for on-campus research, which are applied on a Modified Total Direct Cost Basis (MTDC.)</td>
</tr>
</tbody>
</table>
Appendix

New Proposal Checklist


The questions posed in this list are general and can be applied in most situations.
Calendar Examples

Calendar Year (CY) 18
January 1, 2018 – December 31, 2018

Calendar Year (CY) 19
January 1, 2019 – December 31, 2019

Calendar Year (CY) 20
January 1, 2020 – December 31, 2020

Fiscal Year (FY) 18
July 1, 2018 – June 30, 2019

Fiscal Year (FY) 19
July 1, 2019 – June 30, 2020

Academic Year (AY) 2018-19
Fall Qtr. (Sept.-Dec.) Winter Qtr. (Jan.-Mar.) Spring Qtr. (Mar.-Jun.)

Academic Year (AY) 2019-20
Fall Qtr. (Sept.-Dec.) Winter Qtr. (Jan.-Mar.) Spring Qtr. (Mar.-Jun.)

Summer
Partial June, July, August, Partial September
Useful Website Links

- Accounting & Financial Services site has additional information on calculating effort: http://afs.ucdavis.edu/systems/effort-commitment-system/scenarios.html
- Composite Benefit Rate schedule: http://afs.ucdavis.edu/our_services/costing-policy-e-analysis/composite-benefit-rates/
- Federal Demonstration Partnership (FDP): http://sites.nationalacademies.org/PGA/fdp/index.htm
- Office of Management and Budget Circulars: https://www.whitehouse.gov/omb/circulars/
- Sponsored Programs Administration and Research Kiosk (SPARK): http://spark.ucdavis.edu/
- Sponsored Programs Budget Development: http://research.ucdavis.edu/proposals-grants-contracts/spo/spo-proposal/budget/
- Sponsored Programs – Research Administration Training: http://research.ucdavis.edu/proposals-grants-contracts/spo/spo-training/
- UC Davis Accounting and Financial Services Effort Commitment and Cost Share Tracking: http://afs.ucdavis.edu/systems/effort-commitment-system/effort-commitment-defined.html
- UC Davis Staff Salary Scales: http://www.hr.ucdavis.edu/Salaries