Indirect Costs (aka F&A): Everything you need to know

Presenters:

**Dave Kennedy**, VP & Director, Costing Policies
Council on Governmental Relations (COGR)

**Jim Luther**, Associate VP Finance & Compliance Officer
Duke University

Thursday, September 6, 2018
01:30 EDT
Host: Health Research Alliance
Overview

• Please join us for a webinar where we will explore research costs, including how facilities and administrative costs (F&A or “indirect costs”) and “direct” costs are defined and calculated, and how these costs are used to support research. This is a follow-up to the meeting in May co-hosted by the FIRST Group, as well as a prep for the session at the Members’ Meeting in September.

• The webinar is designed to help funders understand what research infrastructure and operating expenses (including project-specific expenses) are supported by F&A costs, and what contributions research institutions make in support of sponsored research.

• Feel free to ask the presenters your burning questions to better understand the nuances of this issue, as we all strive to accelerate research progress.
Agenda

1) Contextual Overview – Brief!
   a) National
   b) University

2) F&A Process & Key Terms
   a) Understand the regulations that drive a research institutions perspective on F&A
   b) Understand the process by which an institution calculates and negotiates their F&A rate
   c) Awareness of University issues related to F&A
Statement of Clarification

• Much of what we will discuss is the current methodology that has been developed with the federal government over the past 5+ decades

• We are **NOT** suggesting that this is the right or wrong model for foundation-university relationship; we are using it to explain what F&A means to a university and the critical role it plays in supporting the research mission
1) Contextual Overview – Brief!
   a) National
   b) University
Understanding what research really costs

Costs of Federally Sponsored Research

The total cost of federally sponsored research includes a combination of both direct and facilities and administrative (F&A) costs. Both types of expenditures are key to an institution's ability to conduct cutting-edge research. F&A consists of the construction and maintenance costs of laboratories and high-tech facilities; energy and utility expenses; and safety, security, and other government-mandated expenses. These costs are real and research cannot be conducted without them.

Direct costs - These expenses solely cover research and include lab supplies and equipment; salaries and stipends for researchers and graduate students; and travel costs for conducting and sharing research.

Upkeep of any building space not used directly for federally funded research, such as classrooms or lobbies, is not covered by F&A reimbursement.

F&A costs - These expenses include personnel in support of research, including security, financial, administrative, technical, maintenance, and janitorial staff. Secure data storage, internet, telecommunications, and high-speed data processing. Utilities - ventilation, heat, air conditioning, water, and lighting. Radiation and chemical safety, including safety training and hazardous waste disposal. Library and research facilities. Advanced research lab equipment. Costs of federal, state, and local regulatory compliance, including human and animal safety review boards.

Direct costs

F&A costs

No federal funds used
The FY18 proposed budget from the White House reduces the F&A rate to 10%, a cut of approximately two thirds.

Health and Human Services Secretary Tom Price at today’s House of Representatives hearing. MICHAEL REYNOLDS/EPA/NEWSCOM

Trump wants 2018 NIH cut to come from overhead payments

By Jocelyn Kaiser | Mar. 29, 2017, 4:15 PM
F&A -- The Myths...

- **MYTH #1:** F&A costs aren’t real costs of research
- **MYTH #2:** There is no reason for F&A rates to differ between institutions
- **MYTH #3:** Institutions don’t need F&A and can absorb a significant reduction
- **MYTH #4:** Foundations are subsidized by federal sponsors and don’t pay their fair share
- **MYTH #5:** The F&A rate can be lowered if regulatory burden is reduced
- **MYTH #6:** Universities hire people and construct buildings so they can get more F&A.
- **MYTH #7:** Universities (like Duke) get 59 cents of every dollar...
Core Concepts: Direct and Facilities and Administrative Costs

• **Direct Costs**: Costs which can be *identified specifically* with a particular sponsored project or that can be directly assigned to such activities relatively easily with a high degree of accuracy.

• **Facilities & Administrative**: Costs incurred for *common or joint objectives* and therefore *cannot be identified readily and specifically* with a sponsored project.
What is F&A?

Facilities and Administrative costs incurred for common or joint objectives, not identified with a specific project or activity

- Operations and Maintenance costs
  - Utilities
  - Security
  - OESO
  - Housekeeping
  - Maintenance on facilities

- Building and Equipment Depreciation

- External Interest on Capital Assets

- Libraries

- Administration
  - In the departments
  - Pre- and post-award offices
  - Compliance
  - Central administration
Communicating about F&A

• F&A recovery is not “profit” for Duke – it is reimbursement for investments already made in research

• F&A costs are essential for research – they are the state of the art labs, the lights and climate control, the security, and the administrative support for meeting proposal deadlines and ensuring regulatory compliance
Why is F&A Recovery Critical?

• Real costs that have already been incurred in support of research at Duke

• F&A recovery through the F&A rate covers only a portion of the costs of supporting research
  – In FY16, we spent nearly $283M in F&A costs in support of research. We recovered $186M from the F&A rate on research awards – 66% of costs.
The Economics of the Research Mission
Where does a dollar of research funding go at research university?

- 74¢ of each dollar is for direct research costs:
  - Research Salaries & Employee Benefits: 36¢
  - Materials, Services & Travel: 13¢
  - Student Support: 4¢
  - Equipment: 2¢
  - Subcontracts: 18¢
  - All Other: 1¢

- 26¢ of each dollar is for overhead:
  - Operations & Maintenance: 7¢
  - Buildings: 5¢
  - Equipment: 2¢
  - Libraries: 1¢
  - General: 1¢
  - Sponsored Admin/Compliance: 1¢
  - Research Operations Support: 7¢
  - Faculty Support: 2¢
  - Facilities Related: 15¢
  - Administration Related: 11¢
But there’s more...

- To support faculty, allow for infrastructure upgrades, and meet the shortfall of F&A reimbursement, Duke University contributes $125 million annually to research
  - This translates into 26 cents of every research dollar

*Approx. $125 million annually*
<table>
<thead>
<tr>
<th>Category</th>
<th>Medicine</th>
<th>Nursing</th>
<th>A&amp;S</th>
<th>Pratt</th>
<th>Fuqua</th>
<th>Law</th>
<th>Nicholas</th>
<th>Sanford</th>
<th>Divinity</th>
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<tbody>
<tr>
<td><strong>Net Support from SIP</strong></td>
<td>1.0</td>
<td>0.2</td>
<td>9.0</td>
<td>2.2</td>
<td>0.7</td>
<td>1.7</td>
<td>5.1</td>
<td>1.2</td>
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</tr>
<tr>
<td><strong>Auxiliary &amp; Other Revenue</strong></td>
<td>32.2</td>
<td>-</td>
<td>1.0</td>
<td>0.3</td>
<td>9.2</td>
<td>0.4</td>
<td>0.1</td>
<td>0.1</td>
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<tr>
<td><strong>Endowment &amp; Invest Income</strong></td>
<td>162.5</td>
<td>4.0</td>
<td>33.3</td>
<td>20.5</td>
<td>13.9</td>
<td>16.0</td>
<td>10.2</td>
<td>8.1</td>
<td>7.9</td>
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<td><strong>Contributions</strong></td>
<td>39.1</td>
<td>0.5</td>
<td>22.9</td>
<td>4.9</td>
<td>6.9</td>
<td>4.2</td>
<td>2.2</td>
<td>1.6</td>
<td>8.2</td>
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<td><strong>PDC Transfers</strong></td>
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<tr>
<td><strong>Sponsored Direct</strong></td>
<td>674.9</td>
<td>4.4</td>
<td>51.4</td>
<td>55.9</td>
<td>2.4</td>
<td>0.0</td>
<td>12.5</td>
<td>2.0</td>
<td>2.7</td>
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<tr>
<td><strong>Sponsored Indirect</strong></td>
<td>155.0</td>
<td>1.4</td>
<td>18.4</td>
<td>17.5</td>
<td>0.4</td>
<td>0.1</td>
<td>4.0</td>
<td>2.8</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Net Student Income</strong></td>
<td>25.1</td>
<td>30.4</td>
<td>222.6</td>
<td>35.3</td>
<td>83.0</td>
<td>30.8</td>
<td>12.9</td>
<td>16.3</td>
<td>5.6</td>
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<tr>
<td><strong>Total Revenue</strong></td>
<td>1,137.3</td>
<td>40.9</td>
<td>358.5</td>
<td>136.5</td>
<td>116.6</td>
<td>53.2</td>
<td>47.0</td>
<td>32.1</td>
<td>25.0</td>
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Net Student Income - Gross Tuition Less Student Aid
Nazarbayev Contract Income Recorded As Other Revenue
Endowment & Investment Income Includes Unassigne Income
Excludes 1% SIP Tax
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Composition of Total Costs

**UG 200.402**

- The cost of a sponsored agreement is comprised of the allocable direct costs incident to its performance, plus the allocable portion of the allowable F&A costs of the institution....

- Therefore, sponsors **reimburse** the institution for the allowable costs of a project, including direct costs and F&A costs....
Understanding what research really costs

Costs of Federally Sponsored Research

The total cost of federally sponsored research includes a combination of both direct and facilities and administrative (F&A) costs. Both types of expenditures are key to an institution’s ability to conduct cutting-edge research. F&A consists of the construction and maintenance costs of laboratories and high-tech facilities; energy and utility expenses; and safety, security, and other government-mandated expenses. These costs are real and research cannot be conducted without them.
Research Support Costs

• Federal Partners
  • Direct + Indirects = Total Project Cost

• Foundations
  • Directs + Indirects = Total cost
  • Directs + Indirects + Res Supt. Cost = Total cost
  • Directs + Res Supt. Cost = Total cost
  • Directs only = Total cost

Allocations of RSCs require a methodology that is reasonable for universities to track and meaningful for Foundations to use
## Types of Costs

<table>
<thead>
<tr>
<th><strong>Direct</strong> (specifically identifiable to the project)</th>
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<tbody>
<tr>
<td>- Faculty Salaries</td>
</tr>
<tr>
<td>- Lab supplies</td>
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<tr>
<th><strong>Indirect (F&amp;A):</strong> (difficult to assign to the project)</th>
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<tbody>
<tr>
<td>- Library</td>
</tr>
<tr>
<td>- Depreciation</td>
</tr>
<tr>
<td>- Payroll Office</td>
</tr>
<tr>
<td>- Procurement OIT</td>
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<tr>
<th><strong>Research Support Costs:</strong> Costs that are not normally direct but can be attributed to the project</th>
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<tr>
<td>- microscope costs, scans, hazardous waste disposal, rent</td>
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Specifically identifiable
Unlike circumstance
Research Operating Costs

What are examples?

- Salaries/Wages & Fringe Benefits  (if project-specific, can include TTO)
- Facilities  (project-specific space rental for off-campus facilities)
- Microscope facility costs  (on which project depends)
- Other core facility costs  (on which project depends)
- Hazardous waste disposal
- Scans  (project-related including for a clinical trial)
- Recruitment costs  (patients for clinical trial)
- Excessive computer cluster charges  (project-related)
- Travel  (Transportation, lodging, subsistence, and related items incurred by employees who are in travel status on official business of the institution directly related to the project)
Research Operating Costs

What purpose do they serve? **TRANSPARENCY!!**

- Costs that are necessary for the project to be successful are easier to support.
- Vague “indirect” costs are much harder to support.
- Boards, donors, etc want to know their money is going to directly support the research project.
- “Credit” for supporting these costs – esp pertinent to orgs that pay 0% low IDCs yet pay significant ROCs

What are potential downsides?

- Increase reporting and reviewing requirements (at both budget and financial report stages)
- Negatively impact awardees (if space and P&T are tied to % IDCs)
- Complications
  - System limitation
  - Decentralized controls in univs
F&A Rate Development and Negotiation Process
Rate Negotiation Process

• Universities renegotiates their F&A rate every 4 years with DHHS.
  – Prep FY15 (ended 6/30/15)
  – Base Year: FY16 (ended 6/30/16)
  – Proposal Submission: ~ December - March 2017
  – Site visit: ~ Summer 2017
  – Final rate negotiated: ~ Fall 2017
  – Anticipate negotiating rates for 7/1/17 – 6/30/21
Computing the F&A Cost Rate

- Cost Identification
- Cost Allocation
- F&A Cost Rate Determination
Cost Allocation

- Depreciation of Building & Equip
- Operations & Maintenance
- Library
- General & Administrative
- Sponsored Project Administration
- Student Services Administration
- Departmental Administration

F&A COST POOLS

- Allocation based on assignable square feet functionalized through a space survey

DIRECT COST POOLS

- Instruction
- Organized Research
- Other Sponsored Activities
- Other Institutional Activities
Cost Allocation

Allocation based on assignable square feet functionalized through a space survey

- Operations & Maintenance
- Library
- General & Administrative
- Sponsored Project Administration
- Student Services Administration
- Departmental Administration
- Instruction
- Organized Research
- Other Sponsored Activities
- Other Institutional Activities

F&A COST POOLS

DIRECT COST POOLS

Depreciation of Building & Equip
Cost Allocation

- The purpose is to allocate facilities and administrative costs to Organized Research and other University activities (Instruction, Auxiliaries, Patient Care Services, etc.)
F&A Cost Rate Determination

Facilities and Administrative Costs
Supporting Research

\[ \frac{\text{Sponsored Research}}{\text{Research Costs}} = \text{F&A Cost Rate} \]
Simplified F&A Rate Calculation

**Numerator: Allocated F&A Costs**

Building Depreciation
Operation & Maintenance *(includes utilities, mntce, computing, etc.)*
Library
General Administration *(includes President's ofc, finance, HR, etc.)*
Department Administration (Dean, Business Mgr.)
Sponsored Projects Administration *(includes ORS, ORA, OSP, etc.)*

\[
\text{Organized Research} = \frac{\text{Numerator: Allocated F&A Costs}}{\text{Organized Research}} = \text{F & A Rate}
\]
Need some slides to “Bring it home”
The Economics of the Research Mission
Extra Slides – Not needed or utilize aspects above
Understanding F&A

NANCY C. ANDREWS
DUKE UNIVERSITY SCHOOL OF MEDICINE

Credits: Jim Luther, Scott Gibson
The government/university partnership

- Partnership mechanism to fund research was created in the 1950s in the wake of remarkable research contributions to the WWII war effort
- Allows the government research impact to be much larger because universities provide space, people, cost sharing – *and universities assume all of the risk*
- A rapid change would be extremely disruptive and damaging
Dispelling myths that are not true

MYTH #1: F&A costs aren’t real costs of research

• Direct costs are costs that can easily be assigned to individual projects
• Indirect costs, such as lab space or biohazard waste disposal, are real but cannot easily be assigned to individual projects and therefore are estimated by formula
• F&A and direct costs are true costs of doing research.
Understanding what research really costs

Costs of Federally Sponsored Research

The total cost of federally sponsored research includes a combination of both direct and facilities and administrative (F&A) costs. Both types of expenditures are key to an institution's ability to conduct cutting-edge research. F&A consists of the construction and maintenance costs of laboratories and high-tech facilities; energy and utility expenses; and safety, security, and other government-mandated expenses. These costs are real and research cannot be conducted without them.

- Direct costs - These expenses solely cover research and include lab supplies and equipment; salaries and stipends for researchers and graduate students; and travel costs for conducting and sharing research.
- F&A costs - These expenses cover support services such as security, facilities maintenance, and support services.
- No Federal funds used - These expenses are not covered by federal funding.

Radiation and chemical safety, including safety training and hazardous waste disposal

Utilities – ventilation, heat, air conditioning, water, and lighting

Secure data storage, internet, telecommunications, and high-speed data processing

Library and research facilities

Advanced research lab equipment

Costs of federal, state, and local regulatory compliance, including human and animal safety review boards

Personnel in support of research, including security, financial, administrative, technical, maintenance, and janitorial staff

Upkeep of any building space not used directly for federally funded research, such as classrooms or lobbies, is not covered by F&A reimbursement

Direct costs

F&A costs

No Federal funds used
MYTH #2: There is no reason for F&A rates to differ between institutions

• Most institutions, including Duke, have administration ("A") costs above the cap of 26% that they must absorb.

• Therefore, the variability is in facilities ("F") costs. Different types of research vary widely in their needs for specialized space, technology, infrastructure, biocontainment, hazardous waste disposal, etc.

• Universities do not build buildings to get more F&A support – that would be a losing proposition.
MYTH #3: Institutions don’t need F&A and can absorb a significant reduction

• Nationally, universities already provide $5 billion annually to subsidize federally-sponsored research.

• Sources of funds to subsidize research are limited to state support, philanthropy, revenues from long-term investments and clinical margins, but each of these sources is also tapped for other purposes.

• Every state has at least one public research university and most have private research universities. All would be in jeopardy without F&A reimbursement.
Dispelling myths that are not true

MYTH #4: Foundations are subsidized by federal sponsors and don’t pay their fair share

• Universities avoid increasing fixed costs when they accept foundation grants, unless those fixed costs can be budgeted into the foundation grants.

• In general, foundation support is small relative to federal support, filling in the gaps

• Support from some foundations, like Gates, is substantial, but a subset of costs that would be F&A on federal grants can be included in direct cost budgets
Dispelling myths that are not true

MYTH #5: The F&A rate can be lowered if regulatory burden is reduced

• It’s true that the regulatory burden has exploded over the past 25 years

• But research universities already subsidize F&A reimbursement by providing millions above the 26% admin cap

• Advantages to streamlining regulations:
  • Frees up university resources to support research in other ways
  • Frees up faculty time to do more research (estimated 42% of funded research time is currently used for admin)
Challenges and opportunities for improvement on F&A

CHALLENGES

• Federal F&A addresses a real part of research cost but, combined with direct cost, is insufficient to cover the full cost
  • Institutions must cover costs that are not allowed as either direct or F&A; this results in 30-40¢ additional university subsidy per $1 of federal direct cost
  • Research universities carry enormous fixed costs: buildings, specialized equipment, information technology, animal facilities, tenure obligations, etc.
• F&A is reimbursement for *previously incurred* costs
  • The methodology is prescribed by the government – there are no kickbacks
• Research costs are inextricably intermingled
  • This is both what makes the partnership work and what makes it confusing.
Federally-sponsored research at Duke

The government contribution

- research salaries, benefits: 36¢
- materials, services, travel: 13¢
- subcontracts: 18¢
- student support: 4¢
- equipment: 2¢
- all other: 1¢

74¢ direct costs

26¢ F&A

operations, maintenance: 7¢
buildings: 5¢
equipment: 2¢
libraries: 1¢
research ops support: 7¢
general admin: 1¢
sponsored research admin/compliance: 1¢
faculty support: 2¢
Federally-sponsored research at Duke including university component

Considering the total cost of research, Duke contributes about 35% of what the federal government pays, or 26% of the total research dollar.
The 26%: other costs we have to find money to pay

More for quality and compliance

• sponsored research oversight
• human subjects protection
• animal welfare
• conflict of interest management
• biosecurity and safety
• research compliance training

Faculty support*

• recruitment/start up costs
• salary above NIH cap
• bridge funding for gaps in grant funding
• retention costs

More for infrastructure

• computer and IT infrastructure
• support of core facilities/services
• data management
• cost of buildings, renovations (all the rest)

* Generally the faculty support part is most expensive
What is the concern?

• Flat rate (President Trump’s 10% cap) would push much more cost to universities, leading to downsizing of academic research over a few years

• Contrary to increasing opportunities for early career researchers, a 10% cap on F&A would likely result in hiring freezes and layoffs

• The School of Medicine would not be able to accept all of the grants that NIH would be willing to fund – there would have to be a prioritization

• This would lead to a situation that is dramatically different from any we’ve seen before

• Knowledgeable stakeholders have used words like “catastrophe” and “disaster” to describe the situation and we don’t disagree.
Cumulative Growth Rates: Sponsored Expenditures, F&A Recovery, and Quality Assurance Costs

Quality Assurance Growth:
- Research Compliance Office
- Office for Research Integrity
- Pre-award and Post-award Management
- Information Technology
- Human Subjects Protection Program and IRB
- Animal Welfare and IACUC
- Institutional Biosafety Office
- Clinical Research Office
Why does research require institutional support?

Costs not fully covered by F&A:

- sponsored research oversight
- human subjects protection
- animal welfare
- conflict of interest management
- start up of new faculty (2-4 years)
- salary above NIH cap
- full computer and IT infrastructure
- bridge funding (gaps in grant funding)
- retention costs
- full support of core facilities/services
- data management
- full cost of modernizing buildings
- biosecurity and safety
- staff and faculty research compliance training