

PRIMER ON F&A AND RESEARCH OPERATING COSTS

Navigating the Maze

March 2017

Research sponsors, including the federal government, private industry, state and local governments, and nonprofit foundations, provide funding to universities in the form of grants, cooperative agreements, or contracts. Awards generally include funds for the direct costs of research as well as F&A (i.e., “Research Operating Costs”), both of which are real costs incurred by the institution to conduct research. *We use the terms “F&A”, “Indirect”, and “Research Operating Costs” interchangeably as a means to reinforce that F&A costs are an absolute necessity for a functional and effective research enterprise.*

Direct Costs

Direct research costs are what people generally think of when it comes to federal support of research projects. These costs solely support research that is about to take place and often include laboratory supplies, specific research equipment, salary support for researchers and lab personnel, and travel for conducting research or disseminating research results. This is the core of university research, and it is also where the bulk of the federal investment is spent.

Facilities and Administrative (Research Operating) Costs

In order to perform research on behalf of federal agencies, universities incur a variety of other significant costs both leading up to and during a specific research project that they would otherwise not incur. F&A costs cover the portion of these infrastructure and operational costs related to federally-funded research. Such shared costs include the maintenance of sophisticated, high-tech labs specifically designed for cutting-edge, federally-sponsored research; utilities such as light and heat; telecommunications; hazardous waste disposal; and the infrastructure necessary to comply with various federal, state, and local rules and regulations.

From the Association of American Universities (AAU) and the Association of Public and Land-grant Universities (APLU). “Understanding the Costs of Federally Sponsored Research at Universities,” October 2013.

Federal policymakers, and the investigators who conduct research projects, generally recognize the necessity of the direct costs of research, including salary support (e.g.,

investigators, laboratory staff, technicians, graduate students), supplies, and sophisticated equipment. F&A costs, on the other hand, are often devalued for primarily two reasons: (1) due to the way some agencies provide for F&A, some stakeholders view the F&A budget category as diverting funding from direct costs, and (2) the reimbursement mechanism for F&A costs (i.e., the “F&A rate”) is complex and thus difficult to explain and to understand.

However, fair reimbursement of F&A costs is crucial to a stable and viable research enterprise. Research universities and institutions cannot implement research programs if sponsors do not support the real costs of research infrastructure and compliance activities. Construction and maintenance of state-of-the-art research laboratories and administrative efforts that ensure compliance with federal rules and regulations are necessary investments. A June 2014 COGR paper, *Finances of Research Universities* (see www.cogr.edu, Policy Issues / Financial Management), provides an in-depth look at the financial landscape of research universities, including the importance of the F&A reimbursement process.

The F&A rate is the mechanism used to determine and accomplish F&A cost reimbursement. The Office of Management and Budget (OMB), through [2 CFR Part 200](#) (Uniform Guidance) and related guidance, defines rules for reimbursement of F&A costs by way of federally-negotiated F&A rates. F&A rates are:

- **Calculated** by the university according to rules defined by OMB and based on audited university financial data;
- **Submitted** to the rate-setting cognizant agency (for research universities and most research institutions, either the Department of Health and Human Services, Cost Allocation Services or the Department of Defense, Office of Naval Research);
- **Reviewed and/or audited**, rigorously, by the rate-setting cognizant agency;
- **Negotiated** between the university and the rate-setting cognizant agency and normally effective for a period of two to five years; and
- **Charged** by multiplying the negotiated F&A rate by a subset of the direct costs of the sponsored research project.

An institution determines F&A costs by applying the negotiated F&A rate to a subset of the direct costs of the research project – this subset is known as the “modified total direct costs”, or MTDC. Through 2 CFR Part 200, OMB specifies those items that are included in MTDC and those that are not included to ensure equitable allocation of F&A costs. The items excluded from MTDC are generally direct costs which are assumed to not require extensive F&A costs/activities (e.g., graduate student tuition, equipment, subaward amounts greater than \$25,000) compared to other direct costs (e.g., salaries, benefits, supplies).

The chart below illustrates typical direct cost items in a research budget and application of the F&A rate. The F&A Amount (column 4) is determined by multiplying the negotiated F&A Rate (column 3) by the Direct Amount (column 2) for MTDC cost categories.

CHART 1: Research Budget and Application of F&A

Cost Item	Direct Amount	F&A Rate	F&A Amount	Total Reimbursed
Salaries and Benefits (MTDC)	200,000	54%	108,000	308,000
Supplies (MTDC)	30,000	54%	16,200	46,200
Grad Student Tuition	25,000	n/a	0	25,000
Equipment	75,000	n/a	0	75,000
TOTAL	<u>330,000</u>		<u>124,200</u>	<u>454,200</u>
<i>(Percent of Total Reimbursed)</i>	72.7%		27.3%	100%

The “*Percent of Total Reimbursed*” is of particular interest: The 54% F&A rate applied in the example results in F&A costs of 27.3% of the total research budget. National Institutes of Health data shows that F&A costs as a percent of total awards has remained constant for over a decade (see CHART 2 below).

CHART 2: NIH Direct and F&A Awarded (Dollars and Percent)

Fiscal Year	Direct Awarded (000s)	F&A Awarded (000s)	Total Awarded (000s)	Direct as a Percent of Total	F&A as a Percent of Total
FY2002	12,822,068	4,835,456	17,657,524	72.6	27.4
FY2007	15,387,745	5,876,060	21,263,805	72.4	27.6
FY2012	15,978,032	6,182,900	22,160,932	72.1	27.9
FY2016	16,899,936	6,407,203	23,307,139	72.5	27.5

Source: Congressional Justification of the NIH fiscal year (FY) 2017 budget request; Overview of 2017 Presidents Budget.

National Institutes of Health data shows that F&A costs as a percent of total awards has remained constant at less than 28 percent for over a decade. This may or may not represent the “ideal” ratio; however, it does demonstrate that a consistent allocation of funds dedicated to the direct costs of scientific activities is reliable.

At the same time, cutting-edge science requires appropriate infrastructure and other support and institutions incur these real research expenses in the form of facility operations and compliance activities when conducting research on behalf of the federal government and other sponsors. Equitable reimbursement of those F&A costs has a significant impact on the financial health of research institutions, and, consequently, helps to ensure that research activities are supported with the best, state-of-the art laboratory facilities, as well as the highest quality administrative and compliance support mechanisms.