



BROWN

## Cost Allocation Guidance: Appendix A: Methodology Examples

### Common Sample Methodologies

Methodology	Methodology Description	Cost-Benefit Rationale	When is it useful?	Supplemental Supporting Documentation	Considerations
<b>Personnel (FTEs/Effort)</b>	Research costs in defined categories are allocated in alignment with effort levels of one or more personnel on multiple projects	When goods or services are proportional to the personnel / effort on the projects. (i.e.; more effort = more supplies	<ul style="list-style-type: none"> <li>When personnel contributions to multiple projects are consistent over a period of time</li> <li><b>and</b></li> <li>When goods or services used are proportional to the personnel / effort on the projects</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate proportional benefit</li> <li>PI Confirmation of the personnel FTE/ effort allocation to project</li> <li><b>and</b></li> <li>Effort allocation calculation</li> </ul>	<ul style="list-style-type: none"> <li>Changes in headcount or effort</li> <li>Retroactive salary or effort changes, which could affect prior certification or have cost transfer implications</li> <li>Effort paid from other sources may result in disproportionate allocation across benefitting projects (e.g., unpaid visiting scholars, externally paid fellows, cost sharing)</li> </ul>
<b>Headcount</b>	Expenses are allocated across multiple projects in proportion to the number of participants associated with each individual award.	When expenses are linked to headcount of participants	<p>When the following is known:</p> <ul style="list-style-type: none"> <li>How many individuals are associated with (will benefit) each project</li> <li><b>and</b></li> <li>How many individuals are not participants are will not benefit the project(s) (e.g., mentors, staff, presenters)</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate proportional benefit</li> <li>Headcount</li> </ul>	<ul style="list-style-type: none"> <li>Calculated portion of expense associated with NON-Participants (e.g., mentors, staff, presenters) should be allocated to non-participant support account(s).</li> </ul>
<b>Experiments Performed</b>	Expenses are allocated across multiple projects in proportion to the number of experiments performed for each award.	When goods or services used are proportional to the number of experiments	<ul style="list-style-type: none"> <li>When personnel effort on projects does not reflect accurate usage of goods or services</li> <li><b>and</b></li> <li>When the number of experiments for each project is known</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate proportional benefit</li> <li>Define the specific types of costs that relate to the experiment performed</li> </ul>	<ul style="list-style-type: none"> <li>May contradict FTE allocation</li> </ul>

**Common Sample Methodologies (continued)**

Methodology	Methodology Description	Cost-Benefit Rationale	When is it useful?	Supplemental Supporting Documentation	Considerations
<b>Square Footage</b>	Expenses are allocated to projects based on space utilization.	When square footage and utilization benefits multiple projects	<ul style="list-style-type: none"> <li>When expenses are most reasonably allocated by space use</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrated space assignment (how it is primarily used) and room measurements</li> <li>If the space is shared for multiple purposes, usage should be reflected in percentages for each purpose. Include this percentage within the calculation.</li> </ul>	<ul style="list-style-type: none"> <li>Confirm that the expense should be allocated as a direct cost rather than through indirect recovery.</li> <li>Space utilization may change and no longer reflect the relative benefit.</li> </ul>
<b>Usage</b>	Determined Benefit/Usage Research costs in defined categories are allocated to multiple projects based on the benefit to the project as identified by the PI.	Aligns with the proportional benefit to each project as identified by the PI.	<ul style="list-style-type: none"> <li>Aligns with the proportional benefit to each project determined by the PI</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate how cost basis reflects proportional benefit</li> <li>PI confirmation of continued benefit</li> </ul>	<ul style="list-style-type: none"> <li>Changes to the usage of goods or services by projects</li> <li>Consider periodic reviews and discussion/confirmation with PI regarding the continued benefit to projects</li> </ul>

**Examples of Allocation Methodologies by Cost Type**

Cost Type	Methodology & Description	How is Relative Benefit Reflected?	Supporting Documentation	Considerations
<b>General Lab Supplies/Services</b>	<b>Personnel/FTE Effort</b>	Use of general supplies or services, such as glass washing, may be directly associated with the personnel accessing those supplies and the projects they are working on.	<ul style="list-style-type: none"> <li>List or spreadsheet of personnel doing wet lab work, and which projects they are working on</li> <li>Document/Invoice for the general supplies identifying the personnel that accessed the supplies</li> </ul>	<ul style="list-style-type: none"> <li>Analysis required to adjust for personnel doing computational work.</li> <li>Active discussions with PI are required to make adjustments in advance of when charges are incurred.</li> </ul>
<b>REU Participant Catering</b>	<b>Headcount</b> Catering expenses are allocated across multiple NSF Research Experience for Undergraduates (REU) awards in proportion to the number of REU participants associated with each individual award.	Catering expenses for REU events are linked to headcount of REU program participants when the following is known: <ul style="list-style-type: none"> <li>How many REU participants are associated with each individual REU award</li> <li><b>and</b></li> <li>How many individuals are not REU participants (e.g., mentors, staff, presenters)</li> <li><b>and</b></li> <li>How many individuals the catering will feed</li> </ul>	<ul style="list-style-type: none"> <li>Number of individuals participating in each catered event</li> <li>List of REU participant names and the associated REU award (determined by REU Program administrators)</li> <li>Number of individuals who are not REU participants</li> <li>Headcount allocation calculation</li> </ul>	<ul style="list-style-type: none"> <li>Calculated portion of catering expense associated with Non-Participants (e.g., REU mentors, staff, presenters) should be allocated to appropriate (non-participant support) account(s).</li> </ul>
<b>Animal Per Diem</b>	<b>Headcount</b> Animal per diem costs are allocated across multiple awards in proportion to the number of animals or cages associated with each individual award.	Animal per diem costs are linked to animal/cage count when the following is known: <ul style="list-style-type: none"> <li>How many animals/cages are associated with each individual award</li> <li><b>and</b></li> <li>How many total animals/cages are used</li> </ul>	<ul style="list-style-type: none"> <li>Animal/cage count allocation calculation</li> </ul>	<ul style="list-style-type: none"> <li>See considerations for Other Animal Costs</li> </ul>
<b>Other Animal Costs</b>	<b>Experiments Performed</b> Animal-related costs (other than per diem) are allocated across multiple awards in proportion to planned experiments as determined by the PI and defined by the scopes of work.	Other animal costs such as reagent/ apparatus costs are linked to planned experiments within each project scope. These costs may benefit projects in different proportions than animal per diem.	<ul style="list-style-type: none"> <li>PI assessment of the percentage benefit to each project for the allocable animal costs</li> </ul>	<ul style="list-style-type: none"> <li>Check in regularly that the experimental design remains the same; changes to design may impact reagent/supply use.</li> <li>Change of animal model may require additional follow-up with program officer to formally update scope of work.</li> </ul>

**Examples of Allocation Methodologies by Cost Type (continued)**

Cost Type	Methodology & Description	How is Relative Benefit Reflected?	Supporting Documentation	Considerations
<p><b>Publication Costs</b></p>	<p><b>PI Effort</b></p> <p><b>Total Award Budget</b></p> <p><b>Research Components in Publication</b></p>	<p>Evaluate the contributions of each award towards the publication.</p> <p>If research contributions to the publication are based on interrelated research for two or more awards, you may consider PI Effort per project or total cumulative Award Budgets to determine allocation.</p> <p style="text-align: center;">or</p> <p>If a publication is comprised of several research components and one award was only responsible for one component, while the 2<sup>nd</sup> award was responsible for the remaining components, the contribution can also be determined in this manner.</p>	<ul style="list-style-type: none"> <li>Allocation calculation</li> </ul>	<p>Publication costs must be allocated to all Brown <b>active</b> awards cited in the publication on the assumption that the cited awards contributed to and benefited from the publication. Otherwise, any Brown award not contributing to or benefiting from the publication should not be cited or be charged for publication costs. It may not always be appropriate to charge publication costs to a single Brown award when other active Brown awards are cited in the publication.</p>

**Costs that usually occur as distributions, and not as allocations:**

**Travel**

Travel sometimes involves multiple locations benefitting various projects as well as personal travel and novel research. Shared costs should be allocated according to the proportional benefit for each project or activity, which may differ from salary distribution.

Documentation should:

- Demonstrate proportional benefit by providing information about how the travel benefits the project(s)
- Demonstrate how the calculation was created for each travel period
- Demonstrate how each leg of travel relates to the person traveling and their planned work of the project(s)