

# Effort Reporting Briefing for Investigators

University of California Systemwide Training



# Agenda

- Effort Reporting Basics
- Key Effort Reporting Concepts
  - Who must complete an effort report?
  - Who should sign effort reports?
  - Suitable means of verification
  - Institutional base salary (IBS)
  - Cost sharing and salary caps
  - Summer salary
  - Effort commitments
  - Payroll cost transfers



# What is Effort?

- Effort is the portion of time spent on a given professional activity and expressed as a percentage of the total professional activity for which an individual is employed by the University of California. (Total professional activity includes research, teaching, patient care, administrative or other activities)
- Calculating Effort
  - A reasonable estimate
  - Total effort must equal 100%
  - Not based on a standard 40 hour work week
  - Does not include outside activities (e.g., external consulting)

*See Appendix B for common definitions related to effort reporting*



# Why Do We Certify Effort?

- Effort certification verifies:
  - Effort supported (paid) by a federal project has been performed as promised, and
  - Effort expended in support of a federal project but not paid by the project has been performed as promised (cost sharing)
- Effort reports are nearly always reviewed by federal auditors when sponsored programs are under review
  - Personnel salaries and benefits typically represent 2/3 of the direct costs of federal awards

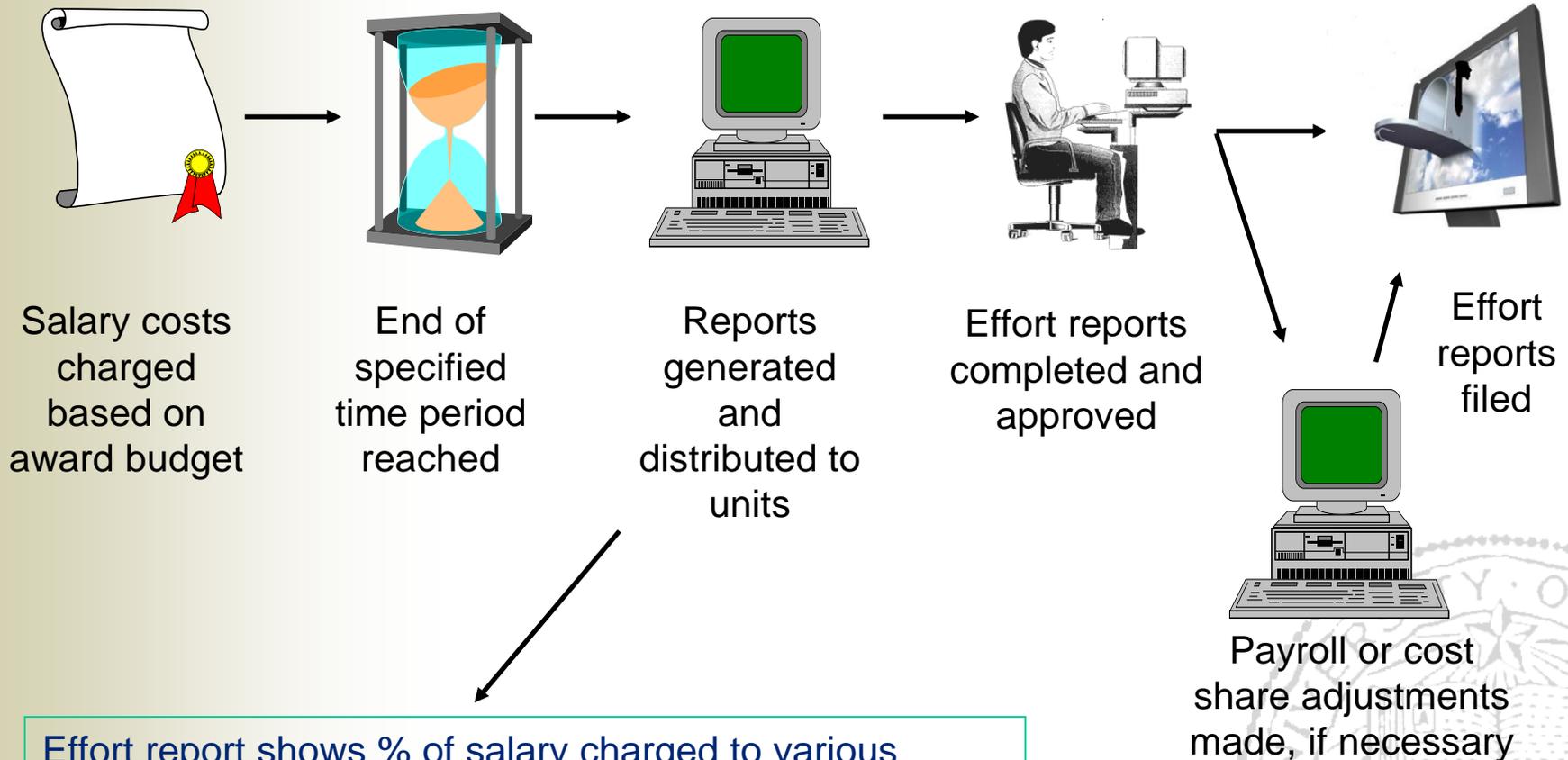


# Requirements

- As recipients of federal funding, educational institutions must abide by OMB Circular A-21 (Cost Principles for Educational Institutions)
  - OMB Circular A-21, Section J.10 outlines acceptable methods for supporting charges related to “compensation for personal services” on federal grants and contracts
- OMB Circular A-21 requires an effort certification system that:
  - Encompasses all employee activities (100% effort)
  - Confirms effort expended after-the-fact
  - Requires certification to be performed by an individual who has first-hand knowledge or used suitable means of verification to determine if the work was performed
  - Requires certification to be encompassed in the institution’s official records



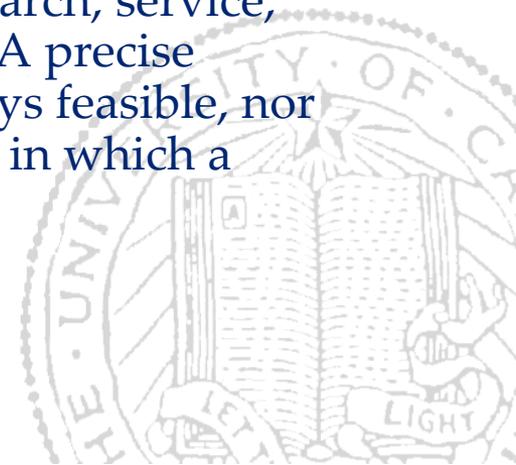
# Typical Effort Reporting Process



Effort report shows % of salary charged to various funding sources. The certifier is verifying that the payroll distribution reasonably reflects the actual effort expended on the activity.

# What is a Reasonable Estimate?

- Sponsors recognize that the activities that constitute effort are often difficult to separate. Effort certification must often rely on a reasonable estimate of effort, and when estimating, a degree of tolerance (at UC, up to 5%) is appropriate. Examples:
  - It would be reasonable for a faculty member who was awarded and expended 40% effort on a grant to sign an effort report stating 35% payroll support for that grant.
  - It would not be reasonable for a full-time faculty member who works 2 days a week in a clinic to certify that she worked 95% on sponsored research.
- A-21 states that “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. A 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.”



# Case Study: Typical Effort Situation A

- ◆ From January through June 2010, Dr. Smith...
  - Estimates that, on average, he worked the following:
    - Half of his institutional time on funded research projects
      - Roughly 10% on Dr. McGee's grant C but with no salary support (committed cost sharing)
      - The rest of his time on research projects was spent evenly between Grants A and B
    - The remainder of his institutional time was spent on the following types of activities:
      - New research areas
      - Proposal development
      - Administration
      - Teaching



# Case Study: Typical Effort Situation A (cont'd)

- ◆ What would be a reasonable estimate of effort for Dr. Smith on his effort report?

<u>Activity</u>	<u>Effort %</u>
<b>Sponsored Activities</b>	
Grant A	_____
Grant B	_____
Grant C	_____
<b>Sub-Total Sponsored</b>	
<b>University Activities</b>	_____
(teaching, administration, etc.)	
<b>TOTAL</b>	_____



# Case Study: Typical Effort Situation A (cont'd)

## Effort Report for Dr. Smith

### Activity

### Effort %

#### Sponsored Activities

Grant A

20%

Grant B

20%

Grant C

10%

#### Sub-Total Sponsored

50%

#### University Activities

(teaching, administration, etc.)

50%

TOTAL

100%

A and B – half of professional time, minus Grant C of 10%, split evenly

**C: Even though the salary related to this effort wasn't charged to Dr. McGee's grant, it should be included on the effort report because it was committed in Dr. McGee's proposal**



# Case Study: Typical Effort Situation B

- ◆ From January through June 2010, Dr. Smith...
  - Estimates that, on average, he worked:
    - 35% on Grant A, including oversight of graduate students working on the grant
    - 35% on Grant B, including oversight of graduate students on the grant
    - The remainder of University time on new research areas, proposal development and administration
    - 1 day/week on external consulting activities and other outside professional activities



# Case Study: Typical Effort Situation B (cont'd)

- ◆ What would be a reasonable estimate of effort for Dr. Smith on his effort report?

<u>Activity</u>	<u>Effort %</u>
<b>Sponsored Activities</b>	
Grant A	_____
Grant B	_____
<b>Sub-Total Sponsored</b>	
<b>University Activities</b>	_____
(teaching, administration, etc.)	
<b>TOTAL</b>	_____



# Case Study: Typical Effort Situation B (cont'd)

## Effort Report for Dr. Smith

<u>Activity</u>	<u>Effort %</u>
<b>Sponsored Activities</b>	
Grant A	<u>35%</u>
Grant B	<u>35%</u>
<b>Sub-Total Sponsored</b>	<u>70%</u>
<b>University Activities</b> (teaching, administration, etc.)	<u>30%</u>
<b>TOTAL</b>	<u>100%</u>

**Key point – external consulting is not considered part of institutional effort and is therefore not included in effort reporting**



# Key Effort Reporting Concepts

*Important concepts to consider with respect to effort reporting include:*

- Who must complete an effort report?
- Who should sign effort reports?
- Suitable means of verification
- Institutional Base Salary (IBS)
- Cost sharing and salary caps
- Summer salary\*
- Effort commitment
- Payroll cost transfers

\*Does not apply to UCSF



# Who Must Complete an Effort Report?

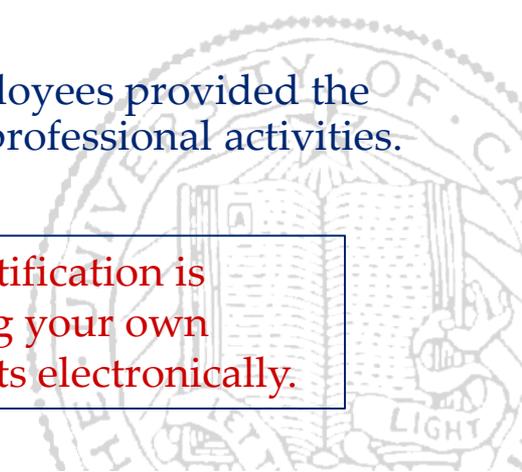
- All individuals paid from, or with effort committed to, a federal-sponsored project (including clinical trials) are required to complete an effort report
- Exceptions:
  - Pre and post-doctoral individuals supported 100% by a fellowship (stipends) with no additional employment compensation
  - College Work Study employees



# Who Should Sign Effort Reports?

- Effort reports should be signed by:
  - An employee, principal investigator or other responsible official with first-hand knowledge of an employee's effort, or
  - A responsible official who used a suitable and documented means of verifying
- Principal investigators and other faculty must certify their own effort.
- Employees with first-hand knowledge of their own activities including knowledge of which specific federal projects are benefited by their work may certify their own effort.
- Employees without first-hand knowledge must have a principal investigator or other responsible official certify on their behalf.
- Faculty may also be required to certify effort for non-faculty who conduct research supported by their federally sponsored awards.
- Direct supervisors can certify effort on behalf of non-faculty employees provided the person certifying the effort has knowledge of all the employee's professional activities.

**Note: If using a web-based on-line effort reporting system, certification is accomplished by logging into the effort reporting system using your own personal logon ID and password, and by submitting the reports electronically.**



# Suitable Means of Verification

- What are suitable means of verification that the work was performed?
  - The individual should have some documentation of how the time was spent
  - Documentation could be in the form of a calendar, project reports, time cards
- In the NSF effort reporting audit at the University of Pennsylvania (2006), University of Pennsylvania business managers were found to be certifying effort for employees they did not directly supervise and they did not have a suitable means of verifying the effort.



# Institutional Base Salary (IBS)

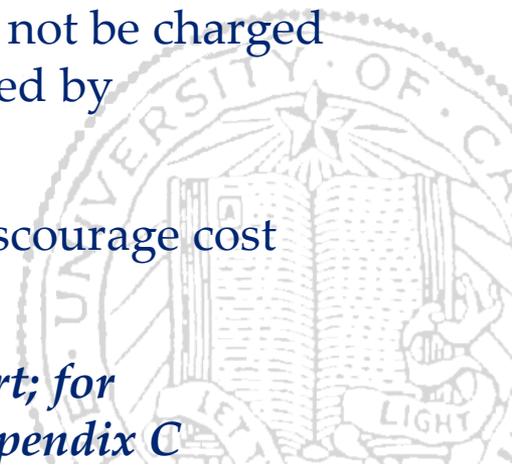
- The NIH Grants Policy Statement defines IBS as the annual compensation paid by the university for an employee's appointment, whether that individual's time is spent on research, teaching, patient care, or other activities. The base salary generally excludes any income that an individual is permitted to earn outside of the university.
- IBS should not change as the number of grants a PI has increases or decreases. Institutions are not permitted to make salary adjustments solely based on the number of grants an individual has.
- Effort included on the effort report should include 100% of the individual's total professional activities as covered by the individual's Institutional Base Salary (IBS).
- IBS does not include stipends, honoraria, medical compensation plan differential or other over-the-cap payments, or vacation and sick leave taken.



# Cost Sharing

- Cost sharing is a commitment of University resources or funding that supplements externally sponsored projects
- Salary cost sharing occurs when effort exceeds the payroll charged to a particular project
- Mandatory cost sharing is that which is required by the sponsor, is quantified and committed in the proposal
- Voluntary committed cost sharing is not formally required by the sponsor, but committed in the proposal and becomes mandatory once the award is made (requires administrative tracking and reporting)
- The above costs are not reimbursed by the sponsor (will not be charged to the sponsored project) and therefore must be supported by University funds
- It is important to note that some sponsors prohibit or discourage cost sharing

*Any cost shared effort must be considered in the effort report; for additional case study involving cost sharing, please see Appendix C*



# Summer Salary\*

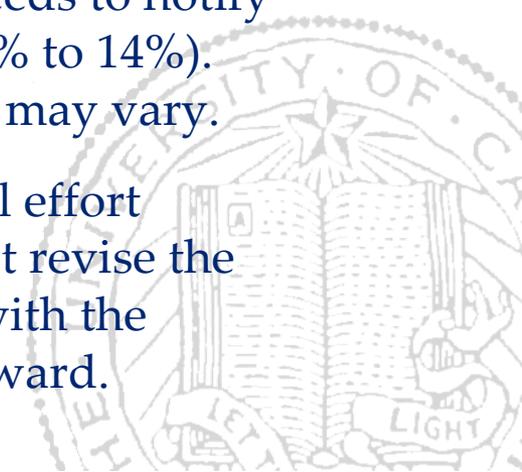
- Charges for summer sponsored research activities must be consistent with the level of effort provided during that time period.
  - It is not allowable for an individual who is absent from research for a substantial period of the summer session to charge full salary to sponsored research and report 100% research activity on effort reports.
- It is not allowable for an individual to do any other work besides that on the sponsored award if the full (100%) salary is being charged to the sponsored award for that period of time (i.e. can not prepare teaching materials, write proposals, work on other research projects, do any administrative tasks, etc. over this time period).

\* Does not apply to UCSF



# Effort Commitment

- Effort commitment is the amount of effort promised by the institution in the proposal or the amended effort included in the award documentation.
- The total distribution of effort dedicated to all institutional activities for an individual must not be greater than 100%, including cost sharing commitments.
- 100%, or nearly 100% research effort, is not realistically possible for individuals with significant non-research obligations to the institution (administrative, clinical or teaching).
- If key personnel intend to reduce their committed effort on a sponsored program by more than 25%, the institution needs to notify the sponsor and receive approval (e.g. reducing from 20% to 14%).  
Note: Review agency rebudgeting rules as requirements may vary.
- If the receipt of an award increases an investigator's total effort commitments to greater than 100%, the investigator must revise the level of committed effort requested by communication with the sponsor, reduce effort on other activities, or refuse the award.



# Case Study: Effort Commitments

- Dr. Chen has the following effort commitments
  - 25% on Grant A
  - 25% on Grant B
  - 25% on Grant C (of which 20% is cost shared)
  - Teaching, administration, and departmental research activities which comprise approximately 1-2 days/week
- Dr. Chen receives a notification that he will be awarded a new grant next month, on which he has a 20% commitment
- Which of the following are acceptable methods of managing this new commitment?



# Case Study: Effort Commitments

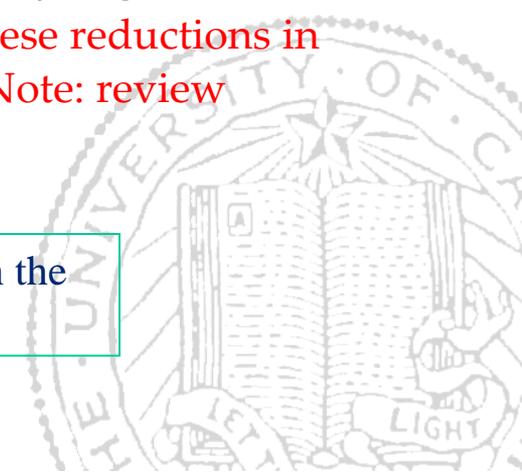
- A. Work 20% more hours than before.
- B. Reduce effort by approximately 5% on Grants A-C (changing payroll distribution accordingly), and reduce effort by 5% on the nonsponsored activities.
- C. Reduce effort on Grant C by 20%. Since it's cost-shared, no notification to the sponsor is necessary.
- D. Reduce effort on Grants A and B by 10% each, notifying each sponsor of the planned reduction in effort.



# Case Study: Effort Commitments

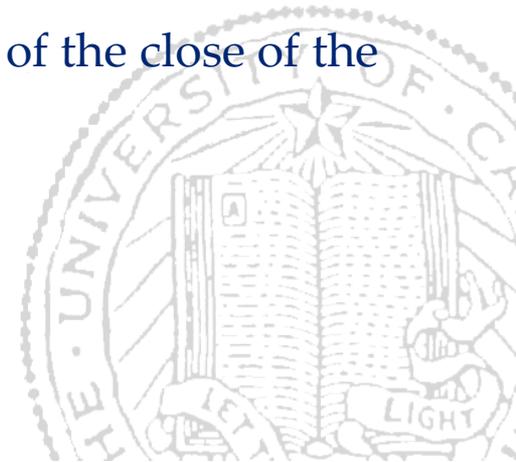
- A. Work 20% more hours than before. No, that just changes the distribution for all of the effort percentages.
- B.** Reduce effort by approximately 5% on Grants A-C (changing payroll distribution accordingly), and reduce effort by 5% on the nonsponsored activities. Yes, this could work.
- C. Reduce effort on Grant C by 20%. Since it's cost-shared, no notification to the sponsor is necessary. No – cost shared commitments should be treated no differently than charged commitments.
- D.** Reduce effort on Grants A and B by 10% each, notifying each sponsor of the planned reduction in effort. Yes – these reductions in effort are each 40% (10/25), so they require prior notification. Note: review agency rebudgeting rules as requirements may vary.

Note: if the salary charged to any federal grant is greater than the effort expended, it is beyond the reasonable tolerance level



# Payroll Cost Transfers

- A cost transfer is an after-the-fact reallocation of the cost associated with a transaction from one activity/account to another.
- The differences between certified effort % and % of salary charged may require a salary cost transfer.
- It is important that the salary charged to a sponsored project not exceed (within tolerance) the effort spent on the project. **If the salary charged is greater than the effort expended, a payroll cost transfer should be made to remove excess salary charged to the sponsored project.**
- Formal re-certification must be completed if the cost transfer occurs after the certification for that effort has already taken place.
- Transfers must be made timely, that is, within 120 days of the close of the ledger period in which the original charge was posted.



# Case Study: Cost Transfers

- From 7/1/09 to 12/31/09:
  - Dr. Walleye was awarded Grant A that included a 50% effort commitment. He was also paid 50% of his salary from this award.
  - Dr. Walleye was paid 50% from departmental funds during this period.
  - At the time of certification, he realizes that he only worked 40% of his time on Grant A during the certification period. He spent the remaining 60% of his time on non-sponsored activities.

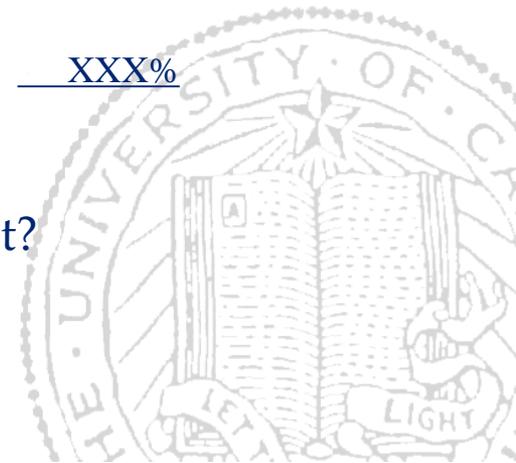


# Case Study: Cost Transfers

- ◆ What should the reported effort % section of Dr. Walleye's effort report look like?

<u>Activity</u>	<u>Payroll %</u>	<u>Cost Sharing %</u>	<u>Effort %</u>
<b>Sponsored Activities</b>			
Grant A	<u>50%</u>	<u>          </u>	<u>XX%</u>
<b>Non-Sponsored Activities</b>	<u>50%</u>	<u>          </u>	<u>XX%</u>
TOTAL	<u>100%</u>	<u>          </u>	<u>XXX%</u>

- ◆ Should anything be done as a result of this effort report?

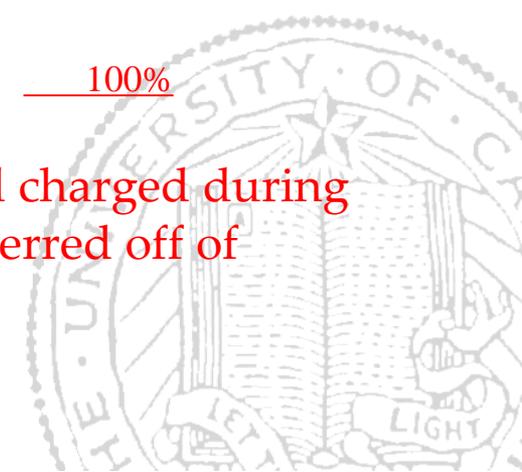


# Case Study: Cost Transfers

- ◆ Dr. Walleye's effort report:

<u>Activity</u>	<u>Payroll %</u>	<u>Cost Sharing %</u>	<u>Effort %</u>
<b>Sponsored Activities</b>			
Grant A	<u>50%</u>	<u>          </u>	<u>40%</u>
<b>Non-Sponsored Activities</b>	<u>50%</u>	<u>          </u>	<u>60%</u>
TOTAL	<u>100%</u>	<u>          </u>	<u>100%</u>

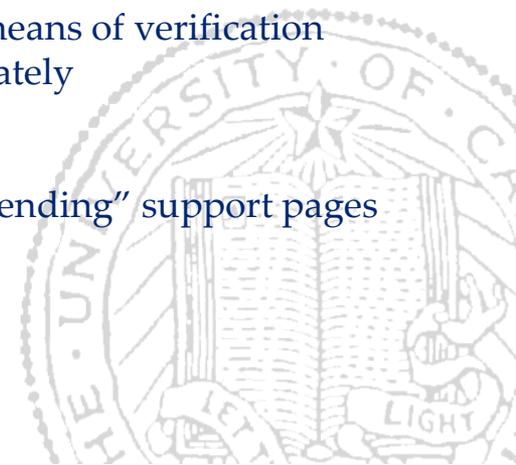
- ◆ Because his effort on Grant A was less than the payroll charged during the period, 10% of his payroll charges need to be transferred off of Grant A and moved to non-sponsored account.



# Consequences of Non-Compliance

- Effort reporting is a condition of accepting Federal funds
- The risks of non-compliance with effort reporting are significant
  - Numerous investigations have been conducted by the federal government that have focused on effort reporting - settlements have been in the tens of millions of dollars
- If effort reports are not complete, research sponsors may:
  - Disallow related salary, fringe benefits and F&A (indirect) costs
  - Reduce or eliminate future funding
  - Press criminal charges
  - Require additional oversight
- NSF in particular has conducted nearly 20 reviews of institutions' effort reporting practices. Common findings have included:
  - Effort reports certified late and/or by individuals without suitable means of verification
  - 100% effort and Institutional Base Salary (IBS) not defined appropriately
  - Problems with summer salary/effort calculations and reports
  - Effort commitments not considered in certification
  - Failure to report committed cost sharing accurately in "Current & Pending" support pages of proposal
  - **Inadequate education programs for faculty and administrators**

*See Appendix A for more detail on recent federal investigations related to effort reporting*



# Consequences of Non-Compliance: UC Policy

- Principal Investigators and their campus departments are responsible for ensuring full compliance with effort reporting requirements. Campus departments and Extramural Fund Accounting Offices shall take progressive action to prompt corrective action and resolution according to local campus policy when required, including:
  - Notification of the Department Chair or director for resolution
  - Notification of the Dean to expedite resolution
  - Notification of the Vice Chancellor—Research and/or Provost/Executive Vice Chancellor and request intervention and resolution
- The University shall require all effort to be certified within 120 days of the end of the reporting period. Effort not certified within 120 days may result in action being taken by the campus to reverse the charges on the award, may jeopardize submission of future proposals, cause a proposal to be withdrawn, and/or jeopardize the acceptance of future awards.

Reference: Contracts and Grants Manual Chapter 7-330  
(<http://www.ucop.edu/raohome/cgmanual/chap07.html#effort>)



# Campus Resources

Contact your department ERS Coordinator

or; Rudy Moreno, UCSB ERS Coordinator, in Extramural Funds  
Accounting @ extension 6127, email address is  
[rudy.moreno@bfs.ucsb.edu](mailto:rudy.moreno@bfs.ucsb.edu)



# Appendix A

## Effort Reporting Settlements and Audit Summaries

### Yale University (2008)

- Government alleged that Yale mischarged federal grants through improper cost transfers designed to “spend down” grant funds, and through inaccurate and overstated effort reports that resulted in salary overcharges to federal awards.
- Government alleged that Yale researchers submitted effort reports for summer salary that wrongfully charged 100 percent of their summer effort to federal grants, when researchers expended significant effort on other work.
- Government alleged that PI failed to provide the 25% level of effort proposed in subaward application.
- Government alleged the University did not have procedures for monitoring the budgeted or minimum level of effort for key personnel.
- \$7.6 million paid to the government.



# Appendix A (cont'd)

## Effort Reporting Settlements and Audit Summaries

### Cornell University Weill Medical College (2005)

- Whistleblower alleged that over an eight year period, the full salaries of nurses, laboratory technicians, and other workers had been paid with NIH grant dollars, even though some of the employees were not involved in the research at all and others did not work full time on the project.
- The Department of Justice (DOJ) said Weill Medical College, 'defrauded the government and made false statements' when a principal investigator on the grants in question 'failed to disclose to the government the full extent of her various active research projects' and that 'Weill Medical College knew, or should have known, that its employee failed to fully disclose her active research projects in the grant applications submitted to the government such that her research commitments exceeded 100% of her available time'.
- \$4.38 million paid to the government



# Appendix A (cont'd)

## Effort Reporting Settlements and Audit Summaries

### Florida International University (2005)

- An audit found that the university had not properly documented whether faculty members had spent the percentage of time they had promised to spend on research projects financed by the grants.
- Government alleged that FIU improperly billed the government for scientists' time, travel, and administration expenses over a 10-year period on a single award dating back to 1995.
- \$11.5 million paid to the government

### Harvard University (2004)

- Harvard disclosed to government that it had, along with an affiliated hospital, overcharged NIH research and training grants by seeking reimbursement for the salaries of researchers who did not work on the grant.
- Faculty time was also found to be overstated.
- Government was billed for salaries and expenses unrelated to federal grants.
- A researcher spent fewer hours than promised on a research study.
- Harvard and affiliated institutions paid \$3.3 million to government.



# Appendix A (cont'd)

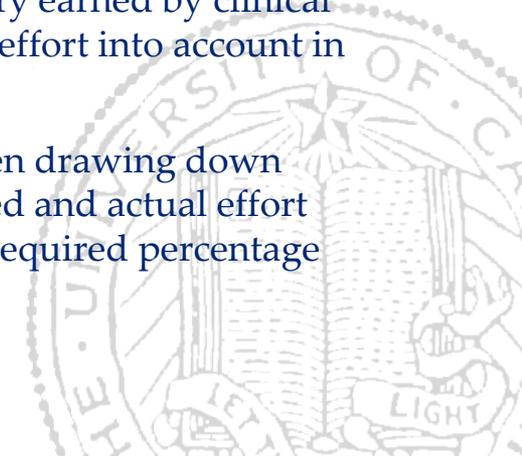
## Effort Reporting Settlements and Audit Summaries

### Johns Hopkins University (2004)

- Whistleblower suit alleged that JHU had knowingly overcharged the government by overstating the amount of time researchers worked on federal research projects and in at least one case charging for more than 100% of an individual's salary.
- NIH found that JHU failed to maintain adequate compliance procedures to reconcile proposed and actual effort .
- \$2.6 million paid to government.

### Northwestern University (2003)

- Whistleblower suit alleged that NU overcharged federal grants .
- Government alleged that NU overstated faculty members' institutional base salaries in grant applications (i.e., including in Institutional Base Salary (IBS) salary earned by clinical faculty from separate clinical practice plans, but failing to take clinical effort into account in effort reporting)
- Government alleged that NU overstated effort in applications and when drawing down funds and failed to maintain adequate procedures to reconcile proposed and actual effort (i.e., recipients of NIH career development awards had not dedicated required percentage of effort to award).
- \$5.5 million paid to government

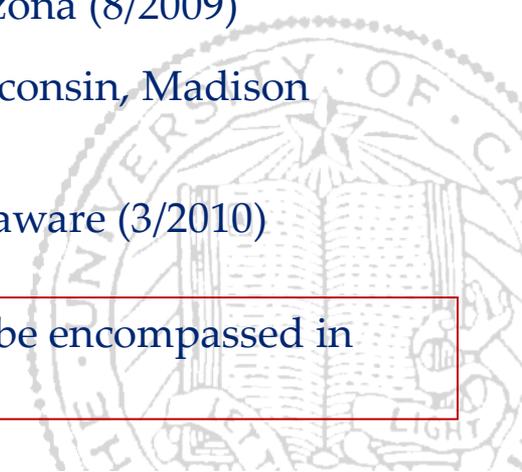


# Appendix A (cont'd)

## NSF Effort Reporting Audits

- University of Pennsylvania (6/2006)
- California Institute of Technology (3/2007)
- **University of California, San Diego (5/2008)**
- **University of California, Berkeley (3/2008)**
- University of Utah (11/2007)
- University of Illinois at Urbana/Champaign (3/2008)
- Vanderbilt University (9/2008)
- Purdue University (7/2009)
- Arizona State University (3/2009)
- Georgia Institute of Technology (6/2009)
- University of Nevada, Reno (1/2010)
- Cornell University (6/2009)
- Washington University in St. Louis (2/2010)
- State University of New York, Stony Brook (11/2009)
- University of Arizona (8/2009)
- University of Wisconsin, Madison (11/2009)
- University of Delaware (3/2010)

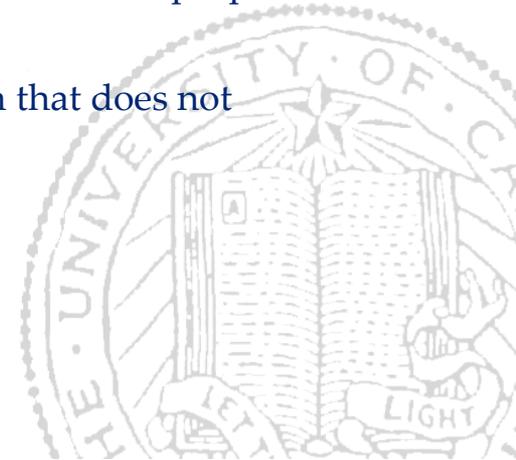
These are continuing ...NSF has indicated that 30 institutions will be encompassed in their review



# Appendix B

## Common Effort Reporting Definitions

- Sponsored Effort - effort for work conducted on sponsored projects, regardless of whether or not the sponsored project is paying for the work.
- Proposed Effort - the amount of effort (in %) that is proposed in any sponsored project application, regardless of whether salary support is requested. Example: Dr. Smith submitted a proposal to NSF. In this proposal, he told NSF he would give 40% of his effort to the award. Dr. Smith's **proposed effort** is 40%.
- Proposed Payroll - this is the amount in salary (in \$) that is proposed in any sponsored project application. Example: Dr. Smith receives an annual UC salary of \$100,000. His 40% proposed effort translates into \$40,000 **proposed payroll**.
- Awarded Effort or Effort Commitment - The amount of effort (in %) promised by the institution in the proposal or the amended effort (in %) included in the award documentation. Example: Dr. Smith receives his NSF award with a reduction to proposed payroll and effort. Dr. Smith's **committed effort** is 30%.
- University effort - effort for work conducted on behalf of the institution that does not involve an external sponsor.



# Appendix B (cont'd)

## Common Effort Reporting Definitions

- Cost sharing - a commitment of University resources or funding that supplements externally sponsored projects; the portion of project costs not borne by the sponsoring agency
- Committed cost sharing - any cost sharing that is documented in the proposal and agreed to in the Notice of Grant Award.
- Institutional base salary – the annual compensation paid by the University for an employee’s appointment, whether that individual’s time is spent on research, teaching, patient care, or other activities. The base salary excludes any income that an individual is permitted to earn outside of duties for the applicant/grantee organization.
- Cost transfer – an after-the-fact reallocation of the cost associated with a transaction from one activity/account to another.



# Appendix C: Additional Case Studies

## Effort Committed With No Salary Support (Cost Sharing)

- ◆ From 7/1/2009 – 12/31/2009, Dr. Carp received salary support from the following awards:
  - ◆ Grant A – 25%
  - ◆ Grant B – 35%
  - ◆ Grant C – 20%
- ◆ The rest of Dr. Carp's salary support was provided from departmental funds
- ◆ Dr. Carp also worked on Grant D and estimates he spent about 10% of his effort on this grant during the applicable period with no salary support.
- ◆ Dr. Carp estimates his effort was consistent with salary support for Grants A, B and C
- ◆ Dr. Carp estimates he spent about 10% effort on non-sponsored activities during the applicable period



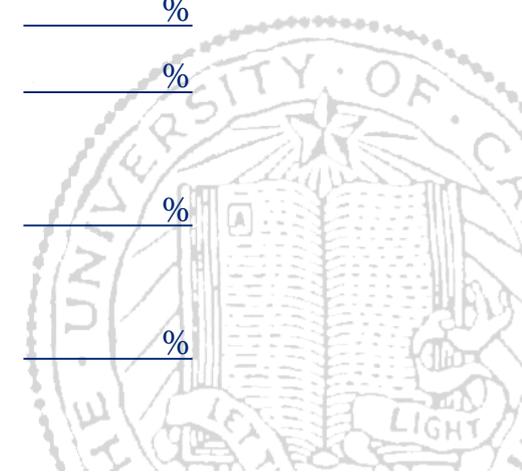
# Appendix C: Additional Case Studies

## Effort Committed With No Salary Support (Cost Sharing)

- ◆ What should Dr. Carp's effort report look like?

### Dr. Carp's Effort Report

<u>Activity</u>	<u>Payroll %</u>	<u>Cost Sharing %</u>	<u>Total Effort %</u>
<b>Sponsored Activities</b>			
Grant A	_____ %	_____ %	_____ %
Grant B	_____ %	_____ %	_____ %
Grant C	_____ %	_____ %	_____ %
Grant D	_____ %	_____ %	_____ %
<b>Non-Sponsored Activities</b>	_____ %	_____ %	_____ %
<b>TOTAL</b>	_____ %	_____ %	_____ %



# Appendix C: Additional Case Studies

## Effort Committed With No Salary Support (Cost Sharing)

### Dr. Carp's Effort Report

<u>Activity</u>	<u>Payroll %</u>	<u>Cost Sharing %</u>	<u>Total Effort %</u>
<b>Sponsored Activities</b>			
Grant A	<u>25%</u>	<u>0%</u>	<u>25%</u>
Grant B	<u>35%</u>	<u>0%</u>	<u>35%</u>
Grant C	<u>20%</u>	<u>0%</u>	<u>20%</u>
Grant D	<u>0%</u>	<u>10%</u>	<u>10%</u>
<b>Non-Sponsored Activities</b>	<u>20%</u>	<u>-10%</u>	<u>10%</u>
<b>TOTAL</b>	<u>100%</u>	<u>0%</u>	<u>100%</u>

**Key point: even though no salary was charged to Grant D, Dr. Carp expended effort on it, and it must be reflected on the effort report as cost sharing if this effort was committed within the proposal.**

