

UC ANR

Guidelines to Research Compliance for Principal Investigators

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Introduction

The administration of extramurally funded projects is an increasingly complex endeavor. In addition to being responsible for leading the research and public service missions that are core to the University and ANR, principal investigators also have ultimate responsibility for compliance with award terms and conditions, federal, state, and local regulations, and University policies directly related to their projects.

This document provides an overview of these policies and regulations. It is intended as a supplement to—not a substitute for—the services provided by the ANR Office of Contracts and Grants (OCG), the ANR Business Operations Center (BOC) or your unit business manager, campus Extramural Funds Accounting Offices, and other ANR and campus offices charged with supporting ANR academics.

Herein you will find:

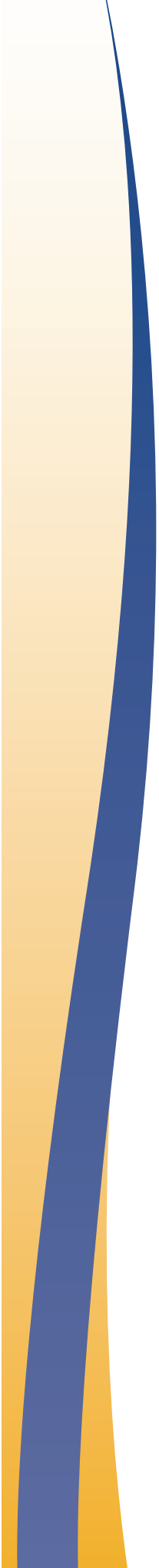
- Information relating to the most frequently asked questions about award administration
- Key points highlighting significant compliance requirements
- Contact information for the units that may assist you with the finer points of award administration and compliance
- Policy references and links to relevant policies

Our goal is to provide principal investigators with valuable resources so that they may better understand contract and grant administration and successfully administer sponsored awards.

The overall structure of this document is based on that of a similar set of guidelines developed at UC Davis, but we have worked to incorporate major modifications and additions that allow it to address conditions that are unique to the ANR systemwide applied research environment. The ANR team responsible for its preparation wishes to thank everyone who has contributed to this effort for their contributions and assistance in making this a practical, thorough, and useful guide.

Acronyms and Abbreviations

ANR	Agriculture and Natural Resources
AREERA	Agricultural Research, Extension, and Education Reform Act
BOC	Business Operations Center
BUA	Biological Use Authorization
CDFA	California Department of Food and Agriculture
CHP	Chemical Hygiene Plan
CITI	Collaborative Institutional Training Initiative
CLEB	Committee for Laboratory and Environmental Biosafety
Co-PI	Co-Principal Investigator
CPHS	Committee for Protection of Human Subjects
CUPA	Certified Unified Program Agency
EH&S	Environmental Health and Safety
F&A	Facilities and Administrative (<i>also known as</i> Indirect Cost)
GAAP	Generally accepted accounting principles
GTS	Grants Tracking System
IACUC	Institutional Animal Care and Use Committee
IBC	Institutional Biosafety Committee
IIPP	Injury and Illness Prevention Program
IRB	Institutional Review Board
NIH	National Institutes of Health
NUD	Non-University differential
OCG	Office of Contracts and Grants
OMB	Federal Office of Management and Budget
PD	Project Director
PI	Principal Investigator
REC	Research and Extension Center
TDC	Total direct cost
UC	University of California
UCOP	University of California – Office of the President



USDA United States Department of Agriculture
VP ANR Vice President – Agriculture and Natural Resources

Glossary

Allocable costs	Allocable costs are those <i>allowable costs</i> that actually benefit the grant or contract activities to which they are being assigned. In effect, allocable costs is another term for direct costs, since indirect costs, by definition, are excluded from allocable costs.
Allowable costs	Those categories of costs that are allowable as a charge on a grant or contract, as determined by the terms and conditions of the award and/or appropriate cost principles. Certain types of costs, such as the cost of alcoholic beverages, are not allowable and may not be charged to a contract or grant.
Animal care use protocol	A protocol that ensures the humane care and use of animals in research studies according to the guidelines set forth in the U.S. Public Health Service (PHS) policy.
Award	An award is an agreement between a sponsor and the University for support of research, scholarly, or professional training, or for support of public service programs related to research or to scholarly or professional training.
Award number	The unique identifying number assigned by the sponsoring agency (or by the campus OCG in the absence of a sponsor-assigned award number) to the contract, grant, or cooperative agreement award document.
Award period end date	The date the award ends. The project period for grants is for administrative planning purposes only. It imposes no legal obligation by the government to require performance or provide funding beyond the current budget period and provides no legal rights to the grantee beyond the current budget period.
Award period start date	The date that a new, renewal, or supplemental agreement award becomes effective. The term <i>effective</i> , for reporting purposes, means the calendar date recognized by the award as the beginning for performance and incidence of costs.
Budget	A financial plan that estimates the costs of conducting future activities. The budget is intended to express the program objectives and how they will be carried out in terms of resources required.
Budget adjustment	The act of amending the budget by moving funds from one category or line item to another

Budget periods	The intervals of time into which a multiple-year project period is divided for budgetary/funding purposes.
Certified effort	That effort shown on an effort report that has been certified by the employee performing the work or by a person with firsthand knowledge of the work performed. The purpose of the certification is to confirm that the work charged to a sponsored project was actually performed.
Certifier	A certifier is someone who has firsthand knowledge of work performed on specific projects and who certifies the effort reports attesting to the fact that the work has been performed. For academic or professorial titles and professional or high-level staff, the employee usually certifies his or her own report. Effort reports for nonprofessional employees are usually certified by the Principal Investigator or by the employee's direct supervisor.
Close out	The act of completing all internal procedures and sponsor requirements to terminate or complete a research project.
Committed cost sharing	Cost sharing that is specifically pledged in the proposal budget or award. Committed cost sharing can include mandatory cost sharing (cost sharing required by a particular funding agency) as well as voluntary committed cost sharing. Voluntary committed cost sharing is cost sharing that was not required by the agency but was volunteered by the Principal Investigator (University) and quantified in the proposal.
Continuation project (non-competing)	Applicable to grants and cooperative agreements only. Refers to a project approved for multiple-year funding, although funds typically are committed for only one year at a time. At the end of the initial budget period, progress on the project is assessed. If satisfactory, an award is made for the next budget period, subject to the availability of funds. Continuation projects do not compete with new project proposals and are not subjected to peer review beyond the initial project approval.
Contract	An agreement between two or more entities that creates an obligation to do (or not do) a particular thing one is otherwise entitled to do (or not do). To be legally enforceable, a contract must have subject, consideration, and competent party.
Cooperative agreement	A federal assistance agreement; distinguished from grants on the basis of the level of federal involvement. If the federal government is substantially involved in programmatic work under the award, the assistance arrangement is a cooperative agreement.

Conflict of interest	A situation in which an investigator's outside financial interest(s) or obligation(s), whether real or perceived, have the potential to bias a research project or to cause harm to human subjects participating in a research project. Investigators are subject to University of California systemwide policies as well as specific State of California law and federal regulations.
Co-Principal Investigators	Key personnel who have responsibilities similar to those of a PI on a project. While the PI has ultimate responsibility for the conduct of the project, the Co-PI is also obligated to ensure that the project is conducted in compliance with applicable laws and regulations as well as University policy governing the conduct of extramural projects.
Cost principles	A set of principles that provide guidance on how to determine whether charges to a federal award are allowable, allocable, and reasonable. They also provide guidance on how to develop indirect cost rates.
Cost sharing	All contributions, including cash and in-kind contributions, that a recipient makes to an award. If the award is federal, only acceptable nonfederal costs qualify as cost sharing and must conform to other provisions, including the requirements that they be necessary and reasonable to accomplish the program objectives, allowable under cost principles, verifiable to records, and auditable.
Direct costs	Those costs that can be identified specifically with a particular sponsored project or an instructional or institutional activity or with the provision of a particular good or service, and that can be directly assigned to the activity relatively easily with a high degree of accuracy.
Effort	Effort is the portion of time spent on a particular activity, expressed as a percentage of the individual's total activity for the institution.
Effort commitment	The portion of time committed to a particular activity, expressed as a percentage of the individual's total activity for the institution. An effort commitment is that effort that is committed or promised prior to or at the start of the project.
Effort reporting system	A system used to certify to federal granting agencies that the effort required as a condition of an award has actually been completed. Effort reporting is required by Federal OMB Circular A-21, which requires certification of effort spent by employees whose salaries are charged directly to federal funds and federal flow-through funds, as well as for reporting committed cost sharing.

Equipment	Generally, equipment is classified as any freestanding item having an acquisition value of \$5,000 or more and a normal life expectancy of one year or longer. <i>Compare with Supply.</i>
Expiration date	The date signifying the end of the performance period for a project.
Extension	An additional period of time given by the sponsor to an organization for the completion of work on an approved grant or contract. An extension allows previously allocated funds to be spent after the original expiration date.
Extramural funds	Funds that are not regularly budgeted but rather are received under grants, donations, or contracts from sources (private, state, federal, etc.) outside the University.
Facilities and Administrative (F&A) costs	See Indirect costs.
Financial interest	Any financial investment in a business entity in which you, your spouse or registered domestic partner, or your dependent children have a direct, indirect, or beneficial interest totaling \$2,000 or more. Reportable investments include stocks, bonds, warrants, and options, including those held in margin or brokerage accounts.
Generally accepted accounting principles (GAAP)	Uniform minimum standards of and guidelines to financial accounting and reporting. Currently, the Financial Accounting Standards Board (FASB), the Governmental Accounting Standards Board (GASB), and the Federal Accounting Standards Advisory are authorized to establish these principles. The UC system complies with GASB.
Grant	A federal assistance award authorized by federal law to support programs that the government wishes to encourage and that accomplishes a public purpose.
Indirect costs	<p>The costs of conducting business that are incurred for common or joint objectives and therefore cannot be identified readily and specifically with particular projects (such as individual grants or contracts) or with a specific activity (such as instruction, research, or public service). For purposes of charging federal grants, UC negotiates Facilities and Administrative (F&A) cost rates with the U.S. Department of Health and Human Services.</p> <p>There are two negotiated rates:</p> <ul style="list-style-type: none"> • The Off-Campus F&A Rate is applied to sponsored projects conducted at facilities not owned or leased by the university.

- The On-Campus F&A Rate is applied to sponsored projects when the project is conducted on a campus.

For a recharge activity, indirect costs are collected from non-University clients through assessment of the non-University differential (NUD).

Institutional Review Board (IRB)

The Institutional Review Board (IRB) is an administrative body established to protect the rights and welfare of human subjects in projects conducted under the auspices of the University of California. The IRB has the authority to approve, require modifications in, or disapprove all project activities that fall within its jurisdiction.

Mandatory cost sharing

That portion of the total project costs of a sponsored agreement borne by the University and required by the sponsor as a condition of obtaining an award.

Modified total direct costs

A subset of direct costs, used to calculate indirect costs. Consists of direct costs for salaries and wages, fringe benefits, materials and supplies, services, travel, and subgrants and subcontracts up the first \$25,000 of each subgrant and subcontract (regardless of the period covered by the subgrant or subcontract). Equipment capital expenditures, charges for patient care and tuition remission, rental costs, scholarships, and fellowships, as well as the portion of each subgrant and subcontract in excess of \$25,000, are excluded from modified total direct costs.

No-cost time extension

An extension of the period of performance beyond the expiration date to allow the Principal Investigator to finish a project. No additional funds are provided.

Non-University differential (NUD)

A percentage surcharge assessed to a non-University client, in addition to the recharge rate. NUD is UC's mechanism for recovering the indirect (or overhead) costs for a recharge activity from non-University clients.

Notice of grant award

The legally binding document that serves as a notification to the recipient and to others that a grant or cooperative agreement has been made. It contains or references all terms of the award and it documents the obligation of funds.

Office of Management and Budget (OMB)

The primary missions of the federal OMB are to assist the President of the United States in overseeing the preparation of the federal budget and to supervise its administration in Executive Branch agencies. In helping to formulate the President's spending plans, OMB evaluates the effectiveness of agency programs, policies, and procedures, assesses competing funding demands among agencies, and sets funding priorities. OMB ensures that agency reports, rules,

testimony, and proposed legislation are consistent with the President's Budget and with Administration policies.

In addition, OMB oversees and coordinates the Administration's procurement, financial management, information, and regulatory policies. In each of these areas, OMB's roles are to help improve administrative management, to develop better performance measures and coordinating mechanisms, and to reduce any unnecessary burdens on the public.

OMB Circular A-21	An official document that defines direct and indirect costs for purposes of accounting for federal funds. See www.whitehouse.gov/omb/circulars_a021_2004 .
OMB Circulars	Regulatory circulars issued by the federal Office of Management and Budget.
Participating campus	A campus that assists in carrying out the scope of work awarded to the prime campus. Each participating campus is responsible, on its respective campus and for its portion of the project, to carry out contract and grant administration policies and responsibilities that are assigned or delegated by the prime campus.
Prime campus	The campus submitting the overall multiple-campus proposal to and receiving an award from a sponsor. The prime campus is responsible for carrying out all contract and grant administration policies and responsibilities as presented in the Contract and Grant Manual (ucop.edu/raohome/cgmanual).
Principal Investigator	The Principal Investigator (PI) is the individual designated as head of a research project. To be eligible to serve as a PI, the individual must be an academic appointee. More information about eligibility (section 1–500) and responsibilities (section 10–330) can be found in the UCOP Contract and Grant Manual (ucop.edu/raohome/cgmanual).
Project period	The total time for which support of a project has been programmatically approved. A project period may consist of one or more budget periods.
Proposal	An application for funding that contains all information necessary to describe project plans, staff capabilities, and funds requested. Formal proposals are officially approved and submitted by an organization in the name of a Principal Investigator.
Rebudgeting	The act of amending the budget by moving funds from one category or line item to another.

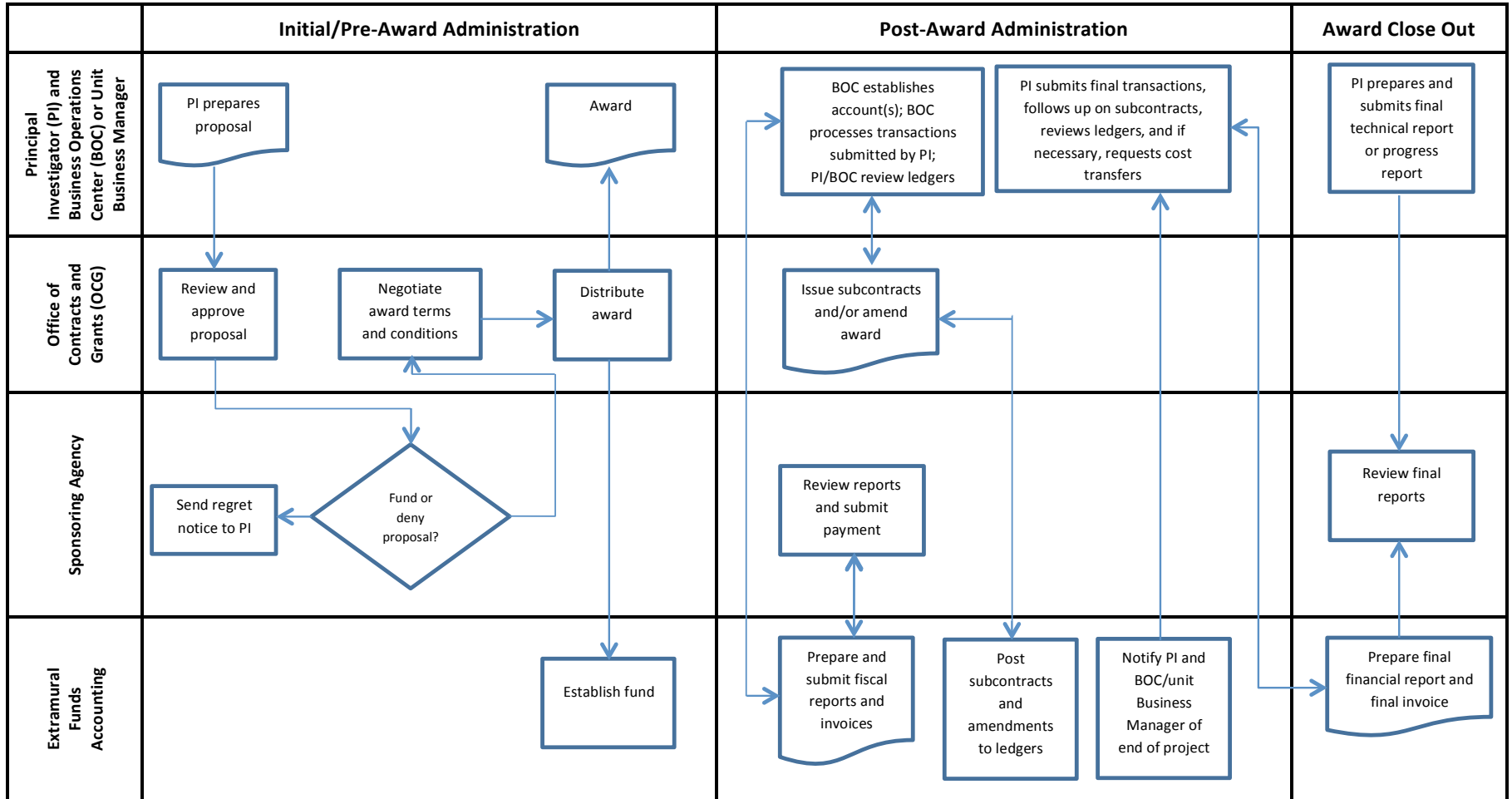
Sponsor	The organization or entity that funds a research project.
Sponsored projects	Projects that are funded by outside sources as the result of a proposal and award. The term commonly refers to projects funded by the various federal agencies.
Subaward/subcontract	A collaborative subaward is written under the authority of and is consistent with the terms and conditions of an award (a grant, contract, or cooperative agreement) and transfers a portion of the research or substantive effort of the prime award to another institution or organization. These agreements, commonly referred to as subcontracts, can be in the form of a subgrant, subcontract, or subagreement.
Supply	Generally, a supply item is classified as one that is expendable and that has an acquisition value of less than \$5,000 and a normal life expectancy of less than a year. <i>Compare with Equipment.</i>
Terms of award	All legal requirements imposed on an agreement by the sponsor, whether by statute, regulation(s), or terms in the award document. The terms of an agreement may include both standard and special provisions that are considered necessary to protect the sponsor interests.
Total cost	The sum of the direct cost plus the F&A costs (also referred to as indirect costs) of a project.
Total direct cost (TDC)	The sum of all direct costs of a project.
Voluntary uncommitted cost sharing	All effort over and above that which is committed and budgeted for in a sponsored agreement.

Roles and Responsibilities

Different offices are responsible for various phases of the extramural funding process. This table defines key proposal and award roles and responsibilities.

Administrative	Fiscal	Technical
Principal Investigator (PI) and Project Staff		
<ul style="list-style-type: none"> • Develop complete, timely proposals. • Prepare all required reports and submit them to sponsors. • Understand sponsors' terms and conditions and University policies and procedures that relate to sponsored project administration. 	<ul style="list-style-type: none"> • Manage and control project funds, including subcontractor funds, to ensure compliance with award terms and conditions and University policy. • Authorize expenses. • When applicable, certify personnel effort and approve cost-share reports. • Review ledgers monthly to ensure that only allowable costs are recorded and that project expenditures are within budgetary constraints. 	<ul style="list-style-type: none"> • Ensure scientific integrity and manage projects. • Manage subcontractor progress. • Ensure that deliverables and scope of work requirements are met.
PI, Business Operations Center (BOC), or Unit Business Manager (when available)		
<ul style="list-style-type: none"> • Assist with development of proposals. • Prepare administrative reports for submission to sponsors. • Facilitate hiring of personnel and notify Human Resources of changes in FTE. • When applicable, track equipment. • When applicable, prepare final equipment inventory and submit it to OCG. 	<ul style="list-style-type: none"> • Establish expenditure account(s) for the award. • Process financial and budget transactions. • Keep PI informed of the financial status of the award and assist in administration of the award. • Provide the PI with business and accounting expertise. • Monitor effort commitments and Effort Report certifications. • Assist with close out of account(s). 	
Campus Extramural Funds Accounting		
<ul style="list-style-type: none"> • Establish awards in the financial system. • Approve project expenditure accounts and ensure that reporting attributes are accurate. 	<ul style="list-style-type: none"> • Prepare financial reports throughout the life of the project. • Prepare invoices and letter-of-credit drawdowns and perform collection activities. • Coordinate effort reporting process. • Perform post-audit reviews of financial transactions. • Coordinate financial close out of the award. 	
Office of Contracts and Grants (OCG)		
<ul style="list-style-type: none"> • Advise PIs and administrative support staff on budget preparation and the calculation of Facilities and Administrative Costs (F&A costs, also referred to as indirect costs). • Review proposal budgets, ensuring compliance with University and sponsor policies. • Collect internal approvals and Conflict of Interest disclosure forms. • Review and approve proposals. • If federal funds are involved, submit proposals on behalf of the institution. • Negotiate awards and accept them on behalf of The Regents. • Initiate and distribute subawards to project collaborators. • As required, approve and submit post-award requests for prior approval to sponsors. • Monitor contract and grant close out. 	<ul style="list-style-type: none"> • Distribute awards to appropriate administrative offices, such as BOC, Research and Extension Centers, Controller/Business Services, Environmental Health and Safety, and Extramural Funds Accounting. • Review and approve requests to establish an advance account. 	

Pre- and Post-Award Flowchart



Solicitation of Extramural Funding

At the University of California all awards must be made to The Regents of the University of California, not to Cooperative Extension offices, Research and Extension Centers, Statewide Programs, schools, colleges, or 4-H Councils. No proposal seeking funding for extramural support for research, training, or public service programs or projects may be made in the name of the University without prior approval of The Regents or an authorized officer of the University. At the UC Division of Agriculture and Natural Resources (ANR), the Vice President–Agriculture and Natural Resources (VP ANR) has delegated such authority, within the limits set forth by The Regents, to the director and staff within the Office of Contracts and Grants (OCG).

Proposals for extramural support must be submitted through the OCG via the ANR Grant Tracking System (GTS). This ensures that all extramurally funded projects conducted either by University employees or with the use of University resources or facilities have proper signature authority and comply with relevant University policies and guidelines. UC has put this policy in place to protect both the University and its academic employees.

The OCG assists Cooperative Extension, Research and Extension Centers, and Statewide Programs in their efforts to secure extramural funding and promotes proper stewardship of those funds. When processing a proposal and the resulting award, the OCG reviews all documents to ensure that projects comply with relevant University policies and guidelines. OCG staff members are available to assist with questions relating to University policy and proposal preparation.

Key Points

Extramural awards are made to The Regents of the University of California.

University policy requires that proposals be submitted through an authorized UC contracts and grants office. At ANR, this is the Office of Contracts and Grants (OCG).

Proposals are submitted via the ANR Grant Tracking System (GTS), which can be accessed from the ANR Portal.

Whom to Contact

ANR Office of Contracts and Grants (OCG)

- ucanr.org/contracts&grants

Additional Information

ANR Administrative Handbook, Section 264 – Contracts and Grants for Research, Training, and Public Service Projects

- ucanr.org/ahsection264

Policy on the Requirement to Submit Proposals and to Receive Awards for Grants and Contracts through the University (systemwide policy)

- ucanr.org/raomemo95-01

Eligibility to Serve as Principal Investigator

At ANR, the individual responsible for the design, scientific conduct, administrative conduct, and reporting of a research, training, or public service project supported by extramural funding is known as the Principal Investigator (PI), and in some cases as the Project Director (PD). The PI must personally participate in the project to a significant degree. A person may not be designated as PI unless he or she is actually making a significant contribution to the sponsored project or research.

The eligibility criteria to serve as a PI are different for UC campus faculty than for ANR academics.

For ANR county and statewide program-based academics, the VP ANR has determined that individuals appointed to the following job titles are eligible to be designated PI on a project:

- Cooperative Extension Advisor series
- Director, Research and Extension Center
- Director, Statewide Program

Retirees in these job titles who are granted emeriti status by the VP ANR retain the PI eligibility that they held prior to their retirement.

With the approval of the VP ANR, individual exceptions to the PI eligibility policy may be permitted. Such exceptions must be endorsed by the individual's director. Exceptions are approved on a case-by-case basis, and most are valid only for a specific project or for a limited period of time

To be eligible to hold the designation of PI on a project, a campus faculty member must work at least 50 percent of full-time in any combination of the following six appointments:

- Member of the Academic Senate
- Appointee in the Agronomist series
- Appointee in the Adjunct Professor series
- Appointee in the Clinical Professor series
- Appointee in the Professional Researcher series
- Appointee in the Cooperative Extension Specialist series

The same eligibility requirements apply to individuals seeking to lead a portion of a project as a Co-Principal Investigator.

Key Points

At ANR the terms “Principal Investigator” and “PI” (and sometimes “Project Director” and “PD”) designate the individual responsible for a project supported by extramural funding.

The PI must personally participate in the project to a significant degree.

Eligibility to serve as a PI is limited to certain appointments.

Exceptions to PI eligibility requirements must be endorsed by a director and approved by the Vice President–Agriculture and Natural Resources.

Whom to Contact

Questions about PI eligibility and exceptions may be directed to Director, Office of Contracts and Grants

Additional Information

ANR Administrative Handbook, Section 264 – Contracts and Grants for Research, Training, and Public Service Projects

- ucanr.org/ahsection264

Conflict of Interest

A conflict of interest is a situation in which the conduct of research could be compromised, or appear to be compromised, by a related financial interest on the part of the PI or Co-PIs. “Financial interest” is defined as any personal benefit of significant monetary value, including, but not limited to

- Salary or other payments received for services
- Equity interests, such as stocks, stock options, or other ownership interests
- Intellectual property rights, such as patents, copyrights, and royalties from such rights, other than royalties received through the University
- Appointment to a position as an officer, director, agent, or employee of a business entity

Rules regarding conflict of interest apply to all investigators (PI and otherwise) on the project as well as to their spouses, domestic partners, and dependent children.

On projects sponsored by private-sector organizations, any financial interest in the sponsor that occurred within 12 months prior to the date of the funding offer or during the project timeframe constitutes a potential conflict of interest.

University policy prohibits academics, staff, managers, or officials from engaging in any activities that create a conflict of interest between official University activities and any personal interest or obligation.

Because conflicts of interest can arise in the course of an individual’s interactions outside the University, the presence of an actual, apparent, or perceived conflict of interest does not automatically constitute wrongdoing. However, any potential conflicts of interest must be disclosed and managed, and the University has a formal procedure for doing so in compliance with federal and state regulations. It requires that investigators

- Disclose their financial interests and the interests of their spouse/domestic partner and dependent children on the appropriate disclosure form(s)
- Provide updates as the amount and nature of financial interest changes during the period of performance of

Key Points

PIs and Co-PIs may not have or appear to have any personal financial interest in a research project.

ANR academics, staff, managers, or officials shall not engage in any activities where there is a conflict of interest between their official University duties and any other interest or obligation.

This policy applies to investigators and to their spouses, domestic partners, and dependent children.

Any potential conflict of interest must be disclosed.

Any association of the UC or ANR name, image, brand, or logo with commercial interests in the public eye may lead to a conflict of interest.

Whom to Contact

Questions about conflict of interest may be directed to:

Director of the ANR Office of Contracts and Grants

ANR Director of Administrative Policies and Business Contracts

Additional Information

Office of the President Ethics, Compliance, and Audits:

- www.ucop.edu/audit

supported research. This policy is intended to protect investigators, their sponsored research and other educational and professional activities in which they are engaged, and the University.

Human subjects and conflict of interest

Research involving human subjects poses special concern with regard to conflict of interest. For example, the research may involve drugs, equipment, materials, or methods in which the investigators, their domestic partner, or their dependent children have a financial interest. Such interests may appear to compromise the rights and well being of the research subjects as well as the integrity of the related research, and therefore must be disclosed. For this reason, potential conflicts of interest in research with human subjects are subject to particularly careful scrutiny. Disclosure of conflicts of interest related to research including human subjects is included in the Institutional Review Board procedures for each campus, accessible online (ucanr.org/humansubject).

Use of the University or ANR name, image, brand, and logo

Association of the University of California or ANR name, image, brand, or logo with commercial interests may lead to a conflict of interest. For example, in the course of consulting or research, ANR academics may provide professional evaluations of products or services, but care must be taken to avoid identifying the University with the academics' opinions or conclusions in any public or private reports that may support their own outside financial interests. Academics must also avoid implying an endorsement on the part of the University or ANR.

Cost Principles

ANR and its Principal Investigators are jointly responsible for the stewardship of extramural funds in compliance with federal cost principles established by the federal Office of Management and Budget (OMB). These principles are described in OMB Circular A-21 and incorporated into University policies and procedures for administering research awards.

Adherence to all cost principles is required for proper and appropriate accounting for the expenses of conducting extramurally funded activities at ANR. The consequences of failing to comply with costing principles may range from disallowance of specific incurred costs by the sponsor, to termination of the award, to federal sanctions, depending on the particular cost and circumstances in question.

Allowable costs

The key concept of the cost principles is “allowability.” For a cost to be allowable on a specific sponsored award, it must be

- *Reasonable.* It is necessary for the performance of the project and is within what a “prudent person” would pay for the particular goods or services obtained.
- *Allocable.* The project that pays the cost is the project that benefits from it. Expenses shared across multiple projects benefit all projects proportionately (when benefit can be clearly allocated) or reasonably (when proportionate value cannot be readily determined due to the interrelationship of the work involved).
- *Consistently treated.* The University consistently designates that type of cost as either direct or indirect when incurred for the same purpose in like circumstances.

Additionally, the cost must not be explicitly excluded by OMB Circular A-21 or the terms or conditions of the award. Some expenses that may directly benefit a project may still be prohibited by the award sponsor and therefore not allowable on the award.

Key Points

All personnel, including PIs and department heads, who are responsible for initiating or approving financial transactions on University accounts shall be familiar with University cost principles, particularly the concept of allowable costs.

Allowable costs must be:

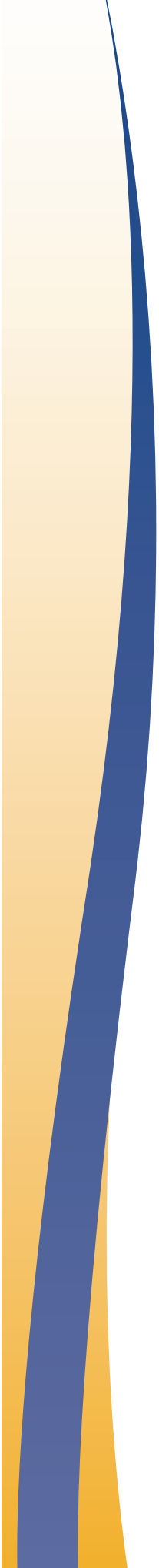
- Reasonable
- Allocable
- Consistently treated
- Not explicitly excluded by OMB Circular A-21 (Federal Cost Principles for Educational Institutions) or the terms and conditions of the award

The consequences of noncompliance with cost principles may include disallowance of specific incurred costs, termination of the award, or federal sanction. These consequences can also affect ANR and the University as a whole.

Additional Information

ANR Administrative Handbook:
Section 202 – Memberships in Organizations
• ucanr.org/ahsection202
Section 291 – Guidelines for Recharge and Income Activities
• ucanr.org/ahsection291

Business and Finance Bulletins:
A-47, University Direct Costing Procedures (systemwide policy)
• ucanr.org/ucopbf-b-a47
G-28, Policy and Regulations Governing Travel
• ucanr.org/ucopbf-b-g28
BUS-29, Management and Control of University Equipment
• ucanr.org/ucopbf-b-bus29
BUS-79, Expenditures for Entertainment, Business Meetings, and Other Occasions
• ucanr.org/ucopbf-b-bus79



Charging Practices for Federally
Funded Grants and Contacts

- ucanr.org/chpractices

Federal Cost Principles for
Educational Institutions
(OMB Circular A-21)

- [www.whitehouse.gov/
omb/circulars_a021_2004](http://www.whitehouse.gov/omb/circulars_a021_2004)

UCOP Contract and Grant
Manual, Chapter 6, Financial –
General (systemwide policy)

- ucanr.org/ucopcg-chap6

Cost Sharing

Cost sharing is the portion of the project expenses provided (“matched”) by the University and not paid by the sponsoring agency. Shared costs are typically direct costs of the project and are paid from ANR funds as a cash match or are provided by a third party as an in-kind match in support of the project.

If cost sharing is mandatory, this will be listed as a condition of the award in the request for proposals issued by the awarding agency. Cost sharing should only be offered by the University if it is a condition of receiving the award.

The cost-shared amount must be disclosed to the sponsor in the proposal. This constitutes a promise that the University will provide funds in support of the project and will not charge the sponsor for those costs. Once an award is made, the cost sharing offered to the sponsor and documented in the proposal documents becomes a binding commitment. Failure to fulfill the cost sharing obligation at the proposed level may result in reduction of the amount of the sponsor’s award.

Per federal regulations, costs eligible for cost sharing must be

- Readily verifiable in the University’s records and documented in writing, if provided by a third party
- Necessary and reasonable for the proper and efficient accomplishment of project or program objectives
- Allowable under applicable cost principles
- Not paid by another federal award, except as authorized by statute
- Provided for in the approved budget when required by the federal awarding agency
- Incurred within the performance period of the award

Tracking, reporting, and certifying cost sharing

The PI, unit Business Manager, BOC, and Extramural Funds Accounting staff share responsibility for tracking, reporting, and certifying cost-shared direct costs. At ANR, tracking and certification is facilitated by the Cost Share Tracking system.

Key Points

The PI is responsible for providing the resources for cost sharing of direct costs and the BOC or unit Business Manager assists with tracking and appropriate reporting of the costs.

Whom to Contact

Questions regarding cost sharing should be addressed to:

Business Operations Center or
your unit Business Manager
Office of Contracts and Grants
Extramural Funds Accounting

Additional Information

UCOP Contract and Grant Manual, Chapter 5

- ucanr.org/ucopecg-chap5

Federal Cost Principles for Educational Institutions (OMB Circular A-21)

- www.whitehouse.gov/omb/circulars_a021_2004

At the time of proposal:

The PI prepares a cost share pledge by

- Clearly documenting cost sharing in the proposal budget or budget justification
- Leaving any discussion of cost sharing out of any other proposal text
- Obtaining signed documentation from each funding source that has promised to contribute
 - If the contribution is from the University, a signed letter from a unit head is acceptable.
 - If the contribution is from a third party, the letter of commitment must be on the contributor's letterhead.
- Submitting all signed documentation with the proposal package to OCG

After the award:

The BOC or unit Business Manager is responsible for recording and tracking cost share expenses. The PI is responsible for reviewing and certifying cost share reports to ensure that all cost share contributions are captured correctly and that all cost sharing obligations are met in a timely manner.

It is important to notify OCG immediately if there is any possibility that a cost sharing commitment will not be fulfilled. This includes situations in which a PI transfers to another institution during the performance period of a project, because the sponsor may hold ANR responsible for fulfilling all, or a proportionate share, of any cost sharing commitment associated with the project.

The PI and/or the BOC or unit Business Manager must submit cost share contribution reports, signed by the PI, to Extramural Funds Accounting for submission to the sponsor in accordance with the reporting terms defined in the award agreement.

Award Terms and Conditions

It is critical that the PI review and understand the contract or grant requirements and restrictions of each specific award. If any of the award terms are unclear, it is the PI's responsibility to contact the OCG for clarification and guidance. If the terms of an individual award are more strict than federal guidelines and University policy, the terms of the award take precedence. For example, travel expenses are allowable under federal and University policy, but may be specifically excluded or limited by your specific award.

Some important terms and conditions to be considered when managing an award include the following (*not meant to be all-inclusive*):

Budget

The PI prepares a project budget and justification for the project. The budget must be in accordance with allowable costing principles and must include the appropriate indirect costs (also known as Facilities and Administrative [F&A] costs) rate. As the project progresses, the project budget should be compared on a regular basis to actual expenditures. Standard university budget categories are

- Salaries/wages
- Benefits
- Supplies and other expenses
- Travel
- Equipment (as defined by University policy)
- Subawards
- Indirect costs

Before rebudgeting the project, the PI should consult the terms and conditions of the award to determine whether prior approval is required. Rebudgeting can result in a change in the scope of work and therefore require pre-approval from the sponsoring agency. Requests to the sponsor for prior approval to rebudget should be submitted through the OCG.

Key Points

The PI is responsible for adhering to the agency expectations as detailed in the award terms and conditions.

The PI should review every award for specific restrictions such as those pertaining to rebudgeting and unallowable expenses.

Requests to the sponsor for prior approval to rebudget should be submitted through OCG.

Whom to Contact

Questions about award terms and conditions:
Office of Contracts and Grants

Questions about budgeting or rebudgeting:
Business Operations Center or your unit Business Manager

Additional Information

Federal Cost Principles for Educational Institutions (OMB Circular A-21)

- www.whitehouse.gov/omb/circulars_a021_2004

UCOP Contract and Grant Manual, Chapter 2

- ucanr.org/ucopcpg-chap2

Performance period

In order to be allowable, expenses must be incurred during the performance period set forth in the terms and conditions of the award. Expenses incurred after the end of the performance period are not allowable. If the PI believes he or she will not be able to complete a project by the end date of the project period, he or she should submit a request for a no-cost extension to the sponsor, through the OCG. The award agreement may indicate a specific timeframe for submission of the request for a no-cost extension, and the PI must meet any such timeline or the request may be denied on that basis.

Other project modifications

The following are examples of project modifications that may require prior sponsor approval:

- Change in PI or other key personnel
- Transfer of PI to another institution
- Change in scope of work or project work plan
- Out-of-state or foreign travel
- Purchase of equipment not initially requested and approved in budget
- Carry-forward of remaining funds to subsequent budget period

Any requests for prior sponsor approval should be submitted through the OCG.

Spending before an award is fully executed

Spending prior to notification of a fully executed award is generally discouraged. However, there are situations where funding is delayed and the project is ready to commence. If a delay in funding is anticipated, an advance expenditure authorization may be requested. Requests to establish an advance account must be submitted through the BOC or your unit Business Manager for approval. The PI and his or her director must guarantee that if the proposal is not awarded all pre-award expenses will be funded by the unit or other discretionary funds. Once these approvals have been obtained, the request will be forwarded to OCG for review and approval.

Program income earned as a result of an extramural award

If it is anticipated that the program will realize income as part of a project proposed for federal funding, this expectation should be disclosed in the project proposal. Program income is defined as gross income earned by an award recipient that is directly generated by a supported activity or earned as a result of the award. Examples of program income include fees from services performed or registration fees for conferences sponsored by an award. All program income and related expenses on a federally funded project must be reported to the agency along with the award financial activity, through the OCG.

Project reporting

The PI should read the award terms and conditions closely to determine what technical or programmatic reports, report deadlines, report format, and method of submission are required. Award close out and final reporting are also discussed in this document, under *Project Reports*.

Administrative Costs

Salaries and wages of administrative and clerical staff should generally be treated as indirect costs (also known as F&A costs) and included in departmental administration. Directly charging such costs to a contract or grant may be appropriate when the project requires an extensive amount of administrative or an amount of clerical support significantly greater than what is routinely provided by the administrative unit. The costs must be attributable to the project and the circumstances must be justified in the project proposal to the satisfaction of the awarding agency.

The following types of administrative and clerical activities are considered indirect. They should not be charged to sponsored projects because they cannot easily be directly identified with specific projects

- Administration and support services that span multiple administrative unit activities
- Contracts and grants analysis
- Personnel functions
- Accounting and budgeting functions
- Routine travel planning
- Processing and tracking of routine purchase orders

The development and preparation of proposals, including typing, data entry, photocopying, scanning, and mailing, are also indirect costs and should not be included as part of the direct project costs.

If a sponsored project meets the criteria of a major project, as defined by the federal government, charging administrative expenses to the project may be allowable with sponsor approval. Such administrative expenses must be specifically identified in the proposal budget and supported by a written justification as to how the expense is above and beyond what normally would be provided as administrative support to the project.

Key Points

Salaries and wages of administrative and clerical staff should generally be treated as indirect costs and included in the departmental administration budget.

Charging administrative expenses to major projects may be allowable with sponsor approval. Such expenses must be identified in the proposal budget and supported by a written justification.

Whom to Contact

PI's unit Business Manager
Office of Contracts and Grants
Business Operations Center

Additional Information

UCOP Contract and Grant Manual, Chapter 7, Budget and Expenditures (systemwide policy)

- ucanr.org/ucopcg-chap7sal

Charging Practices for Federally Funded Grants and Contacts 2009 (UC Davis policy)

- ucanr.org/chpractices

Federal Cost Principles for Educational Institutions (OMB Circular A-21)

- www.whitehouse.gov/omb/circulars_a021_2004

Expense Categories to Watch

The following expense categories are frequently misunderstood. These costs are scrutinized by federal agencies, and great care must be taken to ensure that, when directly charged to a sponsored project, such costs directly benefit the project. **Before approving any expenses in the following categories, check University policy and the terms and conditions of the award to ensure that the expenses are allowable.**

Proposal preparation costs

Costs of preparing proposals and applications for acquiring sponsored funding, including copying, mailing, long distance telephone charges, etc., are not allowable.

Equipment

Equipment is defined by the federal government and the University as tangible, nonexpendable property having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit (including tax, shipping, and installation). However, when the terms of an award set a lower dollar threshold for equipment—\$1,000, for example—the PI's administrative unit must track it as if it fell under the University's definition of equipment. (See UCOP Management and Control of University Equipment Policy, Business and Finance Bulletin BUS-29, ucanr.org/ucopbfb-bus29.)

Important information to consider before purchasing equipment on a sponsored project:

- If a piece of purchased equipment will benefit more than one sponsored agreement or activity, the cost must be allocated to the various projects and activities proportionally based on the benefit directly received by each.
- Budgeted equipment is generally purchased at the beginning of a project unless the scope of work is such that the equipment is essential during a later period of performance. If the equipment purchase is to be made within 120 days of the award end date, a justification must

Additional Information

Business and Finance Bulletin:
G-28, Policy and Regulations
Governing Travel

- ucanr.org/ucopbfb-g28
BUS-29, Management and
Control of University
Equipment

- ucanr.org/ucopbfb-bus29
BUS-79, Expenditures for
Entertainment, Business
Meetings, and Other Occasions
- ucanr.org/ucopbfb-bus79

ANR Administrative Handbook
Section 202, Memberships in
Organizations

- ucanr.org/ahsection202
Section 291, Recharge and
Income Activities
- ucanr.org/ahsection291

Federal Cost Principles for
Educational Institutions
(OMB Circular A-21)

- [www.whitehouse.gov/
omb/circulars_a021_2004](http://www.whitehouse.gov/omb/circulars_a021_2004)

be submitted to the BOC or unit Business Manager for coordination, review, and approval by the OCG prior to purchase.

- Maintenance and repair costs to keep project-specific equipment—whether pre-existing or purchased with project funds—in operating condition are allowable within the timeframe of the project’s performance period. As with equipment purchases, if the maintenance agreement or repair cost benefits more than one sponsored agreement or activity, the cost must be allocated to the various projects and activities proportionally based on the benefit directly received by each.

Food

- Food (meals and refreshments) is generally not allowable as a charge to a sponsored project unless specifically identified in the proposal budget and approved by the sponsoring agency (e.g., meals for a meeting).
- Meal costs incurred during the course of travel generally are allowable.
- Food purchased for demonstrations or approved activities may be allowable if specifically identified in the proposal budget and approved by the sponsoring agency. The rules for allowability and unallowability of food expenses are included in UCOP UC Business and Finance Bulletin BUS-79, Expenditures for Entertainment, Business Meetings, and Other Occasions (ucanr.org/ucopbfb-bus79).

Administrative salaries and expenses

Unless the project meets the definition of a “major project” per federal guidelines, general administrative salaries and expenses must be treated as indirect costs and not charged to the project. For more information regarding “major projects,” please see OMB Circular A-21 (www.whitehouse.gov/omb/circulars_a021_2004).

Travel

Before charging travel to an extramural project, PIs and their administrative staff should review all relevant travel policies—sponsor, program, federal, University, and ANR—and follow the most restrictive policy, noting any special requirements such as pre-trip approval. (See UC Business and Finance

Bulletin G-28, Policy and Regulations Governing Travel, ucanr.org/ucopfb-g28.)

Memberships and subscriptions

Memberships and subscriptions are normally considered to be indirect costs because their benefit to research and academic endeavors generally cannot be specifically assigned to individual awards. If memberships are required for attendance at a professional technical meeting related to the funded project, the membership cost may be allowable, provided it was specifically budgeted and justified in the project proposal. See ANR Administrative Handbook Section 202 (ucanr.org/ahsection202).

Office supplies, telecommunication charges, postage, and printing charges

Office supplies, postage and mailing costs, printing costs, and local telephone line charges (including cell phones) are normally treated as indirect costs. Costs that are specifically identifiable with a project may be directly charged.

General-purpose computers, software, and computer supplies

General-purpose computers, office software, and computer supplies are normally considered indirect costs.

Recharge activities and service centers

Costs of approved University rate and recharge activities and service centers are allowable as direct costs to a sponsored project where such costs are required under the scope of the project. All usage must be accounted for and services must be charged to all users based on actual usage, using uniform, nondiscriminatory rates. The rates must be based on the direct costs of providing the services. Rates must be approved within University policies and appropriately revised based upon review of the actual direct expenses and charges to users. Charging a fixed percentage or fee to all sponsored projects for a particular service (e.g., programmer time) is not allowable. See ANR Administrative Handbook Section 291, Guidelines for Recharge and Income Activities (ucanr.org/ahsection291).

Cost Transfers

A cost transfer is the movement of an expense from one account to another. This may be necessary to correct an error, to move or split costs into accounts that did not exist when the original transaction was made, or for other reasons associated with a unit's financial operation. Transfers should be the exception, not the rule. Cost transfers must meet the guidelines for allowability, allocability, reasonableness and consistency. More stringent criteria apply when cost transfers are to be deemed allowable on federally funded projects.

With the knowledge and approval of the PI, cost transfers may be initiated by the BOC or by your unit Business Manager. All cost transfers on federally funded projects must meet the following conditions:

- *Timely.* The transfer must be recorded in the general ledger within 120 days from the close of the month in which the original charge is posted to the ledger.
- *Fully explained and justified.* The reason why the original charge was incorrect must be documented, as must the reason why the charge is allowable and allocable to the new account.
- *Fully documented.* The transfer transaction must contain a reference to the invoice, payroll, or other disbursement document(s) that were the basis of the original direct charge.

A high number of cost transfers can imply that financial transactions are not being properly reviewed and recorded when originally incurred. For this reason, cost transfers are closely scrutinized by auditors to determine the reason for the correction and the allowability of the charge to the project.

Initiating a cost transfer

Once an expense has been recorded, it is appropriate to initiate a cost transfer only for the following purposes:

- To correct an erroneous recording.
- To record a change in the original decisions made as to the use of goods or services.

Key Points

Cost transfers should be rare exceptions, not regular occurrences.

Cost transfers must meet the rules for allowability for the account to which they are being transferred.

Cost transfers are closely scrutinized by auditors.

Cost transfers must be approved by the PI, recorded in a timely manner, and fully justified and documented.

Whom to Contact

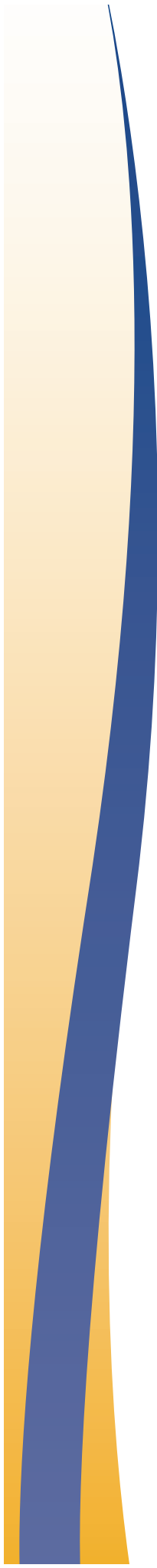
Questions regarding cost transfers should be addressed to Business Operations Center or your unit Business Manager
Extramural Funds Accounting

Additional Information

Business and Finance Bulletin A-47, University Direct Costing Procedures (systemwide policy)
• ucanr.org/ucopbfb-a47

UCOP Contract and Grant Manual, Chapter 7, Budget and Expenditures (systemwide policy)
• ucanr.org/ucopcg-chap7sal

UC Davis Policy and Procedure Manual, Chapter 330-63, Expenditure Adjustments (Cost Transfers)
• ucanr.org/expendadjpolicy

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- To redistribute certain high-volume, low-value charges that may benefit several projects under the jurisdiction of the unit.
 - To redistribute payroll costs based on the after-the-fact verification of effort reported through the University's Effort Reporting System.

Effort Reporting

Effort reporting is the documentation of time spent by any employee working on a federally funded project. Effort reports demonstrate that the amount charged or cost-shared on an extramural award is accurate. Effort is reported for all employees whose salaries are charged directly to federal funds and federal flow-through funds. In cases where cost sharing applies—whether mandatory or voluntary—ANR is required to track the cost-shared effort and certify that commitments to the project have been satisfied.

As directed by the VP ANR, PIs and Co-PIs are required to commit a minimum of 1% effort for federally funded awards up to \$25,000 and a minimum of 2% effort for awards of \$25,000 or more. This policy applies to projects with flow-through as well as direct federal funding. PIs should also ascertain whether the sponsor requires a minimum level of effort that may be in excess of the minimum specified by ANR policy.

Any effort over and above what was originally specified in the project proposal need not be tracked, reported, or certified.

Effort reports show the percentage of time an individual spends on a funded project. Therefore, an effort report must account for all of an individual's total institutional activities and the combined effort must always add up to 100 percent, regardless of the number of hours assigned to the funded project.

Certifying effort

An effort report must be certified for each employee whose salary (or any portion thereof) is charged to a federally sponsored award and for each employee who has cost sharing commitments on the project.

PIs and others in academic and management classifications who are paid on federal or federal flow-through funds are required to certify their own effort. Effort for other employees must be certified by the PI or by some other responsible official. The certifier must have firsthand knowledge of the

Key Points

Effort reporting is required on federally funded projects.

ANR must track and certify cost-shared effort.

Those who certify effort must have firsthand knowledge of the work performed and the amount of effort expended on the project.

Whom to Contact

Questions regarding cost sharing may be directed to

Business Operations Center or
your unit Business Manager

Office of Contracts and Grants
Extramural Funds Accounting

Additional Information

Federal Cost Principles for
Educational Institutions
(OMB Circular A-21)

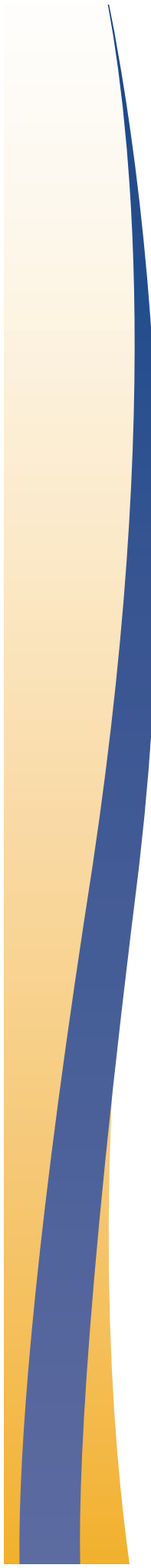
- www.whitehouse.gov/omb/circulars_a021_2004

UCOP Contract and Grant
Manual, Chapter 7, Budget and
Expenditures (systemwide
policy)

- ucanr.org/ucopecg-chap7sal

Charging Practices for Federally
Funded Grants and Contacts
2009 (UC Davis policy)

- ucanr.org/chpractices



work performed and the amount of effort expended on that project.

For ANR employees paid through the UC Davis payroll system, general effort reporting and certification is conducted annually. At UC Berkeley and UC Riverside, effort reporting and certification for federally funded employees is conducted quarterly. The annual effort reporting period aligns with the federal fiscal year, October 1 through September 30. Effort reports are issued on or around November 15 (approximately 45 days after the end of the reporting period). The deadline for certifying effort reports falls on or around January 28 (within 120 days of the end of the reporting period). In conjunction with the annual effort reporting and certification, PIs are required to review expenditures monthly on their federally funded accounts.

In addition to the general effort reporting, the Agricultural Research, Extension, and Education Reform Act (AREERA) requires a quarterly confirmation of effort expended, which is conducted outside the UC Davis annual reporting and certification process. This quarterly confirmation of effort expended is initiated by ANR Financial Services.

Developing and Monitoring Subrecipient Relationships

As the recipient of a prime award, ANR may collaborate with other entities, known as subrecipients, who carry out a portion of the project's scope of work. Subrecipients can receive funding in the form of a subaward drawn from the prime award.

Before developing a proposal, the PI should discuss any necessary outside providers with the OCG. It is important to determine at the proposal stage whether the relationship with the outside provider will be considered a subaward or a procurement transaction with a vendor.

If the relationship is appropriately characterized as a subrecipient relationship, the subawards will be processed by the OCG. Only the first \$25,000 of a subaward expense to a non-University entity is subject to the ANR F&A charge. F&A charges are not assessed by the prime campus for expenses budgeted or incurred by other UC campuses. However, the F&A rate of the participating campus should be included as part of the budget for that campus. For example, in a collaboration between campuses, ANR recovers indirect costs on the direct cost expenditures made by ANR and each collaborating campus recovers indirect costs on the direct cost expenditures made by that campus.

Requests to issue a subaward to project collaborators, along with the agreed-upon scope of work and budget, should be submitted to the OCG. OCG initiates and issues all subawards for extramurally funded projects on behalf of the University. Any contracts made with vendors to obtain services in support of the project are requisitioned through the appropriate BOC or through your unit Business Manager and are initiated and issued by your campus purchasing department.

Subrecipient entities must comply with all terms and conditions of the prime award. The PI is responsible for monitoring the subrecipient for compliance with award terms

Key Points

Subrecipients are entities that participate in carrying out a portion of the project and receive funding as a subaward drawn from the prime award.

Before submitting a proposal, determine whether the relationship with an outside provider qualifies as a subaward or a procurement transaction with a vendor.

The terms and conditions governing the relationship will differ depending on whether the provider is a subaward recipient or a vendor.

The PI is responsible for monitoring the performance of the subrecipient.

Only the first \$25,000 of a subaward expense is subject to the ANR F&A charge.

Whom to Contact

Questions regarding effort reporting may be directed to
Business Operations Center
Your unit Business Manager
Office of Contracts and Grants
Extramural Funds Accounting

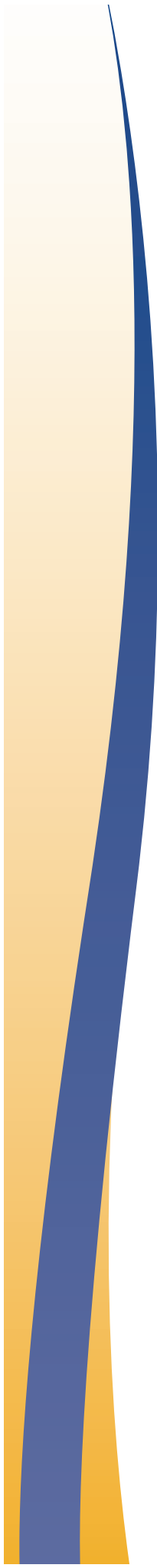
Additional Information

UCOP Contract and Grant Manual, Chapter 7, Budget and Expenditures (systemwide policy)

- ucanr.org/ucopcg-chap7

Federal Cost Principles for Educational Institutions (OMB Circular A-21)

- www.whitehouse.gov/omb/circulars_a021_2004



and conditions and for satisfactory performance of the subrecipient, including the completeness and acceptability of work performed, reasonableness of expenditures, and fulfillment of cost sharing commitments.

Subawards are monitored using one of the following mechanisms or a combination thereof:

- *Reporting.* Review of financial and performance reports submitted by the subrecipient
- *Contact.* Regular contact with subrecipients about program activities and progress
- *Invoice review.* Invoices must be approved by the PI prior to processing for payment by the BOC or your unit Business Manager

If the PI has questions regarding changes in the subrecipient relationship or changes in the project scope of work, he or she should contact the OCG for assistance.

Project Reports

The PI is responsible for submitting all required interim and final technical or project reports to the awarding agency or sponsor. Report content requirements are spelled out in the award terms and conditions, and may include

- Identification information (including project title, grant or contract number, PI contact information, period of performance [including authorized extensions])
- Significant results of the project
- Project difficulties and solutions
- List of publications resulting from the project, including articles in progress
- A discussion of “milestones” and “deliverables”

The OCG monitors compliance with all final contract and grant reporting requirements. For federally sponsored projects, required reports generally include the following:

Final technical or project report

The PI is responsible for submitting the required final technical or project report to the sponsoring agency. Evidence that the report was submitted should be provided to the OCG (i.e., transmittal letter or e-mail).

Final financial report

The campus Extramural Funds Accounting Office prepares and submits the final financial report to the sponsoring agency as required by the award terms and conditions.

Final invention report

The PI submits final invention reports to the OCG, which submits final invention reports to sponsors. The report describes any new technology developed with support from the award, whether or not it has been disclosed to the Office of the President Office of Technology Transfer.

Final equipment inventory report

If required by the award terms and conditions, contact the BOC or your unit Business Manager for guidance or assistance with preparation of an equipment inventory report, which will be submitted by OCG to the sponsoring agency.

Key Points

Complete and accurate reporting per the reporting schedule associated with each award is the responsibility of the PI.

Sponsors can and do suspend funding in cases in which progress reports or final reports are not submitted in a timely fashion.

Check with the sponsor for report formatting requirements and deadlines.

Additional Information

Federal Cost Principles for Educational Institutions (OMB Circular A-21)

- www.whitehouse.gov/omb/circulars_a021_2004

Quarantined and Regulated Pests

Projects and activities associated with exotic pests (including insects, pathogens, plants, etc.) often require a permit from the California Department of Food and Agriculture (CDFA) and/or U.S. Department of Agriculture (USDA). Import of pests, soil, or certain plant materials from out of state or out of country also requires a permit from CDFA and/or USDA.

- When propagating, raising, or transporting plant pests that are subject to quarantine, use Pest Exclusion Form 66-045, Application and Permit to Move and Use Plant Quarantine Commodities (www.cdfa.ca.gov/plant/docs/form_66-045_fill-in.pdf).
- When moving or using plant pests across county lines within the state, use Pest Exclusion Form 66-026, Application and Permit to Move and Use Live Plant Pests or Insects or Noxious Weeds (www.cdfa.ca.gov/plant/docs/form66026_p1.pdf).
- When importing plant pests, soil, or plant materials from outside the state, there are various USDA forms to use depending on type of pest or quarantine status. See the USDA website (www.aphis.usda.gov/plant_health/permits/)

Read all permit conditions and procedures carefully and follow permit requirements. Distribute permit copies among all collaborators and staff working on the project and provide training to ensure they are aware of and adhere to permit requirements. If permit requirements do not match project protocols or if the project changes, work with the permitting agency to revise the permit.

Training

ANR requires training for PIs and staff working on projects that involve quarantined or regulated pests (including insects, pathogens, plants, etc.). This training can be completed online at ucanr.org/plantpesttraining.

Key Points

Projects that involve the collection, transport, propagation, or raising of pests that are subject to quarantine or other regulation may require a state or federal permit.

When a permit is required, the PI must follow protocols, maintain records, and train project staff in accordance with the permit.

Whom to Contact

ANR Risk and Safety Director
Phone: (530) 752-6024
Fax: (530) 752-2196

Additional Information

ANR Plant Pest Regulations and Permits

- ucanr.org/plantpest

Safety Note #146, Quarantined and Regulated Pest Permit Requirements

- ucanr.org/pestpermit

California Department of Food and Agriculture, Pest Exclusion Branch

- www.cdfa.ca.gov/phpps/pe/

Chemical and Pesticide Safety

All projects involving the use of hazardous chemicals in a laboratory setting require

- Proper reporting of the chemical and pesticide inventory
- Proper labeling, storage, and disposal methods
- A written Chemical Hygiene Plan that includes standard operating procedures
- Staff training

All projects involving the application of pesticides in a greenhouse or outdoor/field setting require

- Proper reporting of pesticide use to the local Agricultural Commissioner
- Maintenance of a chemical and pesticide inventory
- Proper labeling, storage, and disposal methods
- Staff training

Additional requirements for the use of recognized chemical carcinogens also apply as appropriate.

All personnel working with chemicals or pesticides in a laboratory should receive training on the following subjects:

- *Laboratory safety.* Review Safety Notes #127 and #140 and/or Training Videos E-029 and E-075.
- *Hazardous waste management.* Review Safety Note #056 and/or Project Leader Guideline for Laboratory Accumulation of Hazardous Waste.

Additional training must be provided for the specific chemicals, equipment, and processes used in the laboratory. Additional ANR Laboratory Safety training resources can be found online (ucanr.org/labsafetrain).

Key Points

Chemicals and pesticides used in projects must be properly labeled, stored, and disposed of.

PIs must self-audit chemical and pesticide use and storage and must maintain an inventory record of chemicals and pesticides.

Whom to Contact

ANR Risk and Safety Director
Phone: (530) 752-6024
Fax: (530) 752-2196

ANR Policies and Procedures

Agriculture Worker Protection Program

- ucanr.org/agsafetystandard

Experimental use of Pesticides

- ucanr.org/expusepesticide

Pesticide Use and Handling

- ucanr.org/pestusehandling

Project Leader Guidelines for Laboratory Accumulation of Hazardous Waste

- ucanr.org/labhazwaste

Storage and Removal of Regulated Waste

- ucanr.org/wastestor

ANR Guidelines

Hazard Communication Program

- ucanr.org/hazcom

Respiratory Protection Manual

- ucanr.org/resppro

ANR Plans

Chemical Hygiene Plan

- ucanr.org/chemhyg

ANR Safety Notes

Pesticide Safety Notes

- ucanr.org/pestsafetynotes

Laboratory Safety Notes

- ucanr.org/labsafetynotes

California Pesticide Information Series

- www.cdpr.ca.gov/docs/whs/psisenglish.htm

Campus-based personnel may also use the following campus-specific training courses:

Berkeley	Davis	Riverside
<ul style="list-style-type: none"> • Laboratory Safety for New Laboratory Personnel • Hazardous Materials 	<ul style="list-style-type: none"> • Chemical and Laboratory Safety • Hazardous Waste Management and Minimization 	<ul style="list-style-type: none"> • Laboratory Safety Orientation • Hazardous Waste Management

The safety of projects often comes down to a matter of individual behavior. All required protective clothing and equipment must be utilized when working with chemicals, including pesticides. Utmost care should be given to understanding and following correct material handling and equipment operation procedures and a zero-tolerance policy for lapses in sound safety practice should be enforced. This is critical to the prevention of injury, illness, and fatalities.

PIs and others responsible for chemicals, pesticides, and hazardous waste are required to self-audit chemical and pesticide use and storage on an annual basis and to maintain an inventory record of chemicals and pesticides. This self-audit process is designed to verify regulatory compliance and enable county inspectors to audit compliance. Facilities that store or use chemicals or pesticides in amounts that exceed threshold quantities need to register with their local Environmental Health Department (or Certified Unified Program Agency [CUPA]). Failure to comply with applicable regulations could result in fines levied against the PI.

Fieldwork

Field projects and outdoor activities shall be planned in a way that incorporates measures and controls intended to reduce adverse exposure to a variety of natural hazards and conditions, including heat illness, cold stress, animals, plants, terrain, weather, water, and fire.

Heat illness planning is required for work that is scheduled to take place outdoors during the warm season and must include the development of a written Heat Illness Prevention Plan as shown in Appendix H of the Injury and Illness Prevention Program (IIPP) (ucanr.org/heatplan).

Planning for other natural hazards and conditions must include

- Identification of hazards
- Monitoring for severe weather conditions
- Use of appropriate personal protective equipment
- Establishment of controls to eliminate or reduce hazards
- The carrying of an emergency communication device
- Task-specific safety and health training

ANR Risk and Safety Services has developed a variety of resources to help PIs identify and mitigate the hazards associated with fieldwork (ucanr.org/pitraining_field).

Key Points

Fieldwork and outdoor activities must be planned to reduce adverse exposure to natural hazards and conditions.

A written Heat Illness Prevention Plan must be developed for warm-season outdoor work.

Whom to Contact

ANR Risk and Safety Director
Phone: (530) 752-6024
Fax: (530) 752-2196

ANR Guidelines

Fieldwork in Forested, Brush-Covered, Grassland, and Wetland Areas

- ucanr.org/fieldwork

ANR Plans

Injury and Illness Prevention Program, Appendix H

- ucanr.org/heatplan

ANR Safety Notes

- ucanr.org/outdoor

Projects Involving Vertebrate Animals

All projects, teaching, or testing that involves the use of vertebrate animals must be approved by a campus Institutional Animal Care and Use Committee (IACUC) before the activities are performed. Any significant changes to a project must be approved by the IACUC in advance of implementation. The IACUC can assist PIs in compliance with all applicable federal, state, local, and institutional regulations regarding animal care and use. An approved Animal Care and Use Protocol must be in place before the project can be initiated.

Prior to beginning a study that involves animals, you must

- Submit a protocol to an IACUC for approval
- Complete the campus-specific animal care training
- Participate in the campus-specific Occupational Health program, as required

Animal projects at Hopland and Sierra Foothill Research and Extension Centers require approval by the REC-specific Animal Research Committee.

Information regarding the separate campus (UC Berkeley, UC Davis, or UC Riverside) and REC committees, project review and approval processes, and training requirements is summarized online (ucanr.org/pitraining_animal).

Projects that encompass handling of or physical interaction with wild vertebrate animals, including amphibians, reptiles, fish, birds, and large and small mammals, require approval by a campus IACUC.

Key Points

ANR utilizes the IACUC of the UC Berkeley, UC Davis, and UC Riverside campuses.

An IACUC must review and approve all projects and teaching exercises that involve the use of vertebrate animals before project procedures are performed.

Training is required for most project personnel before human or animal projects can be conducted.

A table summarizing the project review and training requirements for the campuses and RECs is available at ucanr.org/pitraining_animal.

Whom to Contact

ANR Risk and Safety Director
Phone: (530) 752-6024
Fax: (530) 752-2196

Biosafety

A Biological Use Authorization (BUA) from a campus Institutional Biosafety Committee (IBC) is required for any project involving recombinant DNA or other biohazardous agents or materials. If the project includes animals, IACUC approval is also required, contingent on IBC approval.

Specific types of projects or operations that require a BUA include

- Projects involving recombinant DNA technology, except those that are exempt under NIH Guidelines (exemption requests are reviewed and authorized by the IBC)
- Work with biohazardous agents or materials that are pathogenic, infectious, or potentially infectious to plants, animals, or humans
 - Biohazardous agents include animals, plants, bacteria, viruses, Chlamydia, rickettsiae, parasitic/infectious protozoa, metazoan animal or human parasites, prions, certain toxins, and all viral vectors, in addition to other agents.
 - Biohazardous materials include cells, cell cultures, fluids, and tissues of animals or plants known or suspected to be infected with any microbial agent, parasite, or prion, and toxin-producing animals and plants maintained for the purpose of isolating or extracting toxins.
- Storage of biohazardous agents or materials that are not currently in use
- Class activities that entail potential exposure to biohazardous materials, such as laboratory exercises that involve the handling of pathogenic agents or the development of recombinant plants or animals
- Operation of core facilities where activities that involve biohazard exposure or regulated recombinant material take place, or where personnel may be exposed to biohazardous materials (clinical laboratory work is exempted, unless the laboratory is not covered under clinical laboratory quality assurance regulations)

Key Points

ANR utilizes the IBC of the UC Berkeley, UC Davis, and UC Riverside campuses.

A BUA from an IBC is required for any project or other work that involves recombinant DNA or other biohazardous agents or materials.

For projects that also involve human subjects, approval from an IRB is also required.

For projects that also involve vertebrate animals, IACUC approval is also required.

Approval of an IRB or IACUC is contingent upon the PI first obtaining a BUA.

Training is required before investigators or their staff may work with specific types of biohazards.

This information is only an overview of biosafety requirements. For detailed requirements and links to all relevant policy and guidelines for UC Berkeley, UC Davis, and UC Riverside campuses, go to ucanr.org/pitraining_biosafety.

Whom to Contact

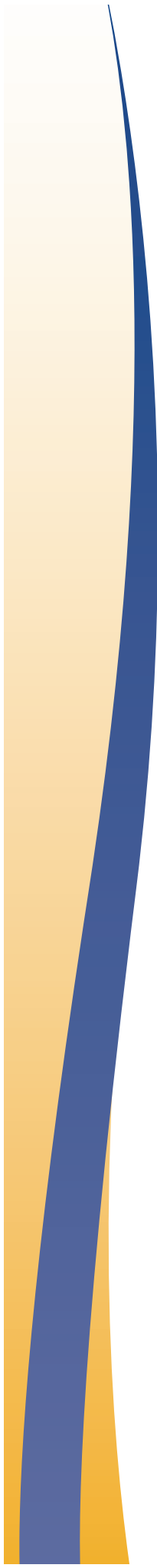
ANR Risk and Safety Director
Phone: (530) 752-6024
Fax: (530) 752-2196

NIH Guidelines

- oba.od.nih.gov/rdna/nih_guidelines_oba.html

Cal OSHA Bloodborne Pathogen Standard

- www.dir.ca.gov/title8/5193.html



Information regarding the separate campus (UC Berkeley, UC Davis, UC Riverside) committees, project review and approval processes, and training requirements are summarized online (ucanr.org/pitraining_biosafety).

The safety of projects often comes down to a matter of individual behavior. To avoid injury, illness, or fatalities, project participants must utilize all required protective clothing and equipment when working with biological agents. Utmost care should be given to understanding and following correct material handling and equipment operation procedures, and a zero-tolerance policy for lapses in sound safety practices should be enforced.

Projects Involving Human Subjects

UC has both legal and ethical obligations to ensure that human subjects used in projects are treated responsibly.

Projects involving humans

Federal regulations (Common Rule 45 CFR 46) and University policy require that a campus Institutional Review Board (IRB) review and approve all projects that involve human subjects before any human studies are begun. This includes projects related to the investigation of behavioral, sociological, and nutritional studies, as well as imaging, questionnaires, interviews, and other procedures.

All personnel, including ANR academics and staff, who participate in studies that involve human subjects must successfully complete an IRB training course. In addition, all studies approved by the IRB require continuing review. Failure to ensure that a project is reviewed and approved by the IRB in a timely manner will lead to the suspension of the project and of any grants related to the study.

Prior to beginning a study that involves human subjects,

- Apply to the IRB for review and approval. This requirement applies to all projects, even when federal regulations exempt certain research from full institutional board review.
- Complete the online Human Subjects Training Course approved by the IRB. This requirement applies to PIs, Co-PIs, student investigators, study coordinators, visiting scientists, consultants, laboratory technicians, and all assistants who will have direct contact with human subjects of research. Training must be renewed as determined by the IRB. The PI is responsible for ensuring project compliance with training requirements.

Information regarding the separate campus (UC Berkeley, UC Davis, and UC Riverside) IRBs, project review and approval processes, and training requirements is summarized online (ucanr.org/pitraining_human).

Key Points

ANR utilizes the IRBs of the UC Berkeley, UC Davis, and UC Riverside campuses.

An IRB must review and approve any project that involves human subjects before the project can commence, even if federal regulations permit certain projects to be exempt from full IRB review.

Training is required for most project personnel prior to the conducting of projects that involve human subjects. A table summarizing the project review and training requirements for the campuses and RECs is available online at ucanr.org/pitraining_human.

ANR Contact Information

Administrative Policies and Business Contracts

ucanr.org/adminpolicies
UC Office of the President
1111 Franklin Street, 10th Floor
Oakland, CA 94607
Phone: (510) 987-0103
Fax: (510) 987-0998

Business Operations Center

(Davis location)
ucanr.org/bocd
One Shields Avenue
Davis, CA 95616
Phone: (530) 754-0383
Fax: (530) 754-8540

Business Operations Center

(Kearney location)
ucanr.org/bock
9240 S. Riverbend Avenue
Parlier, CA 93648
Phone: (559) 646-6518
Fax: (559) 646-6513

Risk and Safety Services

ucanr.org/risk
Ag Field Station Building
One Shields Avenue
Davis, CA 95616
Phone: (530) 752-6024
Fax: (530) 752-2196

Financial Services

ucanr.org/financialservices
UC Office of the President
1111 Franklin Street, 10th Floor
Oakland, CA 94607
Phone: (510) 987-0704
Fax: (510) 587-6491

Office of Contracts and Grants

ucanr.org/contracts&grants
ANR Building
225 Hopkins Road
Davis, CA 95616
Phone: (530) 752-7875
Fax: (530) 754-3943

Office of the Controller and Business Services

ucanr.org/controller
UC Office of the President
1111 Franklin Street, 10th Floor
Oakland, CA 94607
Phone: (510) 987-0103
Fax: (510) 987-0998