



## Building a Budget

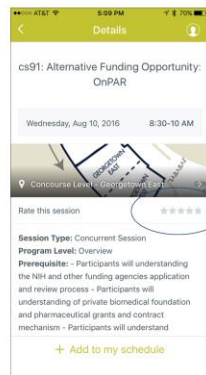
Rebecca Hunsaker

Gaye Bugenhagen

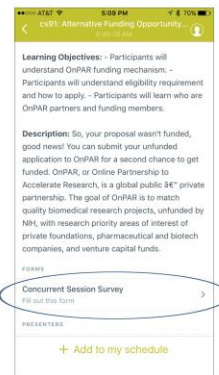
University of Maryland, College Park

## PLEASE RATE THIS SESSION

1. In Guidebook, search the schedule and open the session you are attending.



2. Open the details of the session and highlight the number of stars the session earned.



3. Scroll down to enter the session survey and answer four multiple choice questions.



# Disclaimer

- The information and federal regulations contained within this workshop are accurate and up to date as of March 8, 2017



*The budget plan is the financial expression of the project or program.*

-OMB Circular A-110 C.25.(a).



# Direct Costs

- Costs that can be identified specifically with a particular final cost objective...or that can be directly assigned to such activities relatively easy with a high degree of accuracy. (200.413(a))
- Examples of Direct Costs:
  - Salary of Researcher (including benefit costs)
  - Laboratory Supplies purchased for project
  - Technician

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



## What Does “Allowable” Mean?

An allowable cost must be:

- **CONSISTENTLY TREATED:** Like costs must be treated the same in like circumstances, as either direct or F&A costs. (200.403(d))
- **REASONABLE:** A prudent business person would have purchased this item and paid this price. (200.404)
- **ALLOCABLE:** It can be assigned to the activity on some reasonable basis. (200.405)

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



## More on Allowable

- An “allowable” cost is one that is eligible for reimbursement by the federal government.
- Contrast with:
  - PERMISSIBLE BY INSTITUTION: A cost is permitted by institution, as outlined in its various administrative policies or procedures.
  - ALLOWABLE BY AGENCY: A cost is permitted by the policies of the sponsoring agency or the terms or an award.
- An "unallowable" cost is one that is not eligible for reimbursement by the federal government.

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



## Reasonable Costs

- The cost “...does not exceed that which would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost.”  
(200.414)

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# Assessing Whether a Cost is Allowable or Unallowable

- A cost may be “expressly” unallowable, i.e., it is always unallowable as either a direct or indirect.
  - Unallowable activities: fund raising, alumni relations, lobbying, etc
  - Unallowable transactions: alcohol, entertainment, fines, etc.
- A cost may be allowable but only as an indirect (F&A) cost, not a direct charge, e.g., proposal preparation
- A cost that is allowable as a direct charge should not be included in the F&A rate, e.g., salary of technician

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



## How Is Allocability Determined?

- It is incurred specifically for the federal award
- It benefits both the work under the sponsored agreement and other work of the institution in proportions that can be determined without undue effort or cost
  - If a cost benefits two or more interrelated projects in proportions that cannot be determined the cost may be allocated on any reasonable basis
- It is necessary to the overall operation of the institution and assignable in part to the award.

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



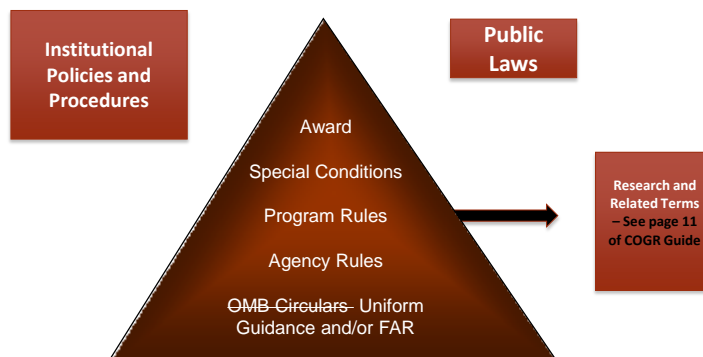
# Admin and Clerical

- The salaries of administrative and clerical staff should normally be treated as F&A costs. Direct charging of these costs may be appropriate only if all of the following conditions are met:
  - Administrative or clerical services are integral to a project or activity;
  - Individuals involved can be specifically identified with the project or activity;
  - Costs are explicitly included in the proposal or have prior written approval from the sponsor. (200.413)

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



## Order of Precedence



# BUILDING THE BUDGET



## Reading the Solicitation

- Sponsor and type of funding
- Expiration date
- Due date
- Financial limitations
- Special conditions



©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.

# REMEMBER YOUR AUDIENCE

- Chair
- Dean
- Office of Sponsored Projects
- Sponsor
- Central Post-Award offices
- Auditors

NOT JUST THE SPONSOR!

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



## The PI “Interview”



# Personnel

- Sponsor limitations
- 100% Effort issue
- Key vs Other
- Justifying the cost



# Personnel

Dr. Cruise, Principal Investigator (1.5 months) Dr. Cruise is a Professor in the Basic Science Lab within the Department of Biology. Dr. Cruise has over ten years experience in cancer research and is an expert in the study of cancer in mice. Dr. Cruise will be responsible for maintaining the overall scientific and procedural integrity of the project, including the experimental procedures. He will conduct weekly scientific meetings with his research team to discuss relevant aspects of the progress of the project. At the completion of each data collection phase, Dr. Cruise will oversee the data analysis and will be primarily responsible for the preparation of the scientific reports and dissemination of the results of the studies.



# Personnel

A Lab Manager is budgeted at 20% FTE for twelve months. This position is responsible for assisting with setting up the scanning electron microscope (SME), managing the animals in the lab, and working with the Post Doc to set up each experiment.



## Federally-mandated salary caps

- Salary calculation should be based on a RATE, not the total dollar amount
- Who pays for the amount over the cap?



# Fringe benefits

The University of Maryland does not have a fringe benefit rate. Contract/grant accounts will be charged for the actual fringe benefit amount used. Fringe benefits have been calculated for Drs. Cruise and Smith at a rate of 8% for summer salary and Dr. Odinson at a rate of 15% for academic year salary. The GRA and Data Manager have a budgeted fringe benefit rate of 30%. Fringe benefits include pension plan contributions; social security; Medicare taxes; unemployment compensation insurance; subsidies for health, life, and disability insurance; vacation; and sick leave. The summer GRA's have a calculated fringe benefit rate of 8%.

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# Fringe Benefits

*Excel trick!*

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# Equipment

- Defined as having a useful life of more than one year and acquisition cost of \$5,000 or more (or institutional level)
- Item is not already available within the university (or department)
- Beware of potential differences between equipment definitions (sponsor / institution / subcontractor)
- Justifying the cost

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# Equipment

Budget is requested in the amount of \$30,000 to purchase a Scanning Electron Microscope (SEM). The SEM will be used to isolate and identify specific genetic markers.

There are two companies (X and Y) that sell SEMs in the U.S. at comparable costs. Since the SEMs are of equal quality, we will purchase from X company which is a woman, veteran-owned company. A quote has been included.

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# Equipment

We have budgeted two desktop computers for \$24,000 (\$12,000 each). The desktop computers will be used for training in Bangkok, Thailand, as the project's focus is capacity building. The computers must be sturdy, quick processing and able to handle the image pre-processing, map generation, and the large swaths of data that will be inputted.

We have budgeted three laptops for \$15,000 (\$5,000 each). Each member of the research team will use their laptop for image processing to support the research project aims to analyze and process large swaths of data and generate training data, training maps, and conduct the preprocessing as needed. Each member of the research team requires their own dedicated laptop to the research project so they can successfully complete the proposed tasks in the prescribed time table.

© University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# Travel

- Institutional policy vs sponsor guidelines
- Domestic vs foreign travel
- Justifying the cost
- [NSF's Data Sharing Policy](#)

© University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# Travel

Travel is budgeted for a total of \$15,000 for Dr. Cruise to attend the annual conference of the XYZ Association, to be held in San Diego, CA and the international conference on ABC Society, to be held in Paris, France in the Spring of 2017. Dr. Cruise will present a paper covering the research conducted under this award with the intent of disseminating and sharing the results.

Additional travel money is budgeted for travel and per diem for 3 invited speakers at \$5,000 each to present at University of Maryland's symposium on Emerging Technologies in Cancer Research.

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



## Participant Support Costs

- Participant support costs means direct costs for items such as stipends or subsistence allowances, travel allowances, and registration fees paid to or on behalf of participants or trainees (but not employees) in connection with conferences or training projects. (200.75)
- Not the same as human subjects compensation/incentives
- Excluded from MTDC base

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# Participant support costs

- Participant Stipends - We are requesting \$40,000 per year for participant stipends. Our estimate is for 8 students at \$500 per week over the course of 10 weeks during the summer.
- Participant Travel – We are requesting roundtrip air fare for students from their home universities and back at a rate of \$500 per ticket for 8 students. We estimate \$4,000 for airfare. We request \$120 per participant (\$960 total) for ground transportation to shuttle the participants to campus and back to the airport after the program. Our total requested for participant travel to UMCP and back to their home universities is \$4,960.
- Housing – We have access to University housing for summer researchers at \$195 per student per week. We are requesting \$15,600 per year to house the 8 participants for 10 weeks.
- Per Diem (food) – We are requesting \$25,200 for each summer to provide the 8 participants with a \$45 food per diem (based on State of Maryland per diem rate). Our calculation is based on \$45 per day, 7-days-a-week, over the course of 10 weeks.
- Ground Transportation – We are requesting \$1,200 (\$15 per student, per week) local/ground travel allowance for each participant. This REU will enable students to take advantage of the multiple professional networking opportunities available to them in the Washington, DC metropolitan area given the large number of scientific societies and professional associations in our area.
- Poster Printing – Each summer we will host a culminating poster session at which the participants will present and describe their work, hone their science presentation skills, and engage in professional networking. It costs us \$130 per poster for printing. Therefore, we are requesting \$1,040 for poster printing.
- On-line GRE Prep Course - Poor performance on the GRE is a well-documented barrier for underrepresented students gaining entry into graduate programs. Consistent with the major aims of this REU, we request \$7,600 to provide each student access to the Princeton Review, on-line GRE prep COURSE

University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



## Materials and Supplies

- Per UG: includes computers
- Allowable only for unusual circumstances, beyond normal business operations – consider the definition of an direct vs indirect costs
- Justifying the cost

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# Materials and Supplies

A total of \$3,000 is budgeted each year with a cumulative 5-year total of \$15,000 to cover needed supplies including software licenses (Matlab & Presentation software), MRI compatible skin conductance and shock electrodes from Biopac systems, and costs of functional MRI data back-up on secured network storage servers.



# Materials and Supplies

Funds are requested to purchase one laptop computer in Year 1, budgeted at \$1,500, for the graduate student to use for testing and data analysis in support of the proposed projects. In addition, funds are requested to purchase supplies for the training paradigms in **Aim 3**: 5 MIDI keyboards (M-Audio Keystation 61ES or similar), estimated at \$200 each for a total of \$1,000, for use in the music training paradigm, and 6 sets of materials, estimated at \$45 each (\$270), for use in the manual dexterity training program (specifically, \$20/each for sets of juggling balls and scarfs, \$5 each for yo-yos, and \$20 each for basic speed stacking sets).



# Sub-agreements

- What kind of relationship is it?
  - Contractor (formerly vendor) vs subrecipient (formerly subcontractor)
- Justifying the cost



## Subrecipient or Contractor?

- Subrecipient (200.93)
  - Performance measured against whether the objectives of the federal program are met
  - Has responsibility for programmatic decision making
  - Has responsibility for adherence to applicable federal program compliance requirements



# Subrecipient or Contractor?

- Contractor (200.23)
  - Provides the goods and services within normal business operations
  - Provides similar goods or services to many different purchasers
  - Operates in a competitive environment
  - Provides goods or services that are ancillary to the project
  - Not subject to compliance requirements

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



## Consultant Costs

- Paid to experts outside of the institution
- Rates must be reasonable and justifiable
  - Documentation to justify the rates may be required by sponsor or institutional purchasing department

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# Collaborations

- Subrecipient: A subaward will be issued to Down South University in the amount of \$110,000. The budgeted amount of is based on the attached statement of work, budget and budget justification as submitted by the Down South University (DSU). The subcontractor will conduct a series of experiments to determine investigate cognitive memory in mice.
- Contractual Costs: A contract will be issued to New Idea Co. in the amount of \$25,000. They will provide services on the genetic analysis and genotyping. New Idea Co. will complete the DNA isolation and normalization at a cost of \$25.00 per mouse to complete the DNA isolation, normalization and array processing. All samples will be genotyped on the Affymetrix Axiom BoiBank Array, Catalog Version 2 (in contrast to the outdated Affymetrix Exome Array). The array is designed to assay 653K SNPs and InDels and will test both commons and rare variants.

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# Cost Sharing

- Mandatory vs voluntary
- Contracts vs grants

Under Federal research proposals, voluntary committed cost sharing is not expected. It cannot be used as a factor during the merit review of applications or proposals, but may be considered if it is both in accordance with Federal awarding agency regulations and specified in a notice of funding opportunity. – 200.306

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# F&A/Overhead/Indirect Costs

- Indirect costs are those that are incurred for common or joint purpose benefitting more than one cost objective, and not readily assignable to the cost objectives benefitted, without effort disproportionate to the results achieved. (200.56)
- Waiver Requests
- Justification

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



## Indirect Costs

The indirect cost rate established for the University for an on-campus project is 52% of total direct costs less each piece of general equipment over \$5,000, rental expenses, and tuition remission. This charge has been approved by the University's cognizant government agency, Department of Health and Human Services, and the agreement was signed on July 25, 2013.

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



# Caution on Budgeting

“The fact that a proposed cost is awarded as requested by an applicant does not indicate a determination of allowability.”

NIH Grants Policy Statement, October 2015

## 7.2 The Cost Principles



# Rebudgeting

- Contract v grant
- Justifications
- Remember your audience!



# Proposal Best Practices

- Let Sponsored Projects Office know in advance of a proposal, especially if it's going to be last minute
- Routing memo
  - Anything unusual about the proposal or submission details
  - If there is cost sharing
  - Should be included for all proposals
- What are yours?

©University of Maryland. Any reuse of these materials requires the permission of UMD and Rebecca Hunsaker.



## QUESTIONS?



# Resources

- Uniform Guidance:  
<http://ora.umd.edu/resources/federal/uniform-guidance/what-is-the-uniform-guidance>
- Research Administration LISTSERV:  
<https://www.healthresearch.org/office-sponsored-programs/research-administration-listserv/>



# Contact Us

- Rebecca Hunsaker, University of Maryland, College Park – [hunsaker@umd.edu](mailto:hunsaker@umd.edu)
- Gaye Bugenhagen, University of Maryland, College Park – [gbugenha@umd.edu](mailto:gbugenha@umd.edu)

