

COMP 918: Research Administration for Scientists

Volume 2: Sponsored Research Agreement Types, Budgeting, FAR, and OMB Circulars A-21 and A-110

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These materials were prepared for the "Research Administration for Scientists" course by Timothy L. Quigg, Lecturer and Associate Chair for Administration, Finance and Entrepreneurship, Computer Science

Department, UNC-Chapel Hill. They are published in four volumes: Volume 1 - Research Funding, Grantsmanship, and Research Ethics, Volume 2 - Sponsored Research Agreement Types, Budgeting, FAR, and OMB Circulars A-21 and A-110, Volume 3 - Management in the Academic and Scientific Enterprise, and Volume 4 - Intellectual Property: Patents, Copyrights, Trademarks and Trade Secrets.

Tim created and taught this course each year from 2001-2013. More than 600 graduate students, post-docs, faculty and staff from over 40 UNC-Chapel Hill departments have taken the course, many for credit and many others as auditors. In 2009, the Computer Science Graduate Student Association honored Tim with the Excellence in Teaching Award for his work with this course!

COMP 918: Research Administration for Scientists

Grants, Cooperative Agreements,
Seven Contract Types and the
Federal Acquisition Regulation
(FAR)

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Federal Funds: Agreement Types

Note: All definitions and policies presented in this lecture apply to federally-funded projects only. Private funding agencies and industry sponsors often use these terms quite differently.

Three types of federal agreements

- Grants - Assistance awards.

The Endless Frontier: Vannevar Bush's final report enumerated two principles for expanding R&D at U.S. universities.

1. The Federal Government should be a patron of science.
2. Government support should ensure a free rein of investigation by scientists into topics and methods of their choice!

Grant - A legal instrument for transferring money, property, or services to the recipient in order to accomplish a public purpose of support or stimulation where there will be no substantial involvement between the federal agency and the recipient during performance.

31 U.S.C. 6304b

What does U.S.C.
mean?

Grant – A legal instrument for transferring money, property, or services to the recipient in order to accomplish a public purpose of support or stimulation where there will be **no substantial involvement** between the federal agency and the recipient during performance.

31 U.S.C. 6304b

In this case, authority comes from the Federal Grant and Cooperative Agreement Act of 1977!

United States Code
"The codification by subject matter of the general and permanent laws of the United States."

Don't confuse the
United States
Code (U.S.C.) with
the Code of
Federal Regulations
(C.F.R.).

United States Code

"The codification by
subject matter of the
general and permanent
laws of the United
States."

C.F.R codifies the
"permanent rules" of
the Government. The
U.S.C. is the law!

Code of Federal Regulations (C.F.R.)

"The codification of the
general and permanent
rules published in the
Federal Register by the
executive departments
and agencies of the
Federal Government."

Three types of federal agreements

- Grants - Assistance awards.
- Cooperative Agreements - Assistance awards, but with strings attached. Some have so many "strings", they look more like contracts than grants.

Cooperative Agreement - A legal instrument for transferring money, property or services to the recipient in order to accomplish a public purpose of support or stimulation where there will be substantial involvement between the federal agency and the recipient during performance.

31 U.S.C. 6305

Three types of federal agreements

- Grants - Assistance awards.
- Cooperative Agreements - Assistance awards, but with strings attached. Some have so many "strings", they look more like contracts than grants.
- Contracts - Procurement (purchasing) agreements.

Contract - An agreement, enforceable by law, between two or more competent parties, to do or not do something not prohibited by law, for a legal consideration.

What is an example of the Government contracting with an individual and paying them for not doing something?

Contract - An agreement, enforceable by law, between two or more competent parties, to do or not do something not prohibited by law, for a legal consideration.

Paying farmers to
not grow certain
crops!

Contract – A mutually binding legal relationship that obligates the seller to furnish supplies or services and the buyer to pay for them.

FAR 2.101

Let's examine each agreement type in more detail.

Grants - More Detail

- **Financial Assistance Award**
- **Broad Agency Announcements** (BAA) or Program Solicitation/Program Announcement

NIH (P01) sample follows!

Part I Overview Information

Part II Full Text of Announcement

Section I. Funding Opportunity Description

1. Research Objectives

Section II. Award Information

1. Mechanism(s) of Support
2. Funds Available

Section III. Eligibility Information

1. Eligible Applicants
 - A. Eligible Institutions
 - B. Eligible Individuals
2. Cost Sharing or Matching
3. Other - Special Eligibility Criteria

Section IV. Application and Submission Information

1. Address to Request Application Information
2. Content and Form of Application Submission
3. Submission Dates and Times
 - A. Submission, Review, and Anticipated Start Dates
 1. Letter of Intent
 - B. Sending an Application to the NIH
 - C. Application Processing
4. Intergovernmental Review
5. Funding Restrictions

Section V. Application Review Information

1. Criteria
2. Review and Selection Process
 - A. Additional Review Criteria
 - B. Additional Review Considerations
 - C. Sharing Research Data
 - D. Sharing Research Resources
3. Anticipated Announcement and Award Dates

Section VI. Award Administration Information

1. Award Notices
2. Administrative and National Policy Requirements
3. Reporting

Section VII. Agency Contact(s)

1. Scientific/Research Contact(s)
2. Peer Review Contact(s)

Part I Overview Information

Department of Health and Human Services

Participating Organizations

National Institutes of Health (NIH), (<http://www.nih.gov/>)

Components of Participating Organizations

National Institute of General Medical Sciences (NIGMS), (<http://www.nigms.nih.gov/>)

Title: Support of NIGMS Program Project Grants (P01)

Announcement Type

This is a reissue of [PA-01-116](#), which was previously released July 9, 2001.

Update: The following update relating to this announcement has been issued:

[September 17, 2007](#) - Expiration Date adjusted to accommodate recent changes to standing submission deadlines, per NOT-OD-07-093.

Looking Ahead: As part of the Department of Health and Human Services' implementation of e-Government, during FY 2006 the NIH will gradually transition each research grant mechanism to electronic submission through Grants.gov and the use of the SF 424 Research and Related (R&R) forms. Therefore, once the transition is made for a specific grant mechanism, investigators and institutions will be required to submit applications electronically using Grants.gov.. For more information and an initial timeline, see <http://era.nih.gov/ElectronicReceipt/>. NIH will announce each grant mechanism change in the NIH Guide to Grants and Contracts (<http://grants.nih.gov/grants/guide/index.html>). Specific funding opportunity announcements will also clearly indicate if Grants.gov submission and the use of the SF424 (R&R) is required. Investigators should consult the NIH Forms and Applications Web site (<http://grants.nih.gov/grants/forms.htm>) for the most current information when preparing a grant application.

Research Objectives

The program project mechanism is designed to support research in which the funding of several interdependent projects offers significant scientific advantages over support of these same projects as individual regular research grants. NIGMS supports research in the broad areas of Cell Biology and Biophysics; Genetics and Developmental Biology; Pharmacology, Physiology, and Biological Chemistry; and Bioinformatics and Computational Biology. Program project grants are investigator-initiated, but are restricted to areas of special interest to the individual divisions within NIGMS (see <http://www.nigms.nih.gov/About/overview> for scientific areas of interests). Potential applicants are strongly encouraged to contact the NIGMS program staff listed at the end of this announcement for guidance about the areas appropriate for program project grant applications and for the preparation of the application itself (see www.nigms.nih.gov/Research/Application/ProgProjFundPolicies.htm for policies related to NIGMS program project funding).

Successful program projects generally bring together scientists in diverse fields, who would not otherwise collaborate, to apply complementary approaches to work on an important well-defined problem. Since it is not unusual for principal investigators of individual research grants to share techniques, information, and methods, it is not sufficient that the projects are unified by a common theme. In this regard the burden of proof is on the principal investigator, and on each individual project leader, to demonstrate in the written application that the program would be much less effective if parceled out as a set of independent research grants. In addition, the program project can facilitate the support of essential shared core facilities, e.g., major equipment, although the need of a group of investigators for a major piece of equipment or a core facility does not in itself justify a program project grant. Administrative cores, except in special, well-justified circumstances, will not be allowed. Further, it is expected that successful program projects will establish effective collaborations, particularly in emerging areas of research, that extend beyond the life of the program project grant itself. Hence, a program project generally has a finite lifetime.

1. Mechanism(s) of Support

This funding opportunity will use the National Institutes of Health (NIH) P01 award mechanism. As an applicant, you will be solely responsible for planning, directing, and executing the proposed project.

This funding opportunity uses the just-in-time budget concepts. It also uses the non-modular budget format described in the PHS 398 application instructions (see <http://grants.nih.gov/grants/funding/phs398/phs398.html>). A detailed categorical budget for the "Initial Budget Period" and the "Entire Proposed Period of Support" is to be submitted with the application.

2. Funds Available

For applications seeking initial funding in FY2007, an upper limit of \$6.1 million direct costs (exclusive of sub-contractual facilities and administrative costs) for the entire five-year period may be requested. Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary. Although the financial plans of the IC(s) provide support for this program, awards pursuant to this funding opportunity are contingent upon the availability of funds and the receipt of a sufficient number of meritorious applications. Facilities and administrative costs requested by consortium participants are not included in the direct cost limitation, see [NOT-OD-05-004](#).

The total project period for an application submitted in response to this PA may not exceed five years. For applications seeking initial funding in FY2007, an upper limit of \$6.1 million direct costs (exclusive of subcontractual facilities and administrative costs) for the entire five-year period may be requested. Under certain circumstances, with the concurrence of NIGMS staff, additional funds may be requested and provided for major pieces of equipment. In compliance with NIH policy, a grant application that requests more than \$500,000 (direct costs) in any one year will not be accepted without prior approval from the Institute.

Grants: More Detail

- Financial Assistance Award
- Broad Agency Announcements (BAA) or Program Solicitation/Program Announcement.
- Made for stated purpose (defined in award; note the proposal is incorporated in the award by reference).
- Made for stated period of time (project period or period of performance).
- Made **to an organization** in the name of a Principal Investigator (PI).
- **No substantial programmatic involvement** by the awarding agency.
- Initial funding may be **annual, multi-year** or for **entire project period**.
- Performance standard - **best/reasonable effort**.
- **Minimum of limiting conditions.**

Cooperative Agreements: More Detail

In the 1970's, Congress was concerned with the perceived misuse of assistance agreements, i.e., using assistance agreements to circumvent competition and procurement rules. To address these problems, and to ensure uniform agency practices, Congress passed the **Federal Grant and Cooperative Agreement Act of 1977 - FGCAA**.

- The FGCAA established government-wide criteria for determining the appropriate legal instrument for use when funding an extramural activity.
- The FGCAA distinguished between acquisition (procurement/contracts) and assistance (grants and cooperative agreements), based on the principal purpose of the legal relationship between the parties.

Cooperative Agreements: More Detail

Benefit or Use Test:

- Is the Government the direct beneficiary or user of the activity?
- Is the Government providing the specifications for the project?
- Is the Government having the project completed based on its own identified needs?

If the principle purpose of the funded activity is to provide something for the direct benefit or use of the Federal Government, then a contract is the appropriate legal instrument to use.

Support or Stimulation Test:

- Is the applicant performing the project for its own purpose?
- Is the Government merely supporting the project with financial or other assistance?
- Is the benefit to the Government incidental, i.e., do the funded activities simply compliment an agency's mission?

If the purpose of the funded activity is to support or stimulate activities that are not for the direct benefit or use of the Federal Government, an assistance agreement (grant or cooperative agreement) may be used.

Cooperative Agreements: More Detail

Financial Assistance Awards as defined by the Federal Grant and Cooperative Agreement Act of 1977

- Similar to Grants - Principal purpose is to transfer money or something of value to recipient in order to accomplish a public purpose - this is **grant language**.
- Except - There is substantial programmatic involvement by the awarding agency - this is **cooperative agreement language**.

Agencies have substantial flexibility when defining the terms and conditions for their CAs, but they are required to issue, post and consistently apply these CA regulations.

Contracts: More Detail

- Mutually **binding legal relationship** that requires the seller to deliver certain specified goods or services (deliverables) in exchange for a certain specified consideration - usually money.
- Competition in Contracting Act of 1984 allowed for Broad Agency Announcements (BAA) to be used to solicit proposals **for basic and applied research when that part of the development is not related to the development of a specific system or hardware procurement**. The BAA is described in FAR 6.102, "Use of Competitive Procedures," and FAR 35.016, "Broad Agency Announcements."

Differences between a Competitive RFP and a BAA

(1) Type of Research and Development

RFP - Focuses on a specific system or hardware solution.

BAA - Focuses on scientific studies and experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding.

(2) Statement of Work

RFP - The Government drafts a common **Statement of Work** (SOW) to which all offerors propose.

BAA - The Government drafts a **Statement of the Problem** (or general research interest) to which offerors propose their own SOW and technical approach.

(3) Nature of the Competition

RFP - All proposals are supposed to do the same thing, i.e., address the common SOW. Therefore, they compete - one against another. Cost, price, or best value are often the deciding factors.

BAA - Each proposal presents a unique approach to solving the problem. The technical competition is in the "marketplace of ideas." Cost and/or price are rarely the deciding factors in determining the winning proposal(s).

Contracts: More Detail

- Mutually **binding legal relationship** that requires the seller to deliver certain specified goods or services (deliverables) in exchange for a certain specified consideration (usually money).
- Competition in Contracting Act of 1984 allowed for basic research proposals to use BAA; otherwise RFP or IFB.
- Terms are **detailed and specific**.
- **Activities largely determined by sponsor** (buyer).
- **Less latitude** to modify scope of work and line-item expenditures (usually requires CO approval).
- Funding is often **incremental**, tied to work components, and the final payment may be held till the CO “accepts” the deliverables.
- Process governed by the **FAR** (Federal Acquisition Regulation).

What
is the
FAR?

Federal Acquisition Regulation (FAR)

- The FAR is a system of uniform policies and procedures governing the acquisition and contracting activities of all federal executive agencies.
- Codified in Chapter 1 of Title 48 C.F.R.
- Statutory authority to issue and maintain the FAR resides with the Secretary of Defense, and the Administrators of the General Services Administration (GSA) and the National Aeronautics and Space Administration (NASA).
- Agencies may publish FAR supplements, e.g., DFARS.
- The federal courts in *Davies Precision Machining Inc. v. U.S.* held that the FAR and its supplements have the "effect of law."

Since the FAR is implemented in the C.F.R., it is part of the "permanent rules" of the government!

The original purpose of the FAR was to consolidate the numerous (sometimes contradictory) individual agency regulations into one comprehensive set of standards which applied government-wide.

- “Officially” agencies are discouraged from issuing supplemental regulations.
- However, every cabinet-level department has issued a separate supplement.
- These supplements are frequently longer than the FAR, interpret FAR requirements, and place additional restrictions/requirements on contractors.
- DFARS - Defense Federal Acquisition Regulation Supplement is an example.

Federal Acquisition Regulation (FAR)

When a Government agency issues a BAA or an RFP, it will specify a list of FAR clauses that apply to the procurement which will subsequently be incorporated into the contract.

A bidder must either:

- certify compliance with the provisions with proposal submission,
- declare intention to comply with the provisions at the time of award, or
- claim an exemption from one or more provisions as applicable, e.g., small businesses are exempt from some FAR provisions.

Warning: The FAR is highly technical. It is in the realm of lawyers and highly trained federal procurement specialists, not novices!

Federal Acquisition Regulation (FAR)

When a Government agency issues a BAA or an RFP, it will specify a list of FAR clauses that apply to the procurement which will subsequently be incorporated into the contract.

A bidder must either:

- certify compliance with the provisions with proposal submission,
- declare intention to comply with the provisions at the time of award, or
- claim an exemption from one or more provisions as applicable, e.g., small businesses are exempt from some FAR provisions.

We'll define a few key terms and then examine some of the most relevant FAR provisions!

Definition: Basic Research

Basic (fundamental or pure) research is driven by a scientist's curiosity or interest in a scientific question. The main motivation is to expand human knowledge, not to create or invent something. It is assumed there is no obvious commercial value to the discoveries that result from basic research.

Most scientists believe that a basic, fundamental understanding of all branches of science is needed in order for progress to take place. In other words, basic research lays the foundation for the applied research that follows.

Definition: Applied Research

- Normally follows basic research, but may not be severable from the related basic research;
- Attempts to determine and exploit the potential of scientific discoveries or improvements in technology, materials, processes, methods, devices, or techniques; and
- Attempts to advance the state of the art.

Definition: Development

Development is the systematic use of scientific and technical knowledge in the design, development, testing, or evaluation of a **potential new product or service** (or of an improvement to an existing product or service) to meet specific performance requirements or objectives. It includes the functions of design engineering, prototyping, and engineering testing.

Contract Terminology

- Contracting Officer (CO) - An employee of the Federal Government with the authority to enter into, administer, and/or terminate contracts. (FAR 2.101)
- Contracting Officer's (Technical) Representative (COR/COTR) - An employee of the Federal Government who has been delegated (as specified in contract) certain responsibility and authority from the CO.
- Modification - A written document which is required to change the terms of a contract. (FAR 43.101)
 - Change orders
 - Supplemental agreements
 - Notices of termination
 - Actions to exercise contract options

Verbal instructions, even from the CO, are not binding!

Contract Terminology

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- Contracting Officer's (Technical) Representative (COR/COTR) - An employee of the Federal Government who has been delegated (as specified in contract) certain responsibility and authority from the CO.
- Modification - A written document which is required to change the terms of a contract. (FAR 43.101)
 - Change orders
 - Supplemental agreements
 - Notices of termination
 - Actions to exercise contract options

Only the CO can bind the Government and it must be through a written modification!

Contract Terminology

- Contract-Acquired Property - Property (equipment) acquired while performing work under a contract. The Government (not the contractor) holds title and the property may have to be returned when the contract ends!
- Estimated Cost - Anticipated cost of performance for a cost contract.
- Funding Increment - An amount of funding associated with a portion of the period of performance of a contract.
- Established Funding Limit - The sum of all funding increments of a contract - the amount not to be exceeded under the LOF clause.

Contract Terminology

Termination

- For default - The right of the Government to completely or partially terminate a contract because of the contractor's actual or anticipated failure to perform its contractual obligations. (FAR 49.401)
- For convenience - The right of the Government to completely or partially terminate a contract because the CO determines that termination is in the Government's interest. (FAR 49.101)

It doesn't mean you did anything wrong.
The Government's priorities may have changed.

Contract Terminology

Termination

- For default - The right of the Government to completely or partially terminate a contract because of the contractor's actual or anticipated failure to perform its contractual obligations. (FAR 49.401)
- For convenience - The right of the Government to completely or partially terminate a contract because the CO determines that termination is in the Government's interest. (FAR 49.101)

An early end to a contract necessitates a "Reduction in Estimated Cost" and a corresponding descoping (reduction in the work scope) to reflect the reduction in cost.

Contract Terminology

- **Warrant Authority** - The CO has signature authority up to the amount of his/her warrant (maximum approved dollar amount). Warrant authority applies to the total contract value, including options.
- **Tasks and Options** - The Government may strategically divide the work into small "chunks" or "tasks" and require a separate line item budget for each task. Some tasks may be optional work components within the base period and others may be optional work components in optional work periods. This approach gives the CO:
 - Greater control over the direction of the work based upon the results of each task.
 - The ability to fund additional work in optional work years without having to rebid the contract.

Typical CO Task Order Strategy

Sample Task Order Budget with Options				
	Year 1			
	Q1	Q2	Q3	Q4
Task 1				
Task 2				
Task 3				
Task 4				
Task 5 (option)				

CO only funds Task 1 in initial contract.

Sample Task Order Budget with Options				
	Year 1			
	Q1	Q2	Q3	Q4
Task 1				
Task 2				
Task 3				
Task 4				
Task 5 (option)				

Based upon results of Task 1 report, CO funds Task 2 and optional Task 5 which is designed to test whether or not Tasks 3 and 4 are needed.

Typical CO Task Order Strategy

Sample Task Order Budget with Options				
	Year 1			
	Q1	Q2	Q3	Q4
Task 1				
Task 2				
Task 3				
Task 4				
Task 5 (option)				

Sample Task Order Budget with Options				
	Year 1			
	Q1	Q2	Q3	Q4
Task 1				
Task 2				
Task 3				
Task 4				
Task 5 (option)				

Sample Task Order Budget with Options				
	Year 1			
	Q1	Q2	Q3	Q4
Task 1				
Task 2				
Task 3	TASK	NOT	FUNDED	
Task 4	TASK	NOT	FUNDED	
Task 5 (option)				

Based upon results of Task 2 and 5 reports, CO decides the work covered by this contract is no longer needed and processes a Termination for Convenience.

Contract Terminology

- Milestones - Milestones are deliverables and are usually required at the end of each task. Payment is often attached to the receipt and "acceptance" of each deliverable.
- Arbitrary funding "gaps" (or at least the uncertainty of continued funding) may result as the CO evaluates a deliverable before authorizing work on another task.
- Remember: If the contract only authorizes work on Task 1 through a particular date, reimbursement for expenses on the next task is not approved until the CO authorizes the work through a Contract Modification.

Contract Terminology

How do universities deal with these potential breaks in funding?

- Submit deliverables early to allow the CO to review and accept before the actual due date.
- Move personnel to a department account (F&A) until the next task is approved.
- Take a chance! Assume the next task will be approved, so keep working and incurring costs!

Contracting Process Overview

Purchase Request (Requisition)

- Requirements
- Authorization
- Administrative Detail

Request for Quotation (RFQ) Information Only (Standard Form 18)

Invitation for Bids (IFB)

Contract
Office

Procurement

BAA or RFP

Let's examine this
process in a bit
more detail.

- Sealed Bids (offers)
- Uniform contract format
- Public opening
- Price and price-related factors considered

- Other-than-sealed-bids (offers)
- **Research Procurements**
- Uniform contract format
- Negotiated procurement
 - Bargaining
 - Offerors may revise offer
- Awards made on quality and cost factors
 - Technical excellence
 - Management capabilities
 - Personnel Qualifications
 - Prior experience

Contract Issued

Five Steps in the Procurement Process

The CO must follow appropriate competitive procedures, consistent with FAR requirements, for full and open competition. Steps include:

1. Optimizing the use of “full and open competition” by advertising for proposals using either an **RFP** or **BAA**, as appropriate.

Subpart 6.1 – Full and Open Competition

(a) 10 U.S.C. 2304 and 41 U.S.C. 253 require, with certain limited exceptions (see Subpart 6.2 and 6.3), that contracting officers shall promote and provide for full and open competition in soliciting offers and awarding Government contracts.

(b) Contracting officers shall provide for full and open competition through use of the competitive procedure(s) contained in this subpart that are best suited to the circumstances of the contract action and consistent with the need to fulfill the Government's requirements efficiently (10 U.S.C. 2304 and 41 U.S.C. 253).

Subpart 15.002 - Types of Negotiated Acquisitions

- (a) **Sole source acquisitions.** When contracting in a sole source environment, the request for proposals (RFP) should be tailored to remove unnecessary information and requirements, e.g., evaluation criteria and voluminous proposal preparation instructions.
- (b) **Competitive acquisitions.** When contracting in a competitive environment, the procedures of this part are intended to minimize the complexity of the solicitation, the evaluation, and the source selection decision, while maintaining a process designed to foster an impartial and comprehensive evaluation of offerors' proposals, leading to selection of the proposal representing the best value to the Government. (see 2.101)

Subpart 15.101 - Best Value Approach

An agency can obtain **best value** in negotiated acquisitions by using any one or a combination of source selection approaches. In different types of acquisitions, the relative importance of cost or price may vary.

- When the requirement is clearly definable and the risk is minimal, cost or price may play a dominant role in source selection.
- The less definitive the requirement, the more development work required or the greater the performance risk, the more technical or past performance considerations may play a dominant role in source selection.

Five Steps in the Procurement Process

The CO must follow appropriate competitive procedures, consistent with FAR requirements, for full and open competition. Steps include:

1. Optimizing the use of “full and open competition” by advertising for proposals using either an **RFP or BAA**, as appropriate.
2. Reviewing proposals to determine which have a reasonable chance to result in an award after additional negotiations.

Subpart 15.609 Competitive Range

(a) The contracting officer shall determine which proposals are in the competitive range for the purpose of conducting written or oral discussion (see 15.610(b)). The **competitive range** shall be determined on the basis of cost or price and other factors that were stated in the solicitation and shall include all proposals that have a reasonable chance of being selected for award. When there is doubt as to whether a proposal is in the competitive range, the proposal should be included.

(b) If the contracting officer, after complying with 15.610(b), determines that a proposal no longer has a reasonable chance of being selected for contract award, it may no longer be considered for selection.

(c) The contracting officer shall notify in writing an unsuccessful offeror at the earliest practicable time that its proposal is no longer eligible for award (see 15.1002(b)).

Five Steps in the Procurement Process

The CO must follow appropriate competitive procedures, consistent with FAR requirements, for full and open competition. Steps include:

1. Optimizing the use of “full and open competition” by advertising for proposals using either an **RFP or BAA**, as appropriate.
2. Reviewing proposals to determine which have a reasonable chance to result in an award after additional negotiations.
3. Conducting a thorough cost analysis of these proposals.

Cost Analysis

Cost analysis is the review and evaluation of any separate cost elements and profit or fee in an offeror's or contractor's proposal, as needed to determine a fair and reasonable price or to determine cost realism, and the application of judgment to determine how well the proposed costs represent what the cost of the contract should be, assuming reasonable economy and efficiency.

Comparison of costs proposed by the offeror for individual cost elements with:

- (A) Actual costs previously incurred by the same offeror;
- (B) Previous cost estimates from the offeror or from other offerors for the same or similar items;
- (C) Other cost estimates received in response to the Government's request;
- (D) Independent Government cost estimates by technical personnel; and
- (E) Forecasts of planned expenditures.

Five Steps in the Procurement Process

The CO must follow appropriate competitive procedures, consistent with FAR requirements, for full and open competition. Steps include:

1. Optimizing the use of "full and open competition" by advertising for proposals using either an **RFP or BAA**, as appropriate.
2. Reviewing proposals to determine which have a reasonable chance to result in an award after additional negotiations.
3. Conducting a thorough cost analysis of these proposals.
4. Using the **BAFO process** (a formal procedure designed to improve the proposal until the CO determines the process has likely produced the maximum improvement), the CO requests submission of a **Final Revised Proposal**.

Subpart 15.611 - Best and Final Offer (BAFO)

(a) Upon completion of discussions, the contracting officer shall issue to all offerors still within the competitive range a request for best and final offers.* Oral requests for best and final offers shall be confirmed in writing.

(b) The request shall include--

(1) Notice that discussions are concluded;

(2) Notice that this is the opportunity to submit a best and final offer;

(3) A common cutoff date and time that allows a reasonable opportunity for submission of written best and final offers; and

(4) Notice that if any modification is submitted, it must be received by the date and time specified and is subject to the Late Submissions, Modifications, and Withdrawals of Proposals provision of the solicitation (see 15.412).

* In accordance with FAR 2.101 Definitions, the term BAFO has been removed. This process is now **Final Proposal Revision**.

Subpart 15.611 - Best and Final Offer (BAFO)

(c) After receipt of best and final offers,* the contracting officer should not reopen discussions unless it is clearly in the Government's interest to do so (e.g., it is clear that information available at that time is inadequate to reasonably justify contractor selection and award based on the best and final offers received). If discussions are reopened, the contracting officer shall issue an additional request for best and final offers to all offerors still within the competitive range.

(d) Following evaluation of the best and final offers, the contracting officer (or other designated source selection authority) shall select that source whose best and final offer is most advantageous to the Government, considering only price and the other factors included in the solicitation (but see 15.608(b)).

* In accordance with FAR 2.101 Definitions, the term BAFO has been removed. This process is now **Final Proposal Revision**.

Five Steps in the Procurement Process

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3. Conducting a thorough cost analysis of these proposals.
4. Using the **BAFO process** (a formal procedure designed to improve the proposal until the CO determines the process has likely produced the maximum improvement), the CO requests submission of a **Final Revised Proposal**.
5. Finally, the CO determines which proposal (from the remaining Final Revised Proposals) offers the best value to the Government!

When a proposal has been selected for funding, the CO must draft a contract document incorporating both required and optional FAR clauses.



But skilled university negotiators often request alternate clauses that are more advantageous to the university.



The effective date of the contract is usually the date of the last signature.

Once negotiations are complete, the contract is signed by both parties - a bilateral agreement.

Subpart 19.7 Subcontracting Plans

Goals must be established for including a **minimum percentage** of small business concerns, small disadvantaged business concerns, and women-owned small business concerns in any subcontracting activity under a specific contract. Once accepted by the SBA representative and the CO, the Subcontracting Plan is incorporated into the contract.

Note: Subcontracting includes items purchased, e.g., supplies, equipment, services, as well as actual subcontracts.

Definition: Christian Doctrine

Provides that if a statute or a regulation with the "force and effect of law" mandates the inclusion of the related clause in a Government contract, the contract will be interpreted as if the contract contains the clause, whether it was left out by accident or even if it was intentionally negotiated out of the contract.

- Not every regulation is automatically "read into" the contract, only those regulations issued pursuant to a statute that reasonably contemplates the regulation.
- For example, Termination for Convenience is a "deeply ingrained strand of public procurement policy" and would therefore be "read into" any contract even if it not included.

Definition: Christian Doctrine

Provides that if a statute or a regulation with the "force and effect of law" mandates the inclusion of the related clause in a Government contract, the contract will be interpreted as if the contract contains the clause, whether it was left out by accident or even if it was intentionally negotiated out of the contract.

Not only do you need to understand everything that is in the contract, you also need to know everything that should have been included but for some reason was left out!

Definition: Christian Doctrine

Provides that if a statute or a regulation with the "force and effect of law" mandates the inclusion of the related clause in a Government contract, the contract will be interpreted as if the contract contains the clause, whether it was left out by accident or even if it was intentionally negotiated out of the contract.

Remember, working with the FAR is for lawyers and highly trained federal procurement specialists!

Be sure you have experts on your team. Don't try to figure this stuff out alone!

Warning! Contracts may masquerade as:

- Memorandum of Understanding
- Teaming agreements
- Agreements with funding, e.g., grants with substantial terms and conditions, purchase orders, intergovernmental agreements.
- Agreements without funding, e.g., material transfer agreements, nondisclosure agreements, data transfer agreements.

Remember: The content of the agreement will determine if it is a contract under the law, not its label or title.

Seven Types of Contracts

- ✓ Cost-Reimbursement Contract (CRC) - FAR 16.302
- ✓ Cost-Sharing Contract (CSC) - FAR 35.001
- ✓ Cost-Plus-Fixed Fee (CPFF) - FAR 16.306 (a)
- ✓ Cost-Plus-Incentive Fee (CPIF) - FAR 16.405-1 (a)
- ✓ Fixed Price Contract (FPC) FAR 16.202-1
- ✓ Firm Fixed Price Contract (FFPC) FAR 16.202-1
- ✓ Fixed Price Level of Effort Contract FAR 16.207-1

There are many more types, but these are the types typically seen by universities!

Cost-Reimbursement Contract (CRC)

- Pays allowable (and allocable) costs to the extent proposed and funded.
- Contractor must have an adequate accounting system to track **allowable** costs. Note: Many commercial contractors establish a separate division for their Government work in order to isolate commercial costs that are not allowed in Government contracts.
- Contains a Limitation of Costs clause (LOC) - parties agree that contract costs will not exceed the estimated cost of the contract.
- When the initial funding increment is less than the estimated cost of the contract, the contract will contain a Limitation of Funds clause (LOF) - parties agree that contract costs will not exceed the total amount funded (the established funding limit).

Cost-Reimbursement Contract (CRC)

- Used for procurement of **non-commercial items** which cannot be based on reasonably definite functional or detailed specifications, e.g., R&D, where there are higher performance risks.
- Used when there is **no incentive for contractor to control costs**, thus Government must impose tighter controls.
- Cost of contract must be determined to be **allowable, allocable and reasonable** under the appropriate cost principles.
- This is the typical contract type used with universities and nonprofits.

Cost-Sharing Contract (CSC)

Same as CRC, but with a requirement for the contractor to bear the burden of a portion of the reasonable, allocable and allowable costs. The contractor's share may be expressed as either a percentage of the total project costs or a percentage of the federal share.

Cost-Plus-Fixed Fee (CPFF)

- Note: Fee is profit!
- Same as CRC, but with a negotiated fee fixed at contract inception based on an initial estimate of costs. The fee does not vary with costs incurred - once the cost estimate is achieved, no more fee is allowable unless new tasks are added to the contract.
- Used when the work is speculative and costs are difficult to estimate, therefore the risk may be too great for contractors (thus creating limited interest and insufficient competition).
- Fee cannot exceed 15% for R&D and 10% for "other."
- Problem: Since the full fee can only be earned when full costs are incurred, there is no incentive to control costs.

Cost-Plus-Incentive Fee (CPIF)

Same as CRC, but with a negotiated fixed fee adjusted by a formula based on the relationship of total actual costs to total target costs. In general, the fee increases as the total actual costs decrease below target costs, thus the contractor is incentivized to reduce costs. The formula insures that the fee increase is always less than the cost savings, so the contractor makes more money and the Government's costs go down - a "win-win" situation for both!

Fixed Price Contract (FPC)

- Price-based, not cost-based. Best price is usually determined through competition, e.g., submitting sealed bids.
- Price is defined in the contract and may be for the total contract or by unit or deliverable.
- If earned, an Award Fee may be included. (FAR 16.404(a))
- Price may vary based upon volume, time or economic conditions. (FAR 16.203-1)
- CO is required to conduct a price analysis.

The Contracting Officer is responsible for analyzing price

Price analysis shall be used when certified cost or pricing data are not required - see paragraph (b) of this subsection and 15.404-3.

- i) Comparison of proposed prices received in response to the solicitation.
- (ii) Comparison of the proposed prices to historical prices paid, whether by the Government or other than the Government, for the same or similar items.
- (iii) Use of parametric estimating methods/application of rough yardsticks (such as dollars per pound or per horsepower or other units) to highlight significant inconsistencies that warrant additional pricing inquiry.

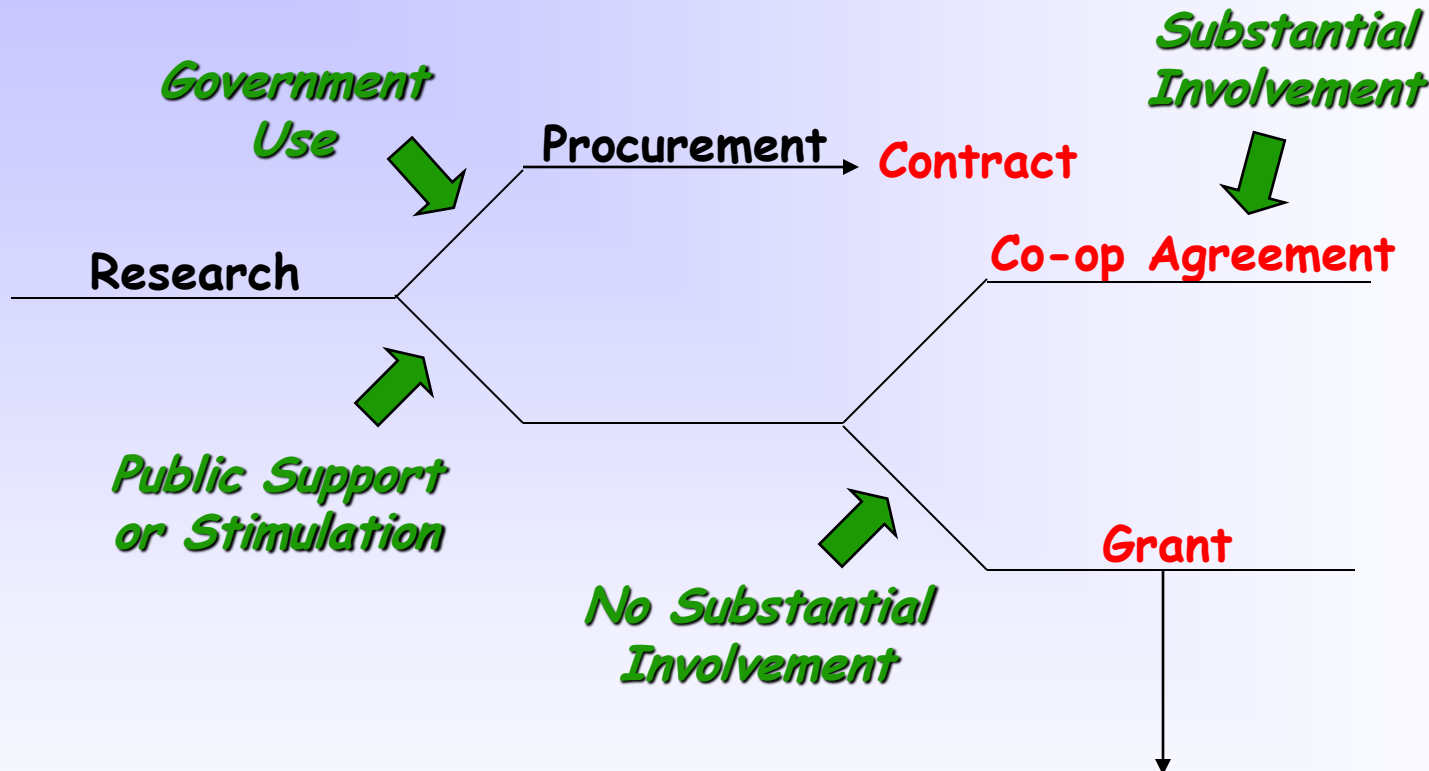
Firm Fixed Price Contract (FFPC)

- Fixed Price is set with no adjustments.
- Often used by industry when contracting with universities for small work components.
- Be careful, university is responsible for the deliverable even if costs run higher than the fixed price.
- Residual funds - If actual costs run below the fixed price, university may (based upon applicable institutional policy) keep excess funds and use them for other non-profit purposes.

Fixed Price Level of Effort Contract

- Variation of FPC where contractor provides a specified level of effort over a defined period of time - primarily used for "Staffing Contracts."
- Be cautious and don't accept this type of contract unless university accounting system can comply with the special billing requirements.
- Billing is based on a fixed rate by position type, e.g., all engineer time is billed at \$200/hour. The rate is usually the average cost for the position type and is "fully loaded" - it includes salary, fringe, F&A, and fee.
- Price is defined in contract.
- All other terms of FPC apply.

DISTINGUISHING CONTRACT, GRANTS AND COOPERATIVE AGREEMENTS



- Idea for the project is initiated by the investigator.
- Grantor has no expectation of a specified service or end product

3 P's - Patron (Grant): Partner (Co-op Agreement): Purchaser (Contract)

COMP 918: Research Administration for Scientists

Cost Accounting Standards, Cost
Principles (OMB Circular A-21) and
Effort Reporting for Grants,
Cooperative Agreements and
Contracts

Tim Quigg, Lecturer and Associate Chair for
Administration, Finance and Entrepreneurship
Computer Science Department, UNC-Chapel Hill

Cost Accounting Standards (CAS)

Born out of frustration from dealing with contractors' differing accounting practices and high-dollar claims for cost over-runs, in 1970 Congress created the Cost Accounting Standards Board and charged that Board with the duty of prescribing Standards for realization of uniformity and consistency in contractors' cost accounting practices.

Twenty Cost Accounting Standards: Only four apply to universities!

- 501 - Consistency in Estimating, Accumulating and Reporting Costs
- 502 - Consistency in Allocating Costs
- 505 - Accounting for Unallowable Costs
- 506 - Cost Accounting Period

The four standards applicable to universities were later included in OMB Circular A-21.

Twenty Cost Accounting Standards: Only four apply to universities!

- 501 - Consistency in Estimating, Accumulating and Reporting Costs
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- 505 - Accounting for Unallowable Costs
- 506 - Cost Accounting Period

What is OMB? What is a Circular?
And what is OMB Circular A-21?

Office of Management and Budget

An executive agency located in the White House that prepares the President's budget for submission to Congress, manages the distribution and expenditure of appropriated funds, and distributes budget and spending rules applicable to all federal agencies.

These rules are promulgated through Circulars which provide policy/rules applicable to all federal agencies!



Relevant OMB Circulars

- **A-21** Establishes principles for determining costs applicable to grants, contracts, and other agreements with educational institutions.
- **A-110** Uniform administrative requirements for grants and cooperative agreements with institutions of higher education, hospitals and other non-profit institutions.
- **A-133** Audit standards for states, local governments and non-profit organizations.

Quick Definitions: Details to follow

Allocable Costs - A cost is allocable to a particular cost objective if the goods or services involved are chargeable or assignable to such cost objective, e.g., account, in accordance with the relative benefit received or some other equitable relationship.

The cost is necessary for the project and it is being incurred to benefit that project!

Quick Definitions: Details to follow

Allowable Costs - A cost is allowable to a particular cost objective if it is consistent with the definitions and requirements contained in A-21.

The cost is "legal", i.e.,
consistent with the
rules!

A-21 Cost Principles: Definitions

Direct Cost - Any cost which is identified specifically with a particular sponsored agreement or other institutional function.

Facilities and Administrative (F&A) Costs - Costs incurred for common or joint objectives that cannot be readily/specifically identified with a particular sponsored project or other institutional function.

F&A costs are also called "indirect."
Previously they were called
"overhead."

A-21 Cost Principles: Definitions

Direct Cost - Any cost which is identified specifically with a particular sponsored agreement or other institutional function.

Facilities and Administrative (F&A) Costs - Costs incurred for common or joint objectives that cannot be readily/specifically identified with a particular sponsored project or other institutional function.

It may be possible to track some costs, e.g., SRO staff could be required to "log" the time spend on each award by completing detailed time sheets. But the cost/effort to do so would be prohibitive! And the accuracy would be questionable.

A-21 Cost Principles: Definitions

Direct Cost - Any cost which is identified specifically with a particular sponsored agreement or other institutional function.

Facilities and Administrative (F&A) Costs - Costs incurred for common or joint objectives that cannot be readily/specifically identified with a particular sponsored project or other institutional function.

Composition of Total Costs - The total cost of a sponsored agreement consists of the allowable direct costs incident to its performance, plus the allocable portion of the allowable F&A costs of the institution.

Sample Budget

	<u>Subject - F&A</u>	<u>Not Subj - F&A</u>	<u>Total</u>
Personnel			
Faculty summer (2 months @ \$10,000/month)	\$20,000		\$20,000
Graduate Students (2 @ \$20,000)	\$40,000		\$40,000
Fringe Benefits - faculty 22.04%	\$4,408		\$4,408
Fringe Benefits - Student health insurance	\$5,388		\$5,388
Equipment		\$50,000	\$50,000
Travel	\$7,500		\$7,500
Supplies	\$6,000		\$6,000
Computer Services	\$8,000		\$8,000
Tuition		\$15,000	\$15,000
Total Direct	\$91,296	\$65,000	\$156,296
F&A (52% of MTDC)	\$47,474		\$47,474
Grand Total	\$138,306	65,000	\$203,306

Modified Total Direct Costs (MTDC) = TDC - Equipment - Tuition - Patient Care Costs - SubK costs > \$25,000

Other relevant federal regulations

- Individual sponsor regulations - check policy manuals and websites.
- Federal Acquisition Regulation - FAR.

Today we're discussing A-21 and the "Cost Accounting Standards."

The FAR and various agency-specific regulations will be addressed in other lectures!

A-21 Requirements

To comply with A-21, university accounting systems must:

- ✓ Allow for the assignment of costs to various institutional functions consistent with A-21 definitions.
- ✓ Allow for unallowable as well as allowable costs to be tracked.

What are these A-21 definitions?

A-21 Cost Principles

Major Institutional Functions

1. Instruction - All teaching/training activities
 - Institution Funded
 - Sponsored Instruction/Training
 - Departmental Research (No separate budget)
2. Organized Research - All R&D activities that are budgeted and accounted for separately
 - Sponsored Research
 - University Research

A-21 Cost Principles

Major Institutional Functions

3. Other Sponsored Activities

- Health Service
- Community Service

4. Other Institutional Activities

- Residence and Dining Halls
- Hospitals
- Athletics
- Book Stores
- Museums

A-21 Cost Principles

Major Institutional Functions

1. Instruction
2. Organized Research
3. Other Sponsored Activities
4. Other Institutional Activities

Universities must allocate every cost incurred to one or more of these functions in reasonable/realistic proportion to the **benefits provided or by some other equitable relationship.**

A-21 Cost Principles

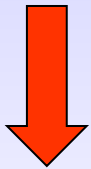
Major Institutional Functions

1. Instruction
2. Organized Research
3. Other Sponsored Activities
4. Other Institutional Activities

**"benefits provided or by some
other equitable relationship"**
Understanding this bureaucratic
language is at the heart of A-21!

Typical Account Numbers

5 - 12345 - 0 - 110 - 3276



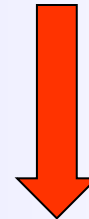
Ledger



Account



Budget
Fund Source



Purpose
A-21
Institution
Function



Department

UNC Central Accounting Report

FBM090 - C2

SUMMARY ACCOUNT STATEMENT FOR
DIST# REPORT DISTRIB = 3276

U1

REPORT PAGE 2531
PROGRAM ID FBM0929
ACCOUNT PAGE 1

ACCT: 5-31136
ATTRI 0-110-32761

TO:
CB 3175, SITTERSON

SPON:NAT CTR FOR RES RESR
CON#:5-P41-RRO2170-17 CAN#:
SPON CODE:DHHS TR:081201

BUD PD:051500-051401 AWARD: \$855,675.00
PRJ PD:050184-051401 FROE:OOOFR:081201 PY:530846
PRIME #:531136OVHD-ON:H 4500 OFF:

SUB		----- BUDGETS -----		----- ACTUALS -----			OPEN	BALANCE
CODE	DESCRIPTION	ORIGINAL	REVISED	CURRENT MONTH	FISCAL YEAR	PROJECT YEAR	COMMITMENTS	AVAILABLE
1001	C/G PERSONNEL	395,190.00	255,069.96					255,069.96
1112	EPA NON-TEACH -		54,859.36	21,120.22	35,799.04	54,859.36		
1113	EPA NON-TEACH -		9 365.19	2,369.00	4,034.78	9,365.19		
1117	MO STU/OTHER NON		42,792.35	15,888.63	25,264.44	42,792.35		
	EPA NON-TEACH SA		107,016.90	39,377.85	65,098.26	107,016.90		
1212	SPA ON CAMPUS		31,377.76	2,420.16	4,791.55	7,694.83	23,682.93	
1251	SPA SEVER WAGES		15.38	4.84	9.58	15.38		
	SPA EMPLOYEE SAL		31,393.14	2,425.00	4,801.13	7,710.21	23,682.93	
1411	NON-STUDENT WAGE		300.00	300.00	300.00	300.00		
1451	STUDENT WAGE		1,410.00	468.75	915.00	1,410.00		
	TEMP EMPLOYEE WA		1,710.00	768.75	1,215.00	1,710.00		
	TOTAL PERSONNEL	395,190.00	395,190.00	42,571.60	71,114.39	116,437.11	23,682.93	255,069.96
1800	STAFF BENEFITS	60,086.00	41,545.31					41,545.31
1812	SOCIAL SECURITY		5,483.63	1,410.22	2,520.07	4,292.87	1,190.76	
1813	SOC SECUR - HOSP		1,433.46	406.44	704.25	1,154.98	278.48	
1822	STATE RETIREMENT		4,087.85	759.83	1,301.56	2,401.63	1,686.22	
1831	MED INSURANCE OT		413.28	118.00	236.00	413.28		
1832	MEDICAL INSURANC		738.68	128.25	214.81	738.68		
1833	HMO/HEALTH PLANS		2,596.30	281.97	582.74	898.37	1,697.93	
1836	MEDICAL INS GRAD		469.02	207.99	469.02	469.02		
1872	TIAA RETIREMENT		2,194.84	684.17	1,444.65	2,194.84		
1873	TIAA-HEALTH PLAN		531.69	416.85	474.66	531.69		
1876	ORP FIDELITY		359.10	359.10	359.10	359.10		
1892	COMPOSITE BENEFI		232.84	85.13	142.21	232.84		
	STAFF BENEFITS	60,086.00	60,086.00	4,601.45	8,449.07	13,687.301,	4,853.39	41,545.31
1920	PROF CONSULTING	5,500.00	5,500.00					5,500.00
2000	SUPPLIES & MATER	9,500.00	7,384.00					7,384.00
2311	EDUCATIONAL SUPP		2,116.00	1,644.24	1,753.67	1,809.66	306.34	
	SUPPLIES / MATER	9,500.00	9,500.00	1,644.24	1,753.67	1,809.66	306.34	7,384.00
3100	TRAVEL	8,317.00	5.90-					5.90-

UNC Central Accounting Report

FBM090 - C2

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REPORT DISTRIB = 3276

U1

REPORT PAGE 2531
PROGRAM ID FBM0929
ACCOUNT PAGE 1

ACCT: 5-31136
ATTRI 0-110-32761

**Account
Number**

TO:
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CON#:5-P41-RRO2170-17 CAN#:
SPON CODE:DHHS TR:081201

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UNC Central Accounting Report

U:

REPORT PAGE 2531
PROGRAM ID FBM0929
ACCOUNT PAGE 1

FBM090 - C2

SUMMARY ACCOUNT STATEMENT FOR
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ACCT: 5-31136
ATTRI 0-110-32761

TO:
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CON#:5-P41-RRO2170-17 CAN#:
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Line
Items

UNC Central Accounting Report

FBM090 - C2

Budget



SUMMARY ACCOUNT STATEMENT FOR
DIST# REPORT DISTRIB = 3276

UI

REPORT PAGE 2531
PROGRAM ID FBM0929
ACCOUNT PAGE 1

ACCT: 5-31136
ATTRI 0-110-32761

TO:
CB 3175, SITTERSON

SPON:NAT CTR FOR RES RESR
CON#:5-P41-RRO2170-17 CAN#:
SPON CODE:DHHS TR:081201

BUD PD:051500-051401 AWARD: \$855,675.00
PRJ PD:050184-051401 FROE:OOOFR:081201 PY:530846
PRIME #:531136OVHD-ON:H 4500 OFF:

SUB		BUDGETS		ACTUALS			OPEN	BALANCE
CODE	DESCRIPTION	ORIGINAL	REVISED	CURRENT MONTH	FISCAL YEAR	PROJECT YEAR	COMMITMENTS	AVAILABLE
1001	C/G PERSONNEL	395,190.00	255,069.96					255,069.96
1112	EPA NON-TEACH -		54,859.36	21,120.22	35,799.04	54,859.36		
1113	EPA NON-TEACH -		9,365.19	2,369.00	4,034.78	9,365.19		
1117	MO STU/OTHER NON		42,792.35	15,888.63	25,264.44	42,792.35		
	EPA NON-TEACH SA		107,016.90	39,377.85	65,098.26	107,016.90		
1212	SPA ON CAMPUS		31,377.76	2,420.16	4,791.55	7,694.83	23,682.93	
1251	SPA SEVER WAGES		15.38	4.84	9.58	15.38		
	SPA EMPLOYEE SAL		31,393.14	2,425.00	4,801.13	7,710.21	23,682.93	
1411	NON-STUDENT WAGE		300.00	300.00	300.00	300.00		
1451	STUDENT WAGE		1,410.00	468.75	915.00	1,410.00		
	TEMP EMPLOYEE WA		1,710.00	768.75	1,215.00	1,710.00		
	TOTAL PERSONNEL	395,190.00	395,190.00	42,571.60	71,114.39	116,437.11	23,682.93	255,069.96
1800	STAFF BENEFITS	60,086.00	41,545.31					41,545.31
1812	SOCIAL SECURITY		5,483.63	1,410.22	2,520.07	4,292.87	1,190.76	
1813	SOC SECUR - HOSP		1,433.46	406.44	704.25	1,154.98	278.48	
1822	STATE RETIREMENT		4,087.85	759.83	1,301.56	2,401.63	1,686.22	
1831	MED INSURANCE OT		413.28	118.00	236.00	413.28		
1832	MEDICAL INSURANC		738.68	128.25	214.81	738.68		
1833	HMO/HEALTH PLANS		2,596.30	281.97	582.74	898.37	1,697.93	
1836	MEDICAL INS GRAD		469.02	207.99	469.02	469.02		
1872	TIAA RETIREMENT		2,194.84	684.17	1,444.65	2,194.84		
1873	TIAA-HEALTH PLAN		531.69	416.85	474.66	531.69		
1876	ORP FIDELITY		359.10	359.10	359.10	359.10		
1892	COMPOSITE BENEFI		232.84	85.13	142.21	232.84		
	STAFF BENEFITS	60,086.00	60,086.00	4,601.45	8,449.07	13,687.301,	4,853.39	41,545.31
1920	PROF CONSULTING	5,500.00	5,500.00					5,500.00
2000	SUPPLIES & MATER	9,500.00	7,384.00					7,384.00
2311	EDUCATIONAL SUPP		2,116.00	1,644.24	1,753.67	1,809.66	306.34	
	SUPPLIES / MATER	9,500.00	9,500.00	1,644.24	1,753.67	1,809.66	306.34	7,384.00
3100	TRAVEL	8,317.00	5.90-					5.90-

UNC Central Accounting Report

FBM090 - C2

SUMMARY ACCOUNT ST
DIST# REPORT DIST#

REPORT PAGE 2531
PROGRAM ID FBM0929
ACCOUNT PAGE 1

ACCT: 5-31136
ATTRI 0-110-32761

Expenditures

TO:
CB 3175, SITTERSON

SPON:NAT CTR FOR RES RESR
CON#:5-P41-RRO2170-17 CAN#:
SPON CODE:DHHS TR:081201

PD:051500-051401 AWARD: \$855,675.00
PD:050184-051401 FROE:OOOFR:081201 PY:530846
PRIME #:531136 OVHD-ON:H 4500 OFF:

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3100	TRAVEL	8,317.00	5.90-					5.90-

UNC Central Accounting Report

FBM090 - C2

SUMMARY ACCOUNT STATEMENT FOR
DIST# REPORT DISTRI

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REPORT PAGE 2531
PROGRAM ID FBM0929
ACCOUNT PAGE 1

ACCT: 5-31136
ATTRI 0-110-32761

Encumbrances

TO:
CB 3175, SITTERSON

SPON:NAT CTR FOR RES RESR
CON#:5-P41-RRO2170-17 CAN#:
SPON CODE:DHHS TR:081201

BUD PD:051500 AWARD: \$855,675.00
PRJ PD:050184-1 FROE:0000FR:081201 PY:530846
PRIME # 16OVHD-ON:H 4500 OFF:

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3100	TRAVEL	8,317.00	5.90-					5.90-

Examples:
Items that
have been
ordered,
but not
received
and future
salary
obligations.

UNC Central Accounting Report

FBM090 - C2

SUMMARY ACCOUNT STATEMENT FOR
DIST# REPORT DISTRIB = 3276

REPORT PAGE 2531
PROGRAM ID FBM0929
ACCOUNT PAGE 1

ACCT: 5-31136
ATTRI 0-110-32761

SPON:NAT CTR FOR RES RESR
CON#:5-P41-RRO2170-17 CAN#:
SPON CODE:DHHS TR:081201

BU
PR

3175, SITTERSON

5.00
201 PY:530846

Available
balances by line
item and grand
total



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3100	TRAVEL	8,317.00	5.90-					5.90-

Every University Cost

Total Institutional Costs

1. Instruction
2. Organized Research
3. Other Sponsored Activities
4. Other Institutional Activities

Allowable*

Unallowable*

Direct
Costs

Indirect Costs
(F&A)

* For Federal Participation

A-21 Tests of Allowability

Tests of Allowability: In order to be allowable as either a direct or indirect cost, a cost must be:

1. Reasonable

A-21 Tests of Allowability

Reasonable: A cost may be considered reasonable if its nature and amount reflect the action that a prudent person would have taken under the circumstances prevailing at the time the decision was made.

- Generally recognized as necessary.
- "Arm's-length" bargaining.
- Acted with due prudence.
- Consistent with institutional policies applicable to all of the institution's work.

A-21 Tests of Allowability

Reasonable: A cost may be considered reasonable if its nature and amount reflect the action that a prudent person would have taken under the circumstances prevailing at the time the decision was made.

A piece of equipment is listed in the approved budget and is required to perform Task 3 of a project. The equipment is ordered, but during the completion of Task 2 it is determined the equipment is no longer needed.

Question: Is this purchase still allowable under the A-21 "reasonableness" test?

A-21 Tests of Allowability

Tests of Allowability: In order to be allowable as either a direct or indirect cost, a cost must be:

1. Reasonable
2. Allocable under A-21 principles/methods

A-21 Tests of Allowability

Allocable: A cost may be considered to be allocable to a particular project if it:

- Is incurred solely to advance work under the sponsored agreement or
- It benefits both the sponsored agreement and other work of the institution, in proportions that can be approximated using reasonable methods or
- It is necessary to the overall operation of the institution and is, consistent with A-21, deemed assignable in part to the sponsored agreement.

A-21 Tests of Allowability

Allocability of Personnel Charges: A cost may be considered to be allocable to a particular project as a direct cost if it is incurred solely to advance work under the sponsored agreement.

Note: Time spent writing grant proposals or working on departmental administrative tasks (serving on committees) is not “incurred solely to advance work under the sponsored agreement” and is therefore not allocable to a sponsored project as a direct charge.

Budgeting Note

"No Defense of Zero"

Most post docs and research faculty spend some time working on these tasks, so the best approach is to always have some portion of their salary, even a small percentage, funded from an institutional source to cover these activities.

When facing an audit, one can defend a small percentage of effort funded from institutional sources to cover non-grant eligible activities.
But there is no defense of zero!

A-21 Tests of Allowability

Tests of Allowability: In order to be allowable as either a direct or indirect cost, a cost must be:

1. Reasonable
2. Allocable under A-21 principles/methods
3. **Treated consistently**: CAS 501 and CAS 502

A-21 Tests of Allowability

Tests of Allowability: In order to be allowable as either a direct or indirect cost, a cost must be:

1. Reasonable
2. Allocable under A-21 principles/methods
3. **Treated consistently:** CAS 501 and CAS 502

CAS 501 - Consistency in Estimating,
Accumulating and Reporting Costs

A-21 Tests of Allowability

Tests of Allowability: In order to be allowable as either a direct or indirect cost, a cost must be:

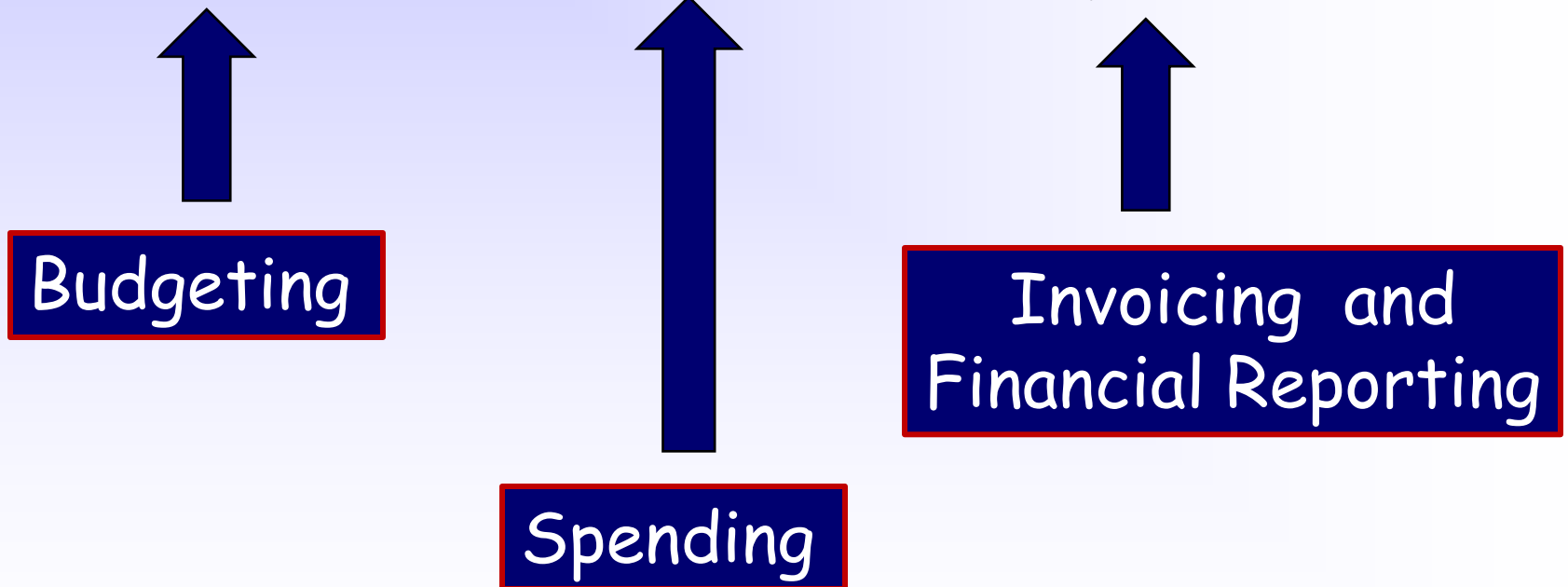
1. Reasonable
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3. **Treated consistently**: CAS 501 and CAS 502

CAS 502 - Consistency in Allocating Costs
Incurred for the Same Purpose

A-21 Tests of Allowability

CAS 501 - Consistent Treatment When:

1. Estimating, accumulating and reporting costs



CAS 501 - Consistency in Estimating, Accumulating and Reporting Costs

The purpose of CAS 501 is to ensure that the practices used in estimating costs for a proposal are consistent with the cost accounting practices used to accumulate and report costs.

In other words, CAS 501 requires that a "common vocabulary" be used to define cost elements at each stage of the process. This is particularly important when defining personnel effort!

CAS 501 - Consistency in Estimating, Accumulating and Reporting Costs

The purpose of CAS 501 is to ensure that the practices used in estimating costs for a proposal are consistent with the cost accounting practices used to accumulate and report costs.

Most universities implement this Standard by using the same chart of accounts with the same definitions for all three purposes and by using a compliant effort reporting system for documenting personnel!

CAS 501 - Consistency in Estimating, Accumulating and Reporting Costs

The purpose of CAS 501 is to ensure that the practices used in estimating costs for a proposal are consistent with the cost accounting practices used to accumulate and report costs.

Consistent reporting of personnel effort is particularly important since personnel is such a large percentage of most budgets!

What is effort?

Effort - The proportion of time spent on any activity expressed as a percentage of the total professional activity for which an individual is employed by the institution.

It is often referred to as Total Professional Effort (TPE).

Why do effort reporting?

- It is required by A-21 Section J10...

"A statement will be signed by the employee, principal investigator or responsible official(s) using suitable means of verification that the work was performed."
- Salary and wage charges to sponsored agreements are allowable only if they are supported/documented by an A-21 compliant Effort Reporting System.

What is included in TPE?

For faculty, TPE usually includes all activities associated with teaching, research, public service, administrative tasks and other duties included in their job description.

These activities should be included as part of TPE regardless of where (office, home) or when (after hours, on vacation, on weekend) the effort was expended.

"I did it in my free time" is not a reason to exclude an activity from TPE if it is related to the job duties!

What is not included in TPE?

- Performing external professional activities (with or without pay).
- Activities for which an honoraria or reimbursement of expenses is paid.
- Membership/service to professional associations.
- Membership on professional review or advisory panels.
- Presenting incidental, non-routine lectures, papers, concerts outside the individual's university appointment.

Is effort based on a 40 hour week?

No, effort is not based on a 40 hour work week or any other definition of a "normal work week."

Rather, effort is based on 100% of the time actually worked during the period. It is expressed as a percentage based on the distribution of salary sources supporting the individual's university work activities for the period being certified.

Example 1: If an employee worked 40 hours in one week on a sponsored project and 20 hours in the same week on an unrelated university activity, then the employee's effort report for that period should show:

67% effort devoted to the sponsored project:

40 hours / 60 total-effort hours = 67%

33% on the unrelated university activity:

20 hours / 60 total-effort hours = 33%

Example 2: If in the next week, the employee worked 15 hours on a sponsored project and 15 hours in the same week on an unrelated university activity, then the employee's effort report for that period should show:

50% effort devoted to the sponsored project:

15 hours / 30 total-effort hours = 50%

50% on the unrelated university activity:

15 hours / 30 total-effort hours = 50%

How often must effort be certified?

Because of the substantial variation when measuring effort over short time periods, A-21 allows universities to certify effort over longer periods, but not less frequently than annually!

Most universities certify effort quarterly, semi-annually or three times per year (each semester and the summer).

Must effort reporting be precise?

OMB Circular A-21 allows for a “degree of tolerance.”

“In the use of any methods for apportioning salaries, it is recognized that, in an academic setting, teaching, research, service and administration are often inextricably intermingled. Precise assessment of factors that contribute to costs is not always feasible, nor is it expected. Reliance, therefore, is placed on estimates in which a degree of tolerance is appropriate.”

Certification relies on a reasonable estimate of effort during a specified time period, and when estimating, a degree of tolerance is both acceptable and appropriate.

CAS 501 Objectives

- Enhances the likelihood that comparable transactions will be treated alike.
- Facilitates the preparation of reliable cost estimates for a proposal.
- Facilitates the ability to compare estimates to the actual cost of performance.
- Provides a basis for financial control over costs during the period of performance.
- Aids in establishing accountability for costs in a manner agreed to by both parties at the time of initial award.
- Provides an improved basis for evaluating institutional cost estimating capabilities.

Potential problem complying with the consistent treatment requirement of CAS 501

- Agency wants "hourly rates" in budget but
- University tracks "percentage effort" only!
- What do you do? You want the award, but you must comply with A-21.
- Possible solution - "Presentation of hourly wage is for illustration purposes only, the university certifies all effort on a percentage basis..."

A-21 Tests of Allowability

Tests of Allowability: In order to be allowable as either a direct or indirect cost, a cost must be:

1. Reasonable
2. Allocable under A-21 principles/methods
3. **Treated consistently**: CAS 501 and CAS 502

CAS 502 - Consistency in allocating costs incurred for the same purpose

CAS 502 - Consistency in allocating costs incurred for the same purpose

"Costs incurred for the same purpose, in like circumstances, shall be consistently classified as either direct costs only or F&A (indirect) costs only."

The treatment of costs as direct or F&A shall be consistent both within a department and among departments and schools for costs incurred in like circumstances.

CAS 502 - Consistency in allocating costs incurred for the same purpose

"Costs incurred for the same purpose, in like circumstances, shall be consistently classified as either direct costs only or F&A (indirect) costs only."

This simply means CAS 501 must be implemented consistently at the institutional level. Individual departments/schools are not allowed to have their own policies.

CAS 502 - Consistency in allocating costs incurred for the same purpose

"Costs incurred for the same purpose, in like circumstances, shall be consistently classified as either direct costs only or F&A (indirect) costs only."

The treatment of costs as direct or F&A shall be consistent both within a department and among departments and schools in like circumstances.

CAS 502 - Consistency in allocating costs incurred for the same purpose

"Costs incurred for the same purpose, in like circumstances, shall be consistently classified as either direct costs only or F&A (indirect) costs only."

Examples of "unlike" circumstances include situations when the cost type or amount represents a level of service or support that is "over-and-above" the normal level of service provided by the institution to all projects.

CAS 502 - Consistency in allocating costs incurred for the same purpose

"Costs incurred for the same purpose, in like circumstances, shall be consistently classified as either direct costs only or F&A (indirect) costs only."

For example, a project involving support for a supercomputer facility might be allowed to charge electricity as a direct cost even though it is normally charged to F&A because the amount of electricity required for the project far exceeds the amount used by a normal project.

Costs incurred for the same purpose, in like circumstances, are either direct costs only or F&A costs only

- Example #1: Office supplies, postage, local telephone costs and memberships shall normally be treated as F&A costs - per A-21 policy guidance memo.
- Exceptions?

Projects requiring an unusually high amount of postage, e.g., survey research using the mail!

Costs incurred for the same purpose, in like circumstances, are either direct costs only or F&A costs only

- Example #1: Office supplies, postage, local telephone costs and memberships shall normally be treated as F&A costs - per A-21 policy guidance memo.

To an auditor, these expenses will appear to be unallowable as direct charges on a federally supported account. Therefore, the account file should contain detailed notes explaining the applicable "unlike" circumstances!

Costs incurred for the same purpose, in like circumstances, are either direct costs only or F&A costs only

- Example #2: Salaries for administrative and clerical staff should normally be treated as F&A costs (per OMB A-21 policy guidance memo).
- Exceptions?

"Major Projects" - General Clinical Research Centers, Primate Centers, Program Projects, NSF "Center Grants", and other projects involving multiple investigators and institutions.

Warning – Cost Transfers!

"Any cost allocable to a particular sponsored agreement under the standards provided in this Circular may not be shifted to other sponsored agreements in order to meet deficiencies caused by overruns or other fund considerations, to avoid restrictions imposed by law or by terms of the sponsored agreement or for other reasons of convenience."

Section C.4.b.

A-21 Tests of Allowability

Tests of Allowability: In order to be allowable as either a direct or indirect cost, a cost must be:

1. Reasonable
2. Allocable under A-21 principles/methods
3. Treated consistently: CAS 501 and CAS 502
4. **Conforms with the limitations/exclusions under A-21 and any specific exclusions under a sponsored agreement required by law or policy.**

A-21 Tests of Allowability

Limitation/Exclusions

Section J provides specific guidance to assist in determining the potential allowability of 54 specific expense categories. Some are allowable under certain circumstances, others (including those listed below) are always unallowable.

- Alcoholic beverages
- Alumni Expenses
- Bad debts
- Commencement costs
- Lobbying costs
- Fines and penalties
- Goods/services for personal use
- Losses on other sponsored agreements/contracts

A-21 Tests of Allowability

Limitation/Exclusions Applicable to Specific Sponsored Agreements

Some sponsored agreements may be subject to either statutory limits or agency policy which limits the allowance of certain costs. Examples include:

- NIH salary caps
- NSF REU limitations on F&A rate
- Infrastructure grants may only allow equipment, no personnel or supplies

CAS 505 - Accounting for Unallowable Costs

"All unallowable costs shall be identified and excluded from any billing, claim, or proposal under a federal award."

The cost of any work not authorized by a sponsored agreement, whether or not related to the performance of a proposed or existing sponsored agreement, shall be accounted for in a manner which permits ready separation from the cost of authorized work projects.

CAS 505 - Accounting for Unallowable Costs

"All unallowable costs shall be identified and excluded from any billing, claim, or proposal under a federal award."

This is why many corporations establish separate divisions to handle their federal contracts and other government-supported business activities!

CAS 505 - Accounting for Unallowable Costs

"All unallowable costs shall be identified and excluded from any billing, claim, or proposal under a federal award."

In addition, the costs pertaining to formal cost sharing shall be accounted for in a manner that permits identification with the sponsored project to which the cost share expense pertains and reporting to the funding agency.

CAS 505 - Accounting for Unallowable Costs

"All unallowable costs shall be identified and excluded from any billing, claim, or proposal under a federal award."

Rate limits or caps imposed by A-21, specific federal law or regulation (NIH salary caps), or by negotiation with the federal government may limit the institution's ability to recover all costs that would otherwise be allocable and allowable. These costs must be tracked.

CAS 505 - Accounting for Unallowable Costs

"All unallowable costs shall be identified and excluded from any billing, claim, or proposal under a federal award."

Remember: To comply with A-21, university accounting systems must:

- ✓ Allow for the assignment of costs to various institutional functions consistent with A-21 definitions.
- ✓ Allow for unallowable as well as allowable costs to be tracked.

Every University Cost

Total Institutional Costs

1. Instruction
2. Organized Research
3. Other Sponsored Activities
4. Other Institutional Activities

Allowable*

- Reasonable
- Allocable
- Consistent
- Not excluded

Direct Costs

- Specific to project

Indirect Costs (F&A)

- Common objective
- Not Specific to project

Unallowable*

- Don't meet A-21 test
- Specifically not allowable in Section J
- Specifically not allowable in award

Facilities and Administrative Costs

"Costs incurred for common or joint objectives and therefore cannot be identified readily and specifically with a particular sponsored project or other institutional function."

Facility Costs

- Building depreciation or "space use allowance"
- Interest on debt associated with certain buildings and capitalized equipment (> \$10K per unit)
- Equipment (> \$5K per unit) depreciation
- Operations and maintenance
- Library

Facilities and Administrative Costs

Administrative Costs

(capped at 26% - can take 24% fixed allowance)

- General Administration (Chancellor, University-wide Business Offices, General Counsel, Central IT Services)
- Departmental Administration (Academic Deans, Accounting, Clerical and other Administrative Salaries)
- Sponsored Projects Administration (University-wide)
- Student Administration and Services (Deans of Students and Admissions, Registrar, Student Advisors, Health Clinic)

Applicable duration of F&A rate

- The F&A rates in effect at the time of the initial award shall be used throughout the life (each competitive segment) of the project.
- New rates are normally negotiated every three (3) years. If there is a delay, the previous rates are used until the new rates are established.

F&A rate negotiation process with cognizant agency

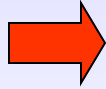
"Cognizant Agency" is the federal agency responsible for negotiating and approving F&A rates for an institution on behalf of all federal agencies. It will always be either:

Department of Health and Human Services
or Department of Defense's Office of
Naval Research

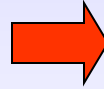
Determination is based on which agency provides the most money. If neither provides money to the university, e.g., all funding comes from the Department of Education, then DHHS prevails.

F&A rate negotiation process with cognizant agency

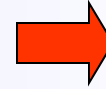
**Institution
Develops
F&A Cost
Pools for
Base
Period**



**Submits
to
Cognizant
Agency**



**Negotiation
Process**



**F&A
Rates
Approved**

Sample F&A Rate: UNC-CH

	<u>Proposed</u>	<u>Negotiated</u>
<u>Facilities</u>		
Building Use/Depreciation	1.22	
Building Interest	.93	
Equipment Depreciation	4.76	
O&M	12.02	
Library	<u>2.00</u>	
Total Facilities	20.93	19.50
 <u>Administrative</u>		
General Administration	5.30	
Departmental Administration	25.57	
Sponsored Program Administration	2.68	
Adjustment for Unallowables	<u>(.09)</u>	
Total Administrative	33.46	26.00*
 <u>Total F&A</u>	 54.39%	 45.50%

***Capped**

Simplified method for small institutions (< \$10 million/year)

Salaries and Wages Base - A modified cost pool is established including only general administration, operations and maintenance, library, and departmental expenses. After a rate is negotiated, it is applied only to the direct salaries and wages within sponsored agreements.

Modified Total Direct Cost Base - Same as above except the rate is applied to MTDC within sponsored agreements.

506 - Cost Accounting Period

"Institutions shall establish a cost accounting period as the time period to be used for cost estimating, accumulating, and reporting."

Consistent practices shall be followed in which any type of expense and any type of accrual, deferral, or adjustment to expense (including prior period adjustments) are accumulated and allocated.

Most institutions establish their cost accounting period as their fiscal year!

F&A Cost Reimbursements

- F&A charges are “reimbursements” for expenses incurred. Remember, the rate is based upon actual and approved costs associated with administering research in the base period of the F&A rate study.
- N.C. views these F&A reimbursements as “general fund revenues.”
- UNC is currently allowed to keep all F&A reimbursements, but there have been times when the N.C. General Assembly has withheld a portion!

F&A Cost Reimbursements

- As direct cost expenses are incurred on a sponsored research account, the university also "charges" applicable F&A costs.
- These funds are "deposited" into an F&A receipts account and distributed at the end of the year consistent with university policy.
- Since F&A receipts are considered reimbursements for expenses incurred, the funds no longer have a "federal identity" and therefore are not subject to federal rules governing expenditure.

How are F&A receipts spent at a typical university?

Examples of uses:

- Utility bills (electricity, water, etc.)
- Administrative Salaries
- Construction (debt service)
- Faculty startup packages, cost-sharing
- Discretionary allocations
- And a portion is returned to Schools and Departments!

F&A receipts do not have to be spent consistent with the distribution of costs in the F&A rate study pool!

How are F&A receipts spent in a typical department?

Some departments administer these funds centrally, others share them with the faculty or labs responsible for their generation.

Examples of uses:

- Administrative salaries
- Faculty startup packages
- Cost-sharing
- Discretionary allocations

TEST

Cost Item	Direct	Indirect	Unallowable
Salary of PI and 2 graduate students			
Appropriate fringe benefits			
Corner office for PI and "tiny cubicles" for grad. students			
Flowers sent to your program officer's secretary			
Telephone sitting on PI's desk			
Tuition costs for graduate students			
Consultant to work on project			
Lunch to celebrate getting new award			
PI effort spent writing proposals			
Electricity to run your computer lab			

Case Study:

Joseph Green, who is in charge of departmental purchases, is puzzled by a purchase order submitted by Daniel Terry a post-doc in the Oldham lab. The chemical is the same one that Terry has been purchasing every couple months on his NIH post-doc grant, but this time the form indicates that the purchase should be charged to Prof. Oldham's NSF grant account. So, Green gives Terry a call to check. "Yes, that's correct," Terry says when Green explains the situation. "I'm getting low on funds in my account, so Dr. Oldham told me to start putting my supplies on his NSF account. There should be plenty of money there." When Green explains that he can't approve charging supplies for one project to an unrelated project because that would be against university and federal policy, Terry becomes agitated. "Look," he says, "just do as I've asked, OK? I'm already in trouble with Oldham. He says I'm bothering him too much about little things. Just this morning he was going on about how I need to make decisions on my own and be more independent. I need him to write me a good recommendation letter for a job I'm looking at. How is it going to look if you bother him about my purchase order?"

COMP 918: Research Administration for Scientists

Introduction to Proposal Budgeting

Tim Quigg, Lecturer and Associate Chair for
Administration, Finance and Entrepreneurship
Computer Science Department, UNC-Chapel Hill

You have defined a research project and have found a BAA that may be an appropriate funding source. Question: Can you complete the project with the funding available from this BAA?

Three Important Strategic Questions

- How much can you request?
- How much do you need?
- How much should you request?

Let's explore each of these important strategic budgeting questions in detail!

How much can you request?

What limits are placed upon your request?

First review the BAA looking for information concerning funding limits, caps or other pertinent restrictions. If no information is provided (rarely the case) or if you have questions about something in the BAA, contact the agency.

Now let's look at a typical
BAA from NSF!

Title: Smart Health and Wellbeing (SHB)(nsf12512)

National Science Foundation Directorate for Computer & Information Science & Engineering
Division of Computing and Communication Foundations Division of Computer and Network
Systems Division of Information & Intelligent Systems Directorate for Engineering
Directorate for Social, Behavioral & Economic Sciences

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time): February 06, 2012 Type I:
Exploratory Projects (EXP) February 21, 2012 Type II: Integrative Projects (INT)

Award Information Anticipated Type of Award: Standard Grant or Continuing Grant

Estimated Number of Awards: 10 to 18 This includes 6-10 awards for Type I Exploratory
Projects (EXP) and 4-8 awards for Type II Integrative Projects (INT)

Anticipated Funding Amount \$15,000,000 in FY 2012 dependent upon the availability of
funds.

Not all solicitations are this clear. Some may only indicate
the total available dollars and the anticipated number of
awards - so you'll need to do the math!

Title: Smart Health and Wellbeing (SHB)(nsf12512)

National Science Foundation Directorate for Computer & Information Science & Engineering
Division of Computing and Communication Foundations Division of Computer and Network
Systems Division of Information & Intelligent Systems Directorate for Engineering
Directorate for Social, Behavioral & Economic Sciences

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time): February 06, 2012 Type I:
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Award Information Anticipated Type of Award: Standard Grant or Continuing Grant

Estimated Number of Awards: 10 to 18 This includes 6-10 awards for Type I Exploratory
Projects (EXP) and 4-8 awards for Type II Integrative Projects (INT)

Anticipated Funding Amount \$15,000,000 in FY 2012 dependent upon the availability of
funds.

The average anticipated amount per award may be
considerably lower than the stated maximum allowable
award request.

This is important information!

The BAA is likely to contain additional important budgetary information!

- Is the award amount capped? If so, does the cap apply to direct costs only (NIH) or to total costs including F&A - most other agencies?
- Are any costs that would normally be allowable prohibited (personnel on an equipment grant) or limited - NSF's 2 month limit on faculty salaries and NIH's salary cap?
- Is the solicitation closed to certain organization types? How about PI qualifications?
- Is there a limit on the number of proposals allowed to be submitted per PI or per institution?
- Is cost share required?

How much do you need?

Many PI's struggle with this question.

- Carefully examine the project to determine what resources are absolutely necessary to complete the work.
- Focus on necessary resources only at this point:
 - 2 months of your time
 - 1 graduate RA
 - specialized piece of equipment

Suggested Metric: If an item is not included in the budget, you know the project will not be successful!

How much do you need?

Many PI's struggle with this question.

- Carefully examine the project to determine what resources are absolutely necessary to complete the work.
- Focus on necessary resources only at this point:
 - 2 months of your time
 - 1 graduate RA
 - specialized piece of equipment

And you are willing to “walk away”
from the project if this item isn't
in the budget!

How much do you need?

Do a rough “back of the envelop” estimate of your budget needs.

Prepare a personal cheat sheet for easy reference. It should include (in round numbers) the cost of key components of your budgets, e.g., a month of your effort, a graduate student!

How much do you need?

Do a rough “back of the envelop” estimate of your budget needs.

- 2 months of PI time - 9 month salary of \$90K (\$10K per month) plus 22% fringe benefits = **\$24.4K**
- 1 Graduate RA - \$30K per year compensation counting health insurance plus \$7K tuition = **\$37K**
- Specialized piece of equipment at **\$18K** (one time cost)
- Since F&A is not charged to equipment or tuition, the F&A is 52% of \$54.5K (\$24.4 + \$30) = **\$28.3K**
- Annual cost of \$90K (\$24.4+\$37K+\$28.3K) * 3 years + \$18K one-time equipment purchase = **\$288K** total project cost.

Round to \$300K!

Is this rough estimate in the "Ball Park"?

If your estimate is above the target, consider these two options:

1. Reduce the scope of the project and associated costs. Concern: Is the project still interesting? To sponsors? To you?
2. Seek supplemental resources from other sources:
 - Use equipment from another lab rather than purchasing new equipment from grant.
 - Use independent study students rather than paid RAs.
 - Request cost share support!

Is this rough estimate in the "Ball Park"?

If your estimate is above the target, consider these two options:

1. Do not

2. If you cannot find a funding source:

Warning: If you can't propose a project that is exciting to you, has a reasonable chance of success and can be conducted within the available resource limits, stop until you find a more appropriate funding source!

request cost share support!

Is this rough estimate in the "Ball Park"?

If your estimate is below the target, consider these actions:

1. Expand the scope of the project (do more) and add associated costs.
2. Improve the quality of the project by increasing the sample size or expanding the dissemination phase and adding associated costs.
3. Keep the project scope static but add allowable costs that make the project:
 - Easier to complete
 - More likely to succeed
 - More interesting to you!

How much should you request?

- Always ask for the amount you need to do the project. Never ask for less than you need!
- But the "amount you need" isn't a precise number, it's a range. Don't "pad" the budget, but proposing at the high end of the justifiable range is usually the best approach!
- It's better to have the project go unfunded than to suffer through three years of an underfunded project!

Now prepare a detailed budget and budget justification!

What information do you need to get started?

Appointment type for all personnel:

- 9 month (academic and summer months)
- 12 month (calendar months)
- Note: 9 month personnel can earn up to 3 summer months of salary at their established monthly rate.
- Note: NSF will only pay for 2 months of salary support per person per year from all NSF grants combined.
- To earn 3 summer months of support, a non-NSF source is required!

Now prepare a detailed budget and budget justification!

What information do you need to get started?

Salary for all personnel:

- Note: NIH caps maximum salary participation at the federal Executive Level I rate (currently \$179,700 or \$14,975 per month.)
- This cap applies to fractional funding.
- The difference between a person's actual salary rate and the capped participation by NIH is cost share and must be documented!
- Let's consider examples for both 12 month and 9 month faculty.

Examples of the impact of NIH salary cap on cost share!

- 12 month faculty example: Salary is \$300,000 (\$25,000 per month) and the maximum allowable for NIH participation is the cap of \$14,975 per month. So, \$14,975 can be charged to the grant and \$10,025 must be charged to a non-federal source and documented as cost share.
- 9 month faculty example: Salary is \$180,000 (\$20,000 per month) and the maximum allowable for NIH participation is the cap of \$14,975 per month. So for 1 month of summer salary, \$14,975 can be charged to the grant and \$5,025 must be charged to a non-federal source and documented as cost share.
- Note: It is not permissible for the faculty to simply provide less effort - the cap applies to the reduced effort level as well!

Now prepare a detailed budget and budget justification!

What information do you need to get started?

Fringe Benefit Rates for each category of personnel on the project:

- Often expressed as a % of salary plus health insurance cost (usually a constant rate independent of salary level).
- Rates vary by type of employee, e.g., staff, faculty, post-doc, graduate student, clinical staff.
- By using the approved average rates by employee type for budgeting purposes, there may be some minor variation in the total fringe benefits line when the actual rates are charged. This is normal and does not represent any violation under A-21 rules.

Now prepare a detailed budget and budget justification!

What information do you need to get started?

Equipment quotes: If the cost is $> \$5K$ it is equipment and not subject to F&A. If the cost is $< \$5K$ it is supplies and is subject to F&A.

You save
money
and get a
better
machine!
See how
helpful it
is to
know the
rules!

Example: A computer costing \$4,500 is a supply item - with 52% F&A, the total cost to the grant is \$6,840. The same computer with upgraded memory, an enhanced graphics card or some other upgrade that brings the cost to \$5,000 is now equipment and has a total cost to the grant of \$5,000 because no F&A is charged.

Now prepare a detailed budget and budget justification!

What information do you need to get started?

Applicable Recharge Center Rates: Lab animals, assay preparation, fabrication, computer services.

Supplies: Lab supplies and other consumables, but remember - standard office supplies are not allowed to be charged as direct costs.

Travel (domestic and foreign): If you only budget for domestic travel and later want to attend a conference outside the U.S. (Canada is OK), you must get agency approval to create a foreign travel line. So, it's usually best to include both lines in the proposal budget.

Now prepare a detailed budget and budget justification!

What information do you need to get started?

Subrecipient/Subcontractor Budget: Start early, these materials must first be approved by the SRO at the collaborator's university before being included in the prime's proposal budget.

- Note: F&A costs are included in the subrecipient or subcontractor budget based upon their approved rates and then the total budget is entered in the prime budget as a single line item under the subawards line as a direct cost.
- The prime budget must then charge F&A on the first \$25K of each sub (\$13K at a 52% F&A rate) as part of the prime's F&A calculation.



Let's look at the
standard NSF budget
form and begin to
develop a simple
budget!



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YEAR 1 PROPOSAL BUDGET

FOR NSF USE ONLY

ORGANIZATION University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR I. M. Importante, PhD				AWARD NO.		Proposed	Granted
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
				CAL	ACAD	SUMR	
1.							
2.							
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. () TOTAL SENIOR PERSONNEL (1-6)							
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. () POSTDOCTORAL ASSOCIATES							
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. () GRADUATE STUDENTS							
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.i.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						\$	\$
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		INDIRECT COST RATE VERIFICATION	
						Date Checked	Date of Rate Sheet

Enter the proper name for the university (no abbreviations) and the PI as listed in FastLane.



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YEAR 1 PROPOSAL BUDGET

ORGANIZATION University of North Carolina at Chapel Hill		PROPOSAL NO.		DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR I. M. Importante, PhD		AWARD NO.		Proposed	Granted
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)		NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
		CAL	ACAD	SUMR	
1. I. M. Importante, PI				2	\$ 20,000
2.					
3.					
4.					
5.					
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)					
7. () TOTAL SENIOR PERSONNEL (1-6)					
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. () POSTDOCTORAL ASSOCIATES					
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)					
3. () GRADUATE STUDENTS					
4. () UNDERGRADUATE STUDENTS					
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					
6. () OTHER					
TOTAL SALARIES AND WAGES (A + B)					
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)					
TOTAL EQUIPMENT					
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)					
2. FOREIGN					
F. PARTICIPANT SUPPORT					
1. STIPENDS \$					
2. TRAVEL					
3. SUBSISTENCE					
4. OTHER					
TOTAL NUMBER OF PARTICIPANTS ()		TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES					
2. PUBLICATION/DOCUMENTATION/DISSEMINATION					
3. CONSULTANT SERVICES					
4. COMPUTER SERVICES					
5. SUBAWARDS					
6. OTHER					
TOTAL OTHER DIRECT COSTS					
H. TOTAL DIRECT COSTS (A THROUGH G)					
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS (F&A)					
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG I.I.D.7.i.)					
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$	\$
M. COST SHARING: PROPOSED LEVEL \$		AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*		DATE		FOR NSF USE ONLY	
ORG. REP. TYPED NAME & SIGNATURE*		DATE		INDIRECT COST RATE VERIFICATION	
				Date Checked	Date of Rate Sheet
				Initials-ORG	

Enter PI name and effort on line A.1. Note: effort is entered under either the CAL (calendar) column for 12 month appointments or the ACAD and/or SUMR columns for 9 month appointments.



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YEAR 1 PROPOSAL BUDGET

ORGANIZATION				FOR NSF USE ONLY			
University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.		Proposed	Granted
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
				CAL	ACAD	SUMR	
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)							
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. () POSTDOCTORAL ASSOCIATES							
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. () GRADUATE STUDENTS							
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
COSTS							
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.i.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						\$	\$
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
						INDIRECT COST RATE VERIFICATION	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		Date Checked	Initials-ORG

Enter Co-PI
and all other
senior
personnel.



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YEAR 1 PROPOSAL BUDGET

FOR NSF USE ONLY

ORGANIZATION University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR I. M. Importante, PhD				AWARD NO.		Proposed	Granted
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
				CAL	ACAD	SUMR	
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1	2		27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. () POSTDOCTORAL ASSOCIATES							
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. () GRADUATE STUDENTS							
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT COSTS			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$ \$			
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		INDIRECT COST RATE VERIFICATION	
						Date Checked	Date of Rate Sheet
						Initials-ORG	

When totaling columns, don't forget to enter the total # of senior personnel on line A.7.



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YEAR 1 PROPOSAL BUDGET

FOR NSF USE ONLY

ORGANIZATION University of North Carolina at Chapel Hill		PROPOSAL NO.		DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR I. M. Importante, PhD		AWARD NO.		Proposed	Granted
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)		NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
		CAL	ACAD	SUMR	
1. I. M. Importante, PI				2	\$ 20,000
2. U.R. Knott, Co-PI		1			7,000
3.					
4.					
5.					
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)					
7. (2) TOTAL SENIOR PERSONNEL (1-6)		1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (1) POSTDOCTORAL ASSOCIATES		12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)					
3. () GRADUATE STUDENTS					
4. () UNDERGRADUATE STUDENTS					
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					
6. () OTHER					
TOTAL SALARIES AND WAGES (A + B)					
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)					
TOTAL EQUIPMENT					
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)					
2. FOREIGN					
F. PARTICIPANT SUPPORT					
1. STIPENDS \$					
2. TRAVEL					
3. SUBSISTENCE					
4. OTHER					
TOTAL NUMBER OF PARTICIPANTS ()		TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES					
2. PUBLICATION/DOCUMENTATION/DISSEMINATION					
3. CONSULTANT SERVICES					
4. COMPUTER SERVICES					
5. SUBAWARDS					
6. OTHER					
TOTAL OTHER DIRECT COSTS					
H. TOTAL DIRECT COSTS (A THROUGH G)					
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS (F&A)					
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)					
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)		\$		\$	
M. COST SHARING: PROPOSED LEVEL \$		AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*		DATE		FOR NSF USE ONLY	
ORG. REP. TYPED NAME & SIGNATURE*		DATE		INDIRECT COST RATE VERIFICATION	
				Date Checked	Date of Rate Sheet
				Initials-ORG	

Enter post-doc
information, if
applicable.



YEAR 1 PROPOSAL BUDGET

FOR NSF USE ONLY

ORGANIZATION University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR I. M. Importante, PhD				AWARD NO.		Proposed	Granted
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
				CAL	ACAD	SUMR	
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS							45,050
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$ \$			
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE			
				FOR NSF USE ONLY			
				INDIRECT COST RATE VERIFICATION			
				Date Checked Date of Rate Sheet Initials-ORG			
ORG. REP. TYPED NAME & SIGNATURE*				DATE			

Note: The "month column" does not extend to graduate students, so this entry may be unclear without further explanation.

Where would you provide this explanation?



YEAR 1 PROPOSAL BUDGET

FOR NSF USE ONLY

ORGANIZATION University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR I. M. Importante, PhD				AWARD NO.		Proposed	Granted
A. SENIOR PERSONNEL: PI/PI, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
				CAL	ACAD	SUMR	
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS							45,050
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						\$	\$
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PI D TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
						INDIRECT COST RATE VERIFICATION	
						Date Checked	Date of Rate Sheet
ORG. REP. TYPED NAME & SIGNATURE*				DATE		Initials-ORG	

The Budget Justification!
(of course)

In this case, the budget includes 2 grad students at \$17K each for academic year plus one for the summer at \$11,050.

Remember: the budget justification is used to explain calculations and to explain why each cost is needed to accomplish the Scope of Work!



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YEAR 1 PROPOSAL BUDGET

ORGANIZATION				FOR NSF USE ONLY			
University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.		Proposed	Granted
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/PI, Co-PIs, Faculty and Other Senior Associates				NSF-Funded		Funds	Funds
List each separately with name and title. (A.7. Show number in brackets)				Person-months		Requested By	Granted by NSF
				CAL	ACAD	Proposer	(If Different)
1.	I. M. Importante, PI				2	\$ 20,000	\$
2.	U.R. Knott, Co-PI			1		7,000	
3.							
4.							
5.							
6.	() OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)						
7.	(2) TOTAL SENIOR PERSONNEL (1-6)			1	2	27,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1.	(1) POSTDOCTORAL ASSOCIATES			12		45,000	
2.	() OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)						
3.	(2) GRADUATE STUDENTS					45,050	
4.	() UNDERGRADUATE STUDENTS						
5.	() SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						
6.	() OTHER						
TOTAL SALARIES AND WAGES (A + B)						117,050	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							
E. TRAVEL							
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
COSTS							
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						\$	\$
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PI D TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
						INDIRECT COST RATE VERIFICATION	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		Date Checked	Date of Rate Sheet
						Initials-ORG	



Total all salaries!



YEAR 1 PROPOSAL BUDGET

ORGANIZATION				PROPOSAL NO.		DURATION (MONTHS)	
University of North Carolina at Chapel Hill						Proposed	Granted
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.			
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/PI, Co-PIs, Faculty and Other Senior Associates				NSF-Funded		Funds	Funds
List each separately with name and title. (A.7. Show number in brackets)				Person-months		Requested By	Granted by NSF
				CAL	ACAD	Proposer	(If Different)
1. I. M. Importante, PI					2	\$ 20,000	\$
2. U.R. Knott, Co-PI				1		7,000	
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1	2	27,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12		45,000	
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS						45,050	
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)						117,050	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							
E. TRAVEL							
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
COSTS							
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						\$	\$
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PI D TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		INDIRECT COST RATE VERIFICATION	
						Date Checked	Date of Rate Sheet

To calculate fringe benefits, use the separate rates for the 3 "types" of employees: faculty, post-docs and graduate students!



YEAR 1 PROPOSAL BUDGET

ORGANIZATION				PROPOSAL NO.		DURATION (MONTHS)	
University of North Carolina at Chapel Hill						Proposed	Granted
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.			
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
				CAL	ACAD	SUMR	
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS							45,050
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							117,050
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
COSTS							
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						\$	\$
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		INDIRECT COST RATE VERIFICATION	
						Date Checked	Date of Rate Sheet
						Initials-ORG	

Faculty
22.04% plus
\$432.66 per
month health

Post-docs
8.78% plus
\$293.57 per
month health

**Graduate
students**
\$224.47 per
month health

Fringe Benefit Calculation

Faculty:

$\$27,000 * 22.04\%$	\$5,950.00
3 months health @ \$432.66	\$1,297.98

Post-doc:

$\$45,000 * 8.78\%$	\$3,951.00
12 months @ \$293.57	\$3,522.84

Graduate Students:

21 months @ \$224.47	\$4,713.87
----------------------	------------

Total

\$19,435.69



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YEAR 1 PROPOSAL BUDGET

FOR NSF USE ONLY

ORGANIZATION University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR I. M. Importante, PhD				AWARD NO.		Proposed	Granted
A. SENIOR PERSONNEL: PI/PO, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
				CAL	ACAD	SUMR	
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS							45,050
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							117,050
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							19,436
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$ _____							
2. TRAVEL _____							
3. SUBSISTENCE _____							
4. OTHER _____							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						\$	\$
M. COST SHARING: PROPOSED LEVEL \$ _____				AGREED LEVEL IF DIFFERENT: \$ _____			
PI/PO TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		INDIRECT COST RATE VERIFICATION	
						Date Checked	Date of Rate Sheet

Enter whole
dollars only,
you may
either round
or truncate!



54

YEAR 1 PROPOSAL BUDGET

ORGANIZATION				PROPOSAL NO.		DURATION (MONTHS)	
University of North Carolina at Chapel Hill						Proposed	Granted
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.			
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/ PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
				CAL	ACAD	SUMR	
1. I. M. Importante, PI					2	\$ 20,000	\$
2. U.R. Knott, Co-PI				1		7,000	
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1	2	27,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12		45,000	
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS						45,050	
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)						117,050	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						19,436	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						136,486	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						\$	\$
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/ PD TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		INDIRECT COST RATE VERIFICATION	
						Date Checked	Date of Rate Sheet

Then total salary and fringe benefits!



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YEAR 1 PROPOSAL BUDGET

ORGANIZATION				PROPOSAL NO.		DURATION (MONTHS)	
University of North Carolina at Chapel Hill						Proposed	Granted
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.			
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/ PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
	CAL	ACAD	SUMR				
1. I. M. Importante, PI			2	\$	20,000	\$	
2. U.R. Knott, Co-PI	1				7,000		
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)	1		2		27,000		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES	12				45,000		
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS					45,050		
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)					117,050		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					19,436		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					136,486		
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
1. Blade Servers - 2 at \$5,700 each							
2. Point Grey Grasshopper Model XXX Camera - \$7,250							
TOTAL EQUIPMENT					18,650		
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$ _____							
2. TRAVEL _____							
3. SUBSISTENCE _____							
4. OTHER _____							
TOTAL NUMBER OF PARTICIPANTS () TOTAL PARTICIPANT COSTS							
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					\$		\$
M. COST SHARING: PROPOSED LEVEL \$ _____				AGREED LEVEL IF DIFFERENT: \$ _____			
PI/ PD TYPED NAME AND SIGNATURE*				DATE	FOR NSF USE ONLY		
ORG. REP. TYPED NAME & SIGNATURE*				DATE	INDIRECT COST RATE VERIFICATION		
					Date Checked	Date of Rate Sheet	Initials-ORG

List each piece of equipment separately showing the cost per unit. Then enter the total budgeted equipment amount on line D.



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YEAR 1 PROPOSAL BUDGET

ORGANIZATION				PROPOSAL NO.		DURATION (MONTHS)	
University of North Carolina at Chapel Hill						Proposed	Granted
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.			
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
				CAL	ACAD	SUMR	
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS							45,050
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							117,050
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							19,436
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							136,486
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
1. Blade Servers - 2 at \$5,700 each							
2. Point Grey Grasshopper Model XXX Camera - \$7,250							
TOTAL EQUIPMENT							18,650
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							5,000
2. FOREIGN							5,000
F. PARTICIPANT SUPPORT							
1. STIPENDS \$ _____							
2. TRAVEL _____							
3. SUBSISTENCE _____							
4. OTHER _____							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$ \$			
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE			
				FOR NSF USE ONLY			
ORG. REP. TYPED NAME & SIGNATURE*				DATE			
				INDIRECT COST RATE VERIFICATION			
				Date Checked Date of Rate Sheet Initials-ORG			

FOR NSF USE ONLY

Note: Line E (travel) is divided into E.1 (domestic) and E.2 (foreign). Enter budget amounts for each separately.

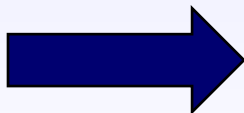
**YEAR 1 PROPOSAL BUDGET**

ORGANIZATION University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR I. M. Importante, PhD				AWARD NO.		Proposed	Granted
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
				CAL	ACAD	SUMR	
1. I. M. Importante, PI					2	\$ 20,000	\$
2. U.R. Knott, Co-PI				1		7,000	
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1	2	27,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12		45,000	
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS						45,050	
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)						117,050	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						19,436	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						136,486	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.) 1. Blade Servers – 2 at \$5,700 each 2. Point Grey Grasshopper Model XXX Camera - \$7,250							
TOTAL EQUIPMENT						18,650	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)						5,000	
2. FOREIGN						5,000	
F. PARTICIPANT SUPPORT							
1. STIPENDS \$ _____							
2. TRAVEL _____							
3. SUBSISTENCE _____							
4. OTHER _____							
TOTAL NUMBER OF PARTICIPANTS () TOTAL PARTICIPANT COSTS							
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES						2,500	
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES						4,500	
4. COMPUTER SERVICES							
5. SUBAWARDS							
6. OTHER (Graduate Student Tuition)							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE) Base (MTDC) = \$209,344 F&A rate 48%							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						\$	\$
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		INDIRECT COST RATE VERIFICATION	
						Date Checked	Date of Rate Sheet

Enter amounts for materials and supplies, publication, and consultant services.

**YEAR 1 PROPOSAL BUDGET**

ORGANIZATION				FOR NSF USE ONLY			
University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
						Proposed	Granted
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.			
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
List each separately with name and title. (A.7. Show number in brackets)				CAL	ACAD	SUMR	
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS							45,050
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							117,050
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							19,436
							136,486
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
1. Blade Servers – 2 at \$5,700 each							
2. Point Grey Grasshopper Model XXX Camera - \$7,250							
TOTAL EQUIPMENT							18,650
E. TRAVEL							
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							5,000
2. FOREIGN							5,000
F. PARTICIPANT SUPPORT							
1. STIPENDS \$ _____							
2. TRAVEL _____							
3. SUBSISTENCE _____							
4. OTHER _____							
TOTAL NUMBER OF PARTICIPANTS () TOTAL PARTICIPANT COSTS							
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							2,500
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							4,500
4. COMPUTER SERVICES							14,445
5. SUBAWARDS							
6. OTHER (Graduate Student Tuition)							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
Base (MTDC) = \$209,344 F&A rate 48%							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
						INDIRECT COST RATE VERIFICATION	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		Date Checked	Date of Rate Sheet
						Initials-ORG	



Follow your departmental and/or institutional rules for calculating computer services fees as applicable.

UNC Computer Science Computer Services Fees

Faculty, Staff and Post-docs:

- billed at a rate of \$535 per month (pro-rated for partial months)
- charged to salary source(s) proportionally

Graduate Students:

- billed at $\frac{1}{2}$ rate for academic year
- billed at full rate for summer
- charged to salary source(s)

Simply sum the total number of months, multiply by \$535, and enter amount on line G.4.



YEAR 1 PROPOSAL BUDGET

ORGANIZATION				FOR NSF USE ONLY			
University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
						Proposed	Granted
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.			
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates				NSF-Funded		Funds	Funds
List each separately with name and title. (A.7. Show number in brackets)				Person-months		Requested By	Granted by NSF
				CAL	ACAD	Proposer	(If Different)
1. I. M. Importante, PI					2	\$ 20,000	\$
2. U.R. Knott, Co-PI				1		7,000	
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1	2	27,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12		45,000	
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS						45,050	
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)						117,050	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						19,436	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						136,486	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
1. Blade Servers - 2 at \$5,700 each							
2. Point Grey Grasshopper Model XXX Camera - \$7,250							
TOTAL EQUIPMENT						18,650	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)						5,000	
2. FOREIGN						5,000	
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES				2,500			
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES				4,500			
4. COMPUTER SERVICES				14,445			
5. SUBAWARDS							
6. OTHER (Graduate Student Tuition)							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
Base (MTDC) = \$209,344 F&A rate 48%							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$		\$	
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
						INDIRECT COST RATE VERIFICATION	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		Date Checked	Date of Rate Sheet
						Initials-ORG	

Faculty = 3

Post-doc = 12

AY Graduate students = 9

(2 for 9 months each at 1/2 time)

SM Graduate student = 3 (summer)

Total = 27

27 * \$535 = \$14,445

Research Administration for Scientists



YEAR 1 PROPOSAL BUDGET

ORGANIZATION				FOR NSF USE ONLY			
University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
						Proposed	Granted
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.			
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
List each separately with name and title. (A.7. Show number in brackets)				CAL	ACAD	SUMR	
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS							45,050
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							117,050
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							19,436
							136,486
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
1. Blade Servers - 2 at \$5,700 each							
2. Point Grey Grasshopper Model XXX Camera - \$7,250							
TOTAL EQUIPMENT							18,650
E. TRAVEL							
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							5,000
2. FOREIGN							5,000
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							2,500
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES							4,500
4. COMPUTER SERVICES							14,445
5. SUBAWARDS							50,000
6. OTHER (Graduate Student Tuition)							
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
Base (MTDC) = \$209,344 F&A rate 48%							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						\$	\$
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
						INDIRECT COST RATE VERIFICATION	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		Date Checked	Date of Rate Sheet
						Initials-ORG	

Enter total budget for sub-awardees. Note: This is the total budgeted amount (direct and F&A) for all sub-awardees. Provide details in the budget justification.



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YEAR 1 PROPOSAL BUDGET

ORGANIZATION				FOR NSF USE ONLY			
University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.		Proposed	Granted
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/PI, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
				CAL	ACAD	SUMR	
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS							45,050
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							117,050
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							19,436
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							136,486
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
1. Blade Servers - 2 at \$5,700 each							
2. Point Grey Grasshopper Model XXX Camera - \$7,250							
TOTAL EQUIPMENT							18,650
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$ _____							
2. TRAVEL _____							
3. SUBSISTENCE _____							
4. OTHER _____							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES				2,500			
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES				4,500			
4. COMPUTER SERVICES				14,445			
5. SUBAWARDS				50,000			
6. OTHER (Graduate Student Tuition)				13,556			
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE) Base (MTDC) = \$209,344 F&A rate 48%							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						\$	\$
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PI D TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		INDIRECT COST RATE VERIFICATION	
						Date Checked	Date of Rate Sheet
						Initials-ORG	

Enter total budget for graduate student tuition (in-state portion only).

Tuition charges on budgets

UNC-CH Policy

- In-state tuition is always charged to the salary source.
- Out-of-state tuition is either charged to "tuition remission" allocation or to the student, but never to federal funding sources!

Policies may vary by type of institution

- Private universities usually have a single tuition rate (not divided by in-state and out-of-state) and may charge full amount to sponsored program budgets if treated "consistently" under A-21 rules.

A-21 Test - Costs incurred under like circumstances must be treated consistently, e.g., to charge grad student tuition to federal grants, the institution must consistently charge grad student tuition without regard to funding source for all students working in like circumstances.



YEAR 1 PROPOSAL BUDGET

FOR NSF USE ONLY

ORGANIZATION University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR I. M. Importante, PhD				AWARD NO.		Proposed	Granted
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
				CAL	ACAD	SUMR	
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS							45,050
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							117,050
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							19,436
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							136,486
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
1. Blade Servers - 2 at \$5,700 each							
2. Point Grey Grasshopper Model XXX Camera - \$7,250							
TOTAL EQUIPMENT							18,650
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN							
F. PARTICIPANT SUPPORT							
1. STIPENDS \$ _____							
2. TRAVEL _____							
3. SUBSISTENCE _____							
4. OTHER _____							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
COSTS							
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES				2,500			
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES				4,500			
4. COMPUTER SERVICES				14,445			
5. SUBAWARDS				50,000			
6. OTHER (Graduate Student Tuition)				13,556			
TOTAL OTHER DIRECT COSTS							
H. TOTAL DIRECT COSTS (A THROUGH G)							
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE) Base (MTDC) = \$209,344 F&A rate 48%							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						\$	\$
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		INDIRECT COST RATE VERIFICATION	
						Date Checked	Date of Rate Sheet

Note: F&A is not charged to tuition, but this line may include "other direct costs" where F&A is charged. So be certain to separate and explain in budget justification.

**YEAR 1 PROPOSAL BUDGET**

ORGANIZATION				FOR NSF USE ONLY				
University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)		
						Proposed	Granted	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.				
I. M. Importante, PhD								
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates				NSF-Funded		Funds	Funds	
List each separately with name and title. (A.7. Show number in brackets)				Person-months		Requested By	Granted by NSF	
				CAL	ACAD	SUMR	Proposer	(If Different)
1. I. M. Importante, PI						2	\$ 20,000	\$
2. U.R. Knott, Co-PI				1			7,000	
3.								
4.								
5.								
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)								
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)								
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000	
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)								
3. (2) GRADUATE STUDENTS							45,050	
4. () UNDERGRADUATE STUDENTS								
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)								
6. () OTHER								
TOTAL SALARIES AND WAGES (A + B)							117,050	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							19,436	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							136,486	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)								
1. Blade Servers – 2 at \$5,700 each								
2. Point Grey Grasshopper Model XXX Camera - \$7,250								
TOTAL EQUIPMENT							18,650	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							5,000	
2. FOREIGN							5,000	
F. PARTICIPANT SUPPORT								
1. STIPENDS \$								
2. TRAVEL								
3. SUBSISTENCE								
4. OTHER								
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT				
G. OTHER DIRECT COSTS								
1. MATERIALS AND SUPPLIES				2,500				
2. PUBLICATION/DOCUMENTATION/DISSEMINATION								
3. CONSULTANT SERVICES				4,500				
4. COMPUTER SERVICES				14,445				
5. SUBAWARDS				50,000				
6. OTHER (Graduate Student Tuition)				13,556				
TOTAL OTHER DIRECT COSTS				85,001				
H. TOTAL DIRECT COSTS (A THROUGH G)				250,137				
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)								
TOTAL INDIRECT COSTS (F&A)								
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)								
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)								
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$				
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$				
PI/PD TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY		
						INDIRECT COST RATE VERIFICATION		
ORG. REP. TYPED NAME & SIGNATURE*				DATE		Date Checked	Date of Rate Sheet	Initials-ORG

Total "other direct costs" (Section G) and then total all "direct costs" (Section A through G).



YEAR 1 PROPOSAL BUDGET

ORGANIZATION				FOR NSF USE ONLY			
University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
						Proposed	Granted
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.			
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
List each separately with name and title. (A.7. Show number in brackets)				CAL	ACAD	SUMR	
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS							45,050
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							117,050
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							19,436
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							136,486
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
1. Blade Servers - 2 at \$5,700 each							
2. Point Grey Grasshopper Model XXX Camera - \$7,250							
TOTAL EQUIPMENT							18,650
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							5,000
2. FOREIGN							5,000
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT COSTS			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES				2,500			
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES				4,500			
4. COMPUTER SERVICES				14,445			
5. SUBAWARDS				50,000			
6. OTHER (Graduate Student Tuition)				13,556			
TOTAL OTHER DIRECT COSTS				85,001			
H. TOTAL DIRECT COSTS (A THROUGH G)				250,137			
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
Base (MTDC) = \$192,931 F&A rate 52%							
TOTAL INDIRECT COSTS (F&A)							
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.j.)				0			
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE			
				FOR NSF USE ONLY			
				INDIRECT COST RATE VERIFICATION			
				Date Checked Date of Rate Sheet Initials-ORG			
ORG. REP. TYPED NAME & SIGNATURE*				DATE			

Calculate the base (MTDC), determine the applicable F&A rate and enter both in Section I.

Base \$250,137
 - \$18,650 (equipment) -
 \$13,556 (tuition) -
 \$25,000 (sub-awards over \$25K) =
 \$192,931



YEAR 1 PROPOSAL BUDGET

ORGANIZATION				FOR NSF USE ONLY		
University of North Carolina at Chapel Hill				PROPOSAL NO.	DURATION (MONTHS)	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.	Proposed	Granted
I. M. Importante, PhD						
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)			NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)
			CAL	ACAD	SUMR	
1. I. M. Importante, PI					2	\$ 20,000
2. U.R. Knott, Co-PI			1			7,000
3.						
4.						
5.						
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)						
7. (2) TOTAL SENIOR PERSONNEL (1-6)			1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. (1) POSTDOCTORAL ASSOCIATES			12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)						
3. (2) GRADUATE STUDENTS						45,050
4. () UNDERGRADUATE STUDENTS						
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						
6. () OTHER						
TOTAL SALARIES AND WAGES (A + B)						117,050
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						21,260
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						138,310
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.) 1. Blade Servers - 2 at \$5,700 each 2. Point Grey Grasshopper Model XXX Camera - \$7,250						
TOTAL EQUIPMENT						18,650
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)						5,000
2. FOREIGN						5,000
F. PARTICIPANT SUPPORT						
1. STIPENDS \$						
2. TRAVEL						
3. SUBSISTENCE						
4. OTHER						
TOTAL NUMBER OF PARTICIPANTS ()			TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS						
1. MATERIALS AND SUPPLIES			2,500			
2. PUBLICATION/DOCUMENTATION/DISSEMINATION						
3. CONSULTANT SERVICES			4,500			
4. COMPUTER SERVICES			14,445			
5. SUBAWARDS			50,000			
6. OTHER (Graduate Student Tuition)			13,556			
TOTAL OTHER DIRECT COSTS			85,001			
H. TOTAL DIRECT COSTS (A THROUGH G)			250,137			
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE) Base (MTDC) = \$192,931 F&A rate 52%						
TOTAL INDIRECT COSTS (F&A)			100,324			
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)						
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.)						
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)			\$			
M. COST SHARING: PROPOSED LEVEL \$			AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*			DATE	FOR NSF USE ONLY		
ORG. REP. TYPED NAME & SIGNATURE*			DATE	INDIRECT COST RATE VERIFICATION		
				Date Checked	Date of Rate Sheet	Initials-ORG

Calculate and enter the F&A amount on line J.
(\$192,931 * 52% = \$100,324).

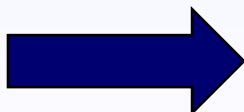
**YEAR 1 PROPOSAL BUDGET**

ORGANIZATION				FOR NSF USE ONLY			
University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)	
						Proposed	Granted
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				AWARD NO.			
I. M. Importante, PhD							
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates				NSF-Funded		Funds	
List each separately with name and title. (A.7. Show number in brackets)				Person-months		Requested By	
				CAL	ACAD	SUMR	Proposer
1. I. M. Importante, PI						2	\$ 20,000
2. U.R. Knott, Co-PI				1			7,000
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)							
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)							
3. (2) GRADUATE STUDENTS							45,050
4. () UNDERGRADUATE STUDENTS							
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							
6. () OTHER							
TOTAL SALARIES AND WAGES (A + B)							117,050
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							21,260
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							138,310
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
1. Blade Servers - 2 at \$5,700 each							
2. Point Grey Grasshopper Model XXX Camera - \$7,250							
TOTAL EQUIPMENT							18,650
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							5,000
2. FOREIGN							5,000
F. PARTICIPANT SUPPORT							
1. STIPENDS \$							
2. TRAVEL							
3. SUBSISTENCE							
4. OTHER							
TOTAL NUMBER OF PARTICIPANTS ()				TOTAL PARTICIPANT			
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES				2,500			
2. PUBLICATION/DOCUMENTATION/DISSEMINATION							
3. CONSULTANT SERVICES				4,500			
4. COMPUTER SERVICES				14,445			
5. SUBAWARDS				50,000			
6. OTHER (Graduate Student Tuition)				13,556			
TOTAL OTHER DIRECT COSTS				85,001			
H. TOTAL DIRECT COSTS (A THROUGH G)				250,137			
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)							
Base (MTDC) = \$192,931 F&A rate 52%							
TOTAL INDIRECT COSTS (F&A)				100,324			
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)				350,461			
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.)							
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$			
M. COST SHARING: PROPOSED LEVEL \$				AGREED LEVEL IF DIFFERENT: \$			
PI/PD TYPED NAME AND SIGNATURE*				DATE		FOR NSF USE ONLY	
						INDIRECT COST RATE VERIFICATION	
ORG. REP. TYPED NAME & SIGNATURE*				DATE		Date Checked	Date of Rate Sheet
						Initials-ORG	

Total lines H
(total direct)
and I (total
indirect) and
enter sum on
line J.

**YEAR 1 PROPOSAL BUDGET**

ORGANIZATION University of North Carolina at Chapel Hill				PROPOSAL NO.		DURATION (MONTHS)		
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR I. M. Importante, PhD				AWARD NO.		Proposed	Granted	
A. SENIOR PERSONNEL: PI/PD, Co-PIs, Faculty and Other Senior Associates List each separately with name and title. (A.7. Show number in brackets)				NSF-Funded Person-months		Funds Requested By Proposer	Funds Granted by NSF (If Different)	
				CAL	ACAD	SUMR		
1. I. M. Importante, PI						2	\$ 20,000	
2. U.R. Knott, Co-PI				1			7,000	
3.								
4.								
5.								
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)								
7. (2) TOTAL SENIOR PERSONNEL (1-6)				1		2	27,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)								
1. (1) POSTDOCTORAL ASSOCIATES				12			45,000	
2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)								
3. (2) GRADUATE STUDENTS							45,050	
4. () UNDERGRADUATE STUDENTS								
5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)								
6. () OTHER								
TOTAL SALARIES AND WAGES (A + B)							117,050	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							21,260	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							138,310	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.) 1. Blade Servers - 2 at \$5,700 each 2. Point Grey Grasshopper Model XXX Camera - \$7,250								
TOTAL EQUIPMENT							18,650	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							5,000	
2. FOREIGN							5,000	
F. PARTICIPANT SUPPORT								
1. STIPENDS \$ _____								
2. TRAVEL _____								
3. SUBSISTENCE _____								
4. OTHER _____								
TOTAL NUMBER OF PARTICIPANTS () TOTAL PARTICIPANT COSTS								
G. OTHER DIRECT COSTS								
1. MATERIALS AND SUPPLIES				2,500				
2. PUBLICATION/DOCUMENTATION/DISSEMINATION								
3. CONSULTANT SERVICES				4,500				
4. COMPUTER SERVICES				14,445				
5. SUBAWARDS				50,000				
6. OTHER (Graduate Student Tuition)				13,556				
TOTAL OTHER DIRECT COSTS				85,001				
H. TOTAL DIRECT COSTS (A THROUGH G)				250,137				
I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE) Base (MTDC) = \$192,931 F&A rate 52%								
TOTAL INDIRECT COSTS (F&A)				100,324				
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)				350,461				
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECT SEE GPG II.D.7.)				0				
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$350,461				
M. COST SHARING: PROPOSED LEVEL \$								
AGREED LEVEL IF DIFFERENT: \$								
PI/PD TYPED NAME AND SIGNATURE*				DATE				
ORG. REP. TYPED NAME & SIGNATURE*				DATE				
				FOR NSF USE ONLY				
				INDIRECT COST RATE VERIFICATION				
				Date Checked Date of Rate Sheet Initials-ORG				



Line K will always be zero for new proposals, so enter zero and total lines J, K and L. Line M will only have an entry if the solicitation requires cost share!

Remember: the budget justification is used to **explain calculations** and to explain why each cost is needed to accomplish the Scope of Work!

Remember: the budget justification is used to explain calculations and to explain why each cost is needed to accomplish the Scope of Work!

If done properly, the
reviewer will
understand how each
cost was calculated and
why it is necessary!

Sample Budget Justification

Personnel

There is one Principal Investigator and one Co- Principal Investigator on this project:

1. _____, Associate Professor of _____, will be the principal investigator and will lead the research and will _____. We are requesting ____ months effort.
2. _____, Assistant Professor of _____, will assist in this effort by doing _____. We are requesting ____ months effort.
3. Support for two (2) full-time (12 month) graduate student research assistants (RAs) is requested.
 - 1 student will _____.
 - 1 student will _____.

All salaries are inflated at a rate of ____% (usually 2-3%) per year for years two and three. Faculty fringe benefits are calculated at a rate of 22.04% of salary plus the cost of health insurance (\$432.66 per month). For academic faculty (9-month), health insurance is charged on academic months only. For research faculty and other 12 month appointments, health insurance is charged based on monthly effort. Post-doc fringe benefits are calculated at a rate of 8.78% of salary plus the cost of health insurance (\$293.57 per month). Graduate student fringe benefits are the cost of health insurance (\$224.47 per month).

Sample Budget Justification

Equipment

Support is requested for the purchase of _____ in year _____ of the project. It has an estimated cost of \$_____ and will be used to _____.

Travel

\$_____ per year is requested for domestic travel and \$_____ is requested for foreign travel to technical conferences to present the results of our research. This represents _____ domestic and _____ foreign trips per year. Travel lines are inflated by X% in years two and three.

Other Direct Costs:

Materials and Supplies

\$_____ per year is requested to pay for project specific software, research supplies and lab consumable supplies. This figure has been calculated based upon past experience with similar projects. No routine office supplies are charged to sponsored research projects.

Sample Budget Justification

Computer Services Fees: The Department of Computer Science distributes the cost of maintaining its shared computing infrastructure among all users through its Computer Services Recharge Center. The University reviews this Recharge Center each year to ensure that it is in compliance with all applicable federal and state regulations, including OMB Circulars A-21 and A-110, as well as the Federal Cost Accounting Standards. Rates are adjusted annually to ensure that the Recharge Center is operating on a strict cost recovery basis. This Recharge Center is subject to, and has passed, both federal and state audits. All records are available for review by authorized federal and state representatives. **The rate is \$535 per Full Time Equivalent (FTE) per month.** Rates apply to each user and are charged according to salary distribution, e.g., if a person works 50% on one project and 50% on another during the month, each project pays 50% of the fee for that month. All employees and students are assessed the same rate without regard to their salary source (federal, state, foundation, commercial). Undergraduate students working on research projects are typically not heavy users of CSRC services. Their fee will vary from 5-25% of the full fee, depending upon the number of hours worked, e.g., a student working 40 hours/week would pay 25% of the full fee and a student working 10 hours/week would pay 6.25% of the full fee. This fee will be paid from the contract or grant that supports the student. No additional fees are charged, and all services included within the Recharge Center are available to all users. The Department's computing environment includes more than 680 computers integrated by means of high-speed networks, including an integrated voice/data switch and video switches. E-mail, internet access, routine backups, a host of personal productivity and development software, the services of the TSC (Technical Support Center) Help Desk, UNIX System Administration, PC (Windows and NT) and Macintosh System Administration and the labor for most hardware repair are examples of the available services.

Sample Budget Justification

Communications

\$500 per year is requested to cover the cost of Federal Express or other expedited package delivery services.

Graduate Student Tuition

All supported graduate students at UNC-Chapel Hill have their in-state tuition paid by the source of their support, e.g., federal grant, state teaching assistant funds, fellowship grant. These numbers are estimates as tuition charges are set by the North Carolina Legislature annually: \$5,640 (estimate) for academic year 2011-2012.

All categories of Other Direct Costs are inflated by X% in years 2 and 3 except the two that are formula driven, i.e., computer services and maintenance.

Facilities & Administrative Costs

The University of North Carolina at Chapel Hill has an approved Facilities & Administrative (F&A) cost rate agreement providing for an F&A cost rate of 52% of MTDC. This rate is not applied to equipment over \$5,000 per unit, graduate student tuition or any subcontract costs in excess of \$25,000.

COMP 918: Research Administration for Scientists

Administrative Requirements for Grants and Cooperative Agreements (OMB Circular A-110) and for Contracts (FAR)

Tim Quigg, Lecturer and Associate Chair for
Administration, Finance and Entrepreneurship
Computer Science Department, UNC-Chapel Hill

Your NSF PM calls and says the proposal you submitted 5 months ago has been recommended for funding.

Great News: But there's so much to do!

- Order the computer that was in the budget.
- Register for the conference next month.
- Hire that postdoc from France before she "gets away."
- And hallelujah - your personal finances have improved because you'll get summer salary after all!

Your NSF PM calls and says the proposal you submitted 5 months ago has been recommended for funding.

Great News: But there's so much to do!

- Order the computer that was in the budget.
- Register for the conference.
- Hire a travel agent before she "goes away."
- And hallelujah - your personal finances have improved because you'll get summer salary after all!

What's wrong here?

Your NSF PM calls and says the proposal you submitted 5 months ago has been recommended for funding.

What does **recommended for funding** mean?

- PM has sent the proper paperwork to the Grants Manager recommending the project for funding at a certain level with specific start and end dates.
- Funding is likely, but it's neither guaranteed nor official until the Grants Manager processes the award and the Notification of Award (NOA) is received by your institution.
- Funds can't be spent until the NOA is received by your institution and an account number is assigned!

Except in certain circumstances. We'll talk about the policy covering pre-award costs in a minute!

But now, let's reboot and consider your options when informed that a project is recommended for funding!

Your NSF PM calls and says the proposal you submitted 5 months ago has been **recommended for funding.**

What should you do?

- Determine the funding level and the estimated start date for the project.
- Alternate plans of action:
 - Do nothing - Simply wait for the NOA to arrive.
 - Preliminary planning - Take steps that will allow you to act quickly when the NOA arrives, e.g., write specs for equipment purchases, prepare ads for new positions, but don't incur expense now.
 - Take actions that actually spend or obligate funds!

Pre-award Costs

Expanded Authority

Agencies may allow recipients to develop their own systems* for approving certain actions that previously required agency approval, e.g., incurring pre-award costs up to 90 days prior to the start date for the award.

* Must be institution-wide and outside the influence of the PI. Rules must be consistently applied.

Expanded Authority

- General rule - If the expense would be allowable within the award period, it is allowable during the 90 day pre-award period as well.
- All pre-award expenditures are incurred at the recipient's risk.
- Usually the NOA will arrive well before the actual start date, so pre-award costs can be incurred at that point with no risk.
- With agency prior approval, pre-award expenditures are allowable more than 90 days prior to the award start date.

But expanded authority rules only apply to grants and cooperative agreements, not to contracts!

It is important to know what rules apply to each award type.

Remember the Golden Rule!

The Golden Rule: He who has the gold, makes the rules!

"There is no law that requires you to take money from the government to support your research but once you do, there are many laws you must follow!"

So what rules apply to each award type?



A-110 Administrative Requirements

Uniform administrative requirements for grants and cooperative agreements with institutions of higher education, hospitals and other non-profit organizations.

"Federal agencies shall not impose additional or inconsistent requirements ... unless specifically required by law or executive order."

Contracts are governed by the FAR and the specific provisions of individual contracts!

Grant Notice of Award has Arrived!

Remember: Awards are made by the agency to an institution in the name of the PI.

- The institution's Sponsored Research Office (SRO) will accept and process the award and then assign an institutional account number.
- From this point forward, the PI will be working in partnership with various departmental and institutional research administrators.
- These folks are important to the PI's success, so make nice. **And listen to their advice/guidance!**

Grant Notice of Award has Arrived!

NOA may fund the project for the first year, multiple years or the entire project period.

If NOA authorizes funding for first year only and

- You underspend the budget during year one

Some agencies require spending at a certain % of the total funded amount before additional funding increments are processed, e.g., NSF's 20% rule and most DOD grants. So it's important to plan expenditure levels appropriately to prevent any reduction or delay in receiving the next year's funding increment.

Grant Notice of Award has Arrived!

NOA may fund the project for the first year, multiple years or the entire project period.

If NOA authorizes funding for first year only and

- You overspend the budget during year one

Some universities won't allow overspending - others require a financial guarantee for the amount overspent from the PI's department. When new funding arrives it will be applied against the negative balance.

Grant Notice of Award has Arrived!

If NOA authorizes funding for the full project period, minimum spending requirements do not apply. Under Expanded Authority:

- Unspent balances at the end of each budget year are automatically carried forward to the next budget year.
- The institution may approve a one-time no-cost extension if it is processed within the required time frame (usually 10 days prior to the project end date) with a project specific reason for the extension.

An unspent balance is not a sufficient reason!

Grant Notice of Award has Arrived!

If NOA authorizes funding for the full project period, minimum spending requirements do not apply. Under Expanded Authority:

- Unspent balances at the end of each budget year are automatically carried forward to the next budget year.
- The institution may approve a one-time no-cost extension if it is processed within the required time frame (usually 10 days prior to the project end date) with a project specific reason for the extension.

Usually any unforeseen delay in a critical project activity is sufficient!

Contract has Arrived!

Contracts are bi-lateral funding documents, so they must be reviewed and signed by the appropriate institutional signatory authority.

- This may take some time since the SRO official must carefully review the specific FAR clauses (usually included by reference) before signing.
- The start date is often the date of the last signature.
- Costs incurred prior to this start date are not allowable for reimbursement.

Contract has Arrived!

Contracts are usually funded incrementally,
often for short periods!

- Limitation of Funds (LOF) FAR clause - The contractor agrees to not exceed the estimated cost of the contract or the established funding limit (the total amount funded to date) and
- The contractor is required to provide written notice of the need for any additional funds at least 60 days before the current funding ends.



Since contracts
are funded
incrementally,
these notices
may be
frequent!

Contract has Arrived!

Contracts are usually funded incrementally,
often for short periods!

- Limitation of Funds (LOF) FAR clause - The contractor agrees to not exceed the estimated cost of the contract or the established funding limit (the total amount funded to date) and
- The contractor is required to provide written notice of the need for any additional funds at least 60 days before the current funding ends.

Example: USAID
project for
\$20m with only
\$50K initially
funded required
immediate
notice!

A-110 Administrative Requirements

- ☐ Financial Management Systems
- ☐ Procurement Standards
- ☐ Program Income
- ☐ Equipment
- ☐ Intangible Property: Patents, Copyright and Data
- ☐ Reports and Records (Performance and Financial)
- ☐ Termination
- ☐ Close-Out
- ☐ Cost Sharing
- ☐ Recharge Centers

A-110 applies to grants and cooperative agreements only. We'll compare and contrast with FAR contract rules as we go!

Financial Management Systems

Remember - A-21 requires that university accounting systems:

- ✓ Allow for the assignment of costs to various institutional functions consistent with A-21 definitions.
- ✓ Allow for unallowable as well as allowable costs to be tracked.

Financial Management Systems

In addition, A-110 requires that university accounting systems provide:

- Accurate, current and complete disclosure of financial results by project.
- Effective control over funds, property and other assets.
- Comparison of outlays with budgeted amounts.

"Each institution must have written policies describing how it minimizes the time between the transfer of funds from the U.S. treasury and the payment of program expenses."

How is money transferred from the Federal Government to the institution?

Many people believe a check is sent to the institution and the money is sitting in a bank account with the PI's name on it.

Sounds nice, but that's not the way it works!

Three methods:

- Letter of Credit (LOC)
- Expense Reimbursement - invoicing
- Cash Advance

Letters of Credit

LOC is the primary method by which most institutions request and receive funds from NIH, NSF and other federal agencies.

- University draws down funds weekly (or on another agreed upon schedule) - the amount of the drawdown is based upon the calculated weekly costs of all assistance awards from that agency.
- Contracts and incoming sub-awards are not included in the LOC, even if the university has an LOC with the funding agency.
- Strict penalties (including paying interest) apply for excessive drawdowns resulting in excess unspent fund balances.

Expense Reimbursement

The method used for requesting and receiving funds from agencies without an LOC or for awards (contracts and sub-awards) not covered by a LOC.

- The university incurs expenses using institutional funds and then prepares/submits an invoice to the agency. Some agencies use electronic invoicing systems, some still use paper.
- Billing periods are usually not more frequent than monthly nor less frequent than quarterly.
- Expense Float - University must carry a considerable amount of expense for a considerable length of time before being reimbursed. Interest charges are not allowable for reimbursement!

Cash Advances

Some agencies advance funds when the institution is unable to manage/afford the "expense float."

- An initial amount of money is "advanced" to cover project expenditures for a designated period, e.g., a quarter.
- Institution then invoices for actual expenses in the same manner as with the Expense Reimbursement method.
- If properly implemented, this method provides adequate funds to cover all project expenses without using any of the institution's funds.

Procurement Standards - Grants

"...for procuring supplies, expendable property, equipment, real property and other services with federal funds."

Recipient procurement systems must address:

- Codes of Conduct to prevent conflicts of interest.
- Competition - "open and free."
- Written procurement procedures.
- Utilization of small businesses, minority-owned firms and women's business enterprises whenever possible - not project specific!

Procurement Standards - Contracts

Requirements for institution level systems are similar. In addition, the university must track expenses against subcontracting plan goals for each federal contract. Reporting is required!

Note: These subcontracting plans are contract-specific and are "over and above" any existing rules/policies at the institution!

Subpart 19.7 Subcontracting Plans

Goals must be established for including a **minimum percentage** of small business concerns, small disadvantaged business concerns, and women-owned small business concerns in any subcontracting* activity under a specific contract. Once accepted by the SBA representative and the CO, the Subcontracting Plan is incorporated into the contract.

* Note: Subcontracting includes items purchased, e.g., supplies, equipment, services, as well as actual subcontracts.

Program Income

"...gross income earned by recipient that is directly generated by a supported activity or earned as a result of the award."

Examples:

- Fees for services, e.g., excess cycles on computer or other equipment.
- Rental of property acquired under award.
- Sale of items fabricated under award.

Program Income

Consistent with agency regulations or the T&C's of the award, Program Income may usually be retained by the recipient and used in one of the following ways:

- Added to the project budget and used to further project objectives.
- Used to finance the non-federal share of the project - must be approved at proposal time.
- Deducted from federal funds - usually the result of not getting prior approval!

IMPORTANT: If you anticipate having program income, include it in the proposal budget. This is the best method for obtaining proper prior approval!

Equipment - Grants

"Tangible, nonexpendable personal property charged directly to the award having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit."

- Title vests with recipient (usually).
- When project ends, residual equipment must be used for:
 - Other projects funded by same agency
 - Other federally funded projects.
- Must have adequate property management system.

Equipment - Contracts

- Contract-Acquired Property - Equipment acquired by a contractor while performing a contract. The Government holds title to this property.
- When the project ends you may be required to return the equipment!
- Note: Sometimes the CO will not fund the equipment line in the contract budget and instead "provide" the equipment from other contracts that are ending.
- Must have adequate property management system.

Patent Rights - Grants

Recipient and Government Rights:

- Recipient may patent (and "own") any invention developed under the award, subject to Bayh-Dole Act and institutional policy.
- Must grant the government a royalty-free, nonexclusive, irrevocable Government-Use license.
- And then there are **"March-In" Rights!**

Patent Rights - Contracts

Subpart 27.3 Intellectual Property

(Not a Standard Clause for Universities)

52.227-13 Patent Rights - **Ownership by the Government** is intended for contracts when the Government requires greater rights - almost never used with non-profits and universities, except in very exceptional circumstances.

Patent Rights - Contracts

52.227-11 - Patents

(Standard Clause for Universities)

The contractor retains rights to inventions but has obligations to the Government including:

- Unrestricted, non-exclusive, royalty-free license.
- Disclosure and notification deadlines.
- Due diligence in disclosure and otherwise complying with the law (Bayh-Dole) and pursuing commercialization as appropriate for the nature of the invention.
- Then there are **"March-In" Rights!**

"March-In" Rights!

- March-In rights give the Federal Government the right to grant other entities licenses if there is a threat to public safety that the owner of the patent is not equipped to handle.
- The likelihood of March-In rights being exercised by the Government is small. To date, they have never been used by the Government - although a few requests have been made!
- However, the chance that a patented invention could prevent a terrorist attack or serve another vital national interest may make the use of March-In Rights more likely in the future!

Copyright - Grants

Recipient and Government Rights:

- Recipient may copyright (and "own") any work developed under the award. Usually the "creator" of the work holds title, however, many universities require assignment of limited rights to the university for copyrighted materials produced under a sponsored project for purposes of meeting the award requirements.
- Recipient must grant the Government a royalty-free, nonexclusive, irrevocable right to reproduce, publish or otherwise use the work for federal purposes or to authorize others to do so.

Data Rights - Grants

Recipient and Government Rights:

- Recipient may obtain, reproduce, publish or otherwise use the data produced under award.
- University data ownership policies vary, but most require an assignment of limited rights to the university for data produced under a sponsored project for purposes of meeting the award requirements.
- Recipient must be willing to authorize others to use for federal purposes.

Note: Neither patent nor copyright law protect data!

Data Rights - Grants

Recipient and Government Rights:

- Recipient may obtain, reproduce, publish or otherwise use the data produced under award.
- University data ownership policies vary, but most require an assignment of limited rights to the university for data produced under a sponsored project for purposes of meeting the award requirements.
- Recipient must be willing to authorize others to use for federal purposes.

The format or other unique characteristics may be subject to copyright protection, but not the actual data!

Data Rights - Grants

Recipient and Government Rights:

- Recipient may obtain, reproduce, publish or otherwise use the data produced under award.
- University data ownership policies vary, but most require an assignment of limited rights to the university for data produced under a sponsored project for purposes of meeting the award requirements.
- Recipient must be willing to authorize others to use for federal purposes.

More on this later in the course!

Copyright and Data Rights - Contracts

52.227-14 Rights in Data - General (Alt IV)

(the preferable clause for universities)

- This clause allows for the assertion of limited or restricted rights to data developed with private funds.
- The Contractor retains rights to data and copyrights first generated, but has obligations to the Government, including:
 - Royalty-free, non-exclusive license.
 - Unlimited rights, unless specified otherwise.

Note: Without Alt IV, the institution may only assert copyright to papers published in technical journals; with Alt IV the institution may assert rights to all data and software.

Grant Progress Reports

PI Responsibility

"Progress reports may not be required less frequent than annually nor more frequent than quarterly."

- Comparison of actual accomplishments with approved goals and objectives for the reporting period.
- If applicable, the reason why goals were not met should be explained.
- Remember - Performance standard is "best reasonable effort."
- Notification of any other developments that may have a significant impact on the project.

Contract Performance Reports

PI/Institution Responsibility

- Reports often involve contract deliverables and payment may be tied to timely submission and subsequent acceptance of the report by the CO.
- The PI prepares and submits performance reports and deliverables as specified in the contract.
- Remember - Performance standard is delivery of "purchased" items, not "best reasonable effort."
- Some SROs want a copy, others just want to be notified when the report is submitted.
- Failure to submit the proper report on time could result in delayed reimbursement or even termination of contract.

Termination - Grants

Award may be terminated only if one of the following situations apply:

- By agency, if the recipient materially fails to comply with the T&Cs of award.
- By agency with the consent of the recipient. Both parties must agree on the termination conditions and the effective date.
- By recipient upon written notification to the agency setting forth the reasons and effective date.

Partial terminations initiated by the recipient must be accepted by agency!

Stop Work Orders - Contract

Situations may occur during contract performance that cause the Government to order a suspension of work or a work stoppage. (FAR 42.13)

- **Suspension of Work** - A suspension of work for a reasonable duration may be ordered by the CO. If the suspension is deemed to be unreasonable, the contractor may submit a written claim for increases in the cost of performance. (FAR 42.1303)
- **Stop-Work Orders** may "be used ... for reasons such as advancement of the state-of-the-art ... or realignment of programs." The clause provides for "the administrative settlement of contractor claims that arise from delays ... caused by the acts or failure to act of the CO." (FAR 42.1304)

Stop Work Orders - Contract

Situations may occur during contract performance that cause the Government to order a suspension of work or a work stoppage. (FAR 42.13)

- Suspension of Work - A

reasonable
suspension
may suspend
performance

Of course, stop-work orders are often the first step "on the road" to contract termination!

a
If the
contractor
cost of

- Stop-

advanced ... or realignment of
program ... the clause provides for "the administrative
settlement of contractor claims that arise from delays ...
caused by the acts or failure to act of the CO." (FAR
42.1304)

Termination - Contract

- For default - The right of the Government to completely or partially terminate a contract because of the contractor's actual or anticipated failure to perform its contractual obligations. (FAR 49.401)
- For convenience - The right of the Government to completely or partially terminate a contract because the CO determines that termination is in the Government's interest. (FAR 49.101)

It doesn't mean you did anything wrong.
The Government's priorities may have changed.

Termination - Contract

- For default - The right of the Government to completely or partially terminate a contract because of the contractor's actual or anticipated failure to perform its contractual obligations. (FAR 49.401)
- For convenience - The right of the Government to completely or partially terminate a contract because the CO determines that termination is in the Government's interest. (FAR 49.101)

An early end to a contract necessitates a "Reduction in Estimated Cost" and a corresponding descoping (reduction in the work scope) to reflect the reduction in cost.

Closeout Procedures - Grants

Recipients shall submit to agency within 90 days after the project end date, all financial, performance and other required reports.

"Sticky Issues"

- Invention Report
- Encumbered Expenses
- Equipment Donation

Closeout Procedures - Contracts

Recipients shall submit to agency within 90 days after the contract end date, all financial, performance and other required reports

"Sticky Issues"

- Acceptance of Deliverables
- Invention Report
- Encumbered Expenses
- Equipment Disposition (return?)

Cost Share

“...that portion of a project's costs not borne by the Federal Government - it may include cash and/or third party in-kind.”

Mandatory Cost Share

Required as a condition of award.

All expenses pertaining to formal cost share shall be accounted for in a manner that permits identification with the sponsored project to which it pertains. This will allow for proper reporting of the cost share expenses to the agency.

Cost Share

"...that portion of a project's costs not borne by the Federal Government - it may include cash and/or third party in-kind."

Voluntary Cost Share

Offered in excess of the mandatory requirement or when not a stated condition of the award.

Voluntary Cost Share in a proposal becomes a requirement of the award! Therefore, the same documentation requirements apply!

Cost Share

"...that portion of a project's costs not borne by the Federal Government - it may include cash and/or third party in-kind."

Voluntary Cost Share

Offered in excess of the mandatory requirement or when not a stated condition of the award.

Expenses that are non-allowable for reimbursement due to restrictions in federal law or regulation, e.g., NIH salary caps, must also be accounted for in a manner that permits identification and reporting to the sponsored project to which it pertains.

Cost Share or Matching?

Generally these terms are synonymous, except:

- Cost sharing requirements are usually expressed as a percentage of the total project costs, e.g., 25% of the project budget.
- Matching requirements are usually expressed as a percentage of the federal dollars, e.g., a one-to-one match.
- Otherwise, the same rules apply!

Cost Share: Eligibility Standards

- Verifiable in recipient's records.
- Paid from a non-federal source.
- Not included as contribution for any other federally-assisted project.
- Necessary and reasonable for proper and efficient accomplishment of project objectives.
- Allowable under applicable cost principles (A-21) in the same manner as federally-supported costs.

Cost Share: Cash or In-kind?

- Cash - If the funds come from the recipient and the expenditure appears in the recipient's accounting records as a transaction, it's cash.
- In-kind - If the funds come from a third party (outside the recipient institution) and the expenditure doesn't appear in the recipient's accounting records as a transaction, it's in-kind.
- Note - If cash is donated to the recipient from a third party and is spent by the recipient, the transaction will appear in the recipient's accounting records, therefore it's cash.

Cost Share: In-kind

- Value of in-kind donations (services, space, equipment, and volunteer time) must comply with applicable cost principles and follow reasonable business practice.
- Bottom-line: The value can't be unreasonably inflated and must be consistent with prevailing commercial rates.
- I prefer using a zero balance invoice that "bills" for the service at customary rates and then credits the charge.

Cost Share: In-kind

- Standard “education discounts” on equipment are not eligible to be used as cost share. However, additional manufacturer discounts above standard education discounts may, with prior approval from the agency, be eligible.
- Commitments in proposals become requirements in awards! The proposal is usually incorporated into the award by reference.
- **Note:** The unrecovered F&A associated with the cost share dollars is eligible to be counted as additional cost share with prior approval from agency!

Sample Budget

	<u>Federal Share</u>	<u>Cost Share</u>	
Personnel			
Faculty summer (2 months @ \$10,000/month)	\$20,000		\$20,000
Graduate Students (2 @ \$20,000)	\$40,000		\$40,000
Fringe Benefits - faculty 22.04%	\$4,408		\$4,408
Fringe Benefits - Student health insurance	\$5,388		\$5,388
Equipment	\$50,000		\$50,000
Travel	\$7,500		\$7,500
Supplies	\$6,000	\$12,000	\$18,000
Computer Services	\$8,000		\$8,000
Tuition	\$15,000		\$15,000
Consultant Service (20 days @ \$200/day)		\$4,000	
Total Direct	\$156,296	\$16,000	\$172,296
F&A (52 % of MTDC)	\$81,274	\$8,320	\$89,594
Grand Total	\$237,570	\$24,320	\$261,890

The unrecovered F&A associated with the cost share dollars is eligible to be counted as additional cost share with prior approval from agency!

Timing of Cost Share

- Only expenditures incurred or services rendered during the period of the award can be counted as cost share - except those subject to pre-award costs.
- Some agencies expect/require cost share to be expended/documentated at approximately the same pace as the expenditure of federal dollars.



Examples of Cost Share

- ✓ Employee time, including fringe benefits
- ✓ Equipment
- ✓ Volunteer time or other contributed items
- ✓ Unrecovered F&A - if approved by sponsor
- ✓ Subrecipient (or subcontractor) cost-sharing
- ✓ Directly related supplies and services

Repercussions of Unmet Cost Share

- First, identify the amount and proportion of unmet cost share.
- Then, identify the programmatic effect and notify the agency immediately.
- The agency may require repayment of a proportionate share of grant funds!

Note: Inadequate documentation of cost share is the same as unmet cost share!

Recharge Centers

A Recharge Center may be a facility, center, operation, function, account, or activity whose output is susceptible to measurement on a workload or other quantitative basis.

- The costs associated with these activities are separately accounted for and charged to users in proportion to the services rendered.
- The primary purpose of a recharge center is to provide specific services to the university community on a break-even basis, although services may be provided on an incidental basis to external users.

Examples of Recharge Centers

- ❑ Copy Machine and/or Printing Services
- ❑ Glass Shop - Machine Shop
- ❑ Computer Services
- ❑ Lab Animals
- ❑ Electric Power/Utilities

Alternate Names

1. Recharge Center:

- < \$50,000/year

2. Service Center/Service Facility:

- \$50,000 - \$1,000,000/year
- Usually not university-wide in scope

3. Special Service Facilities (SSF):

- A-21 Section J.44 - "...institutional services involving the use of highly complex or specialized facilities such as electronic computers, wind tunnels, and reactors ..."
- Usually university-wide in scope
- > \$1,000,000/year

Characteristics

- The charge for each service must include both direct costs and when appropriate, the allocable share of facilities and administrative costs.
- Recharge Centers may be (and often are) subsidized using non-federal funds.
- Users should be directly billed for each service based on a schedule of rates that does not discriminate between federally and non-federally supported university activities.
- However, it is permissible to charge external users a higher rate!

Characteristics

- Goal is to operate a break even operation - Rates should not recover more than the total costs of the center over a long-term period, normally defined as one year.
- If a substantial balance exists in the recharge center account at the end of the period, it is assumed the rates were too high. Therefore the rates must be lowered for the next period.
- Likewise, if there is a negative balance in the recharge center account at the end of the period, it is assumed the rates were too low. Therefore the rates must be raised for the next period.

Relationship between F&A and Recharge Center Rate Pools

Certain costs such as depreciation on a particular piece of capitalized equipment should be included in either the cost pool for the university's F&A rate proposal or in the cost pool for the Recharge Center rate. If the cost for the same piece of equipment is included in both the F&A rate and a Recharge Center rate, it may result in the Federal Government being double charged for the same cost.

Finding this "double billing" is an auditors dream!

Equipment Capitalization

Depreciation prorates a portion of the acquisition cost of “capitalized” equipment to each accounting period during which the equipment is in use. The Recharge Center must pay for the equipment in the year of acquisition, but may only include in its rates the IRS allowable depreciation amount each year using the straight-line depreciation method.

- Automobiles - 4 years
- Computers - 6 years
- All other equipment - 10 years

Issues with External Users

- Commercial entities are external users, but students, faculty, or staff acting in a personal capacity, i.e., not in their student or employee role within the university, may also qualify.
- Inappropriate outside use of recharge facilities could jeopardize the university's tax-exempt status.
Remember - we aren't running a business!
- Umstead Act is a North Carolina-specific law which prevents universities from competing with private business!