AN INDIRECT COST PRIMER
BACKGROUND MATERIAL FOR THE INDIRECT COST RECOVERY TASK FORCE

Prepared by Sherm Bloomer

In early May, Interim Provost Randhawa constituted a group to review the University's practices and policies regarding indirect cost recovery. End of term and summer schedule constraints have prevented the group from meeting yet. Our first meeting will be on September 15th 10-11AM in the President's Conference Room.

The members of the group include Sherm Bloomer, Science (Chair); Mark Abbott, College of Oceanic and Atmospheric Sciences; Joe Beckman, Environmental Health Science Center; George Boehlert, Hatfield Marine Science Center; Barbara Bond, Forest Science; Stella Coakley, Botany and Plant Pathology; Faculty Senate President-Elect; Dan Edge, Fisheries and Wildlife; Rich Holdren, Research Office; Walt Loveland, Chemistry; Faculty Senate Budget and Fiscal Planning Committee; Karty Mayaram, Electrical and Computer Engineering; Roger Nielsen, Geosciences; Faculty Senate Research Council; Rosita Rodriguez, Pharmacy

The charge from the Provost states:

"The ICR Task Force will advise University leadership on the principles of ICR allocation and the distribution policy that would lead to long-term growth of OSU's research enterprise. Specific issues that merit careful assessment include: 1) re-examination of the historical university policy of returning 26% of ICR to units, in the context of the new budget model and OSU Strategic Plan, and 2) consistency in returned overhead policies for units, centers, and institutes, including issues related to historical agreements with colleges and programs, and funding issues related to facilities.

ICR Task Force members will be expected to represent the very best interests of the University. The advisory nature of the group means that the Task Force makes recommendations, but does not serve in a decision-making capacity. Members are asked to commit to active participation."

To begin the conversation, I offer a short description of what indirect costs are, how we have dealt with them in the past, and what our constraints are in dealing with them in the future. This primer may be a starting point for something that would be useful to members of the faculty as background.

What are Indirect Costs?

Indirect costs are costs paid by agencies that enter into grants or contracts with the University for research work. They are also called overhead charges, but formally should be called Facilities and Administrative Costs (which is how the Federal Government refers to them). I will generally call them F&A Costs in this document.

The most important thing to note about F& A Costs is that they are provided to the University as a ***reimbursement*** for real costs incurred in maintaining the infrastructure for research. I'll take an example from my science experience. I had a laboratory in Wilkinson Hall for doing research work on the geochemistry of volcanic rocks, largely from the sea floor. OSU committed to providing the lab and an environment in which I could compete for NSF grants, train graduate students, and hopefully do meaningful research. Some of the costs of providing that commitment that come to mind are: building the lab (and depreciating the costs); providing lights, water, gas, vacuum and distilled water; emptying the trash; keeping a hazardous waste office and disposing

of dangerous waste; stocking the library with essential journals for the work; paying the librarian to take care of the journals; providing repairs in the lab; keeping the library working; paying professionals to do accounting, payroll, ordering, travel for the grant activities; providing compliance officers to make sure the work is line with Federal and State Regulations, and so on. You get the idea.

Maintaining a research infrastructure is a very expensive enterprise. If the faculty did nothing but teach classes for undergraduates, much of the infrastructure we have on campus would not be necessary. When we are paid F&A Costs as part of a project, it is important to remember we are being ***reimbursed*** for costs. We don't run out and build a lab when we get the grant (usually). We've already invested in the lab, the library, the support personnel, and have already incurred those costs. F & A Funds are not "extra" money. They are paid to us for very specific functions. One of the myths of indirect costs is that high return programs (Biochemistry let's say) subsidize low return programs (English let's say). It is true that the F & A Rates are an institutional average but it is much more expensive to do research in Biochemistry than in English. The high return programs generally produce much more F & A because they are in fact much more expensive to maintain. One of the key goals in making budgeting decisions based on F&A recovery is to recognize those programmatic variations in cost and balance them against the less obvious but very real pan-institution costs of research.

How are Facilities and Administrative Costs Determined?

The F & A Cost rates are determined in negotiation with one of two Federal auditing agencies. In OSU's case, the university conducts its negotiations with the U.S. Department of Health and Human Services. Other institutions may need to work with the Defense Contractors Auditing Agency (DCAA), an arm of the Department of Defense. The institution does not get to choose with whom the negotiations are conducted. Rather, an institution's oversight agency depends on from which agency (DoD or DHHS) it obtains more grant and contract funds. The last negotiated agreement was initiated in July, 2001, and was initially established to cover a three year period through June 2004. The agreement has since been extended by two years.

OSU negotiates with representatives of DHHS out of their San Francisco Office. In that negotiation OSU documents the costs it has incurred for supporting research in a one-year period (called the base year) immediately preceding the initiation of negotiations. The government typically requests a one-year period in which to complete the evaluation and negotiation with the institution. The base year for our next negotiation will be the FY2004-2005 and then the actual discussions will take place between July of 2005 and June 2006.

For OSU, DHHS looks at expenditures in about eight or nine different categories: on-campus research, off-campus research, ship support costs, on-campus training, off-campus training, and others. Ultimately, several of these may be collapsed into a single rate, depending on actual costs and the magnitude of the expenditures. Within each category, the auditing agency looks at two components, a General and Administrative (G&A) component and a Facilities component. The G&A component applies to all research (or training, or ship operations) activities, whereas the facilities component applies only to those projects that use university facilities. For uniformity, the government sets standards for what constitutes off campus research, including, for example, that the project team must be away from campus continuously for more than ninety days. The logic here is that even if the majority of the work is done away from campus facilities, the investigators will continue to use computer, telephone, library, etc. resources when they are on campus. By setting uniform standards for all institutions, it reduces the amount of "gaming" attempted by institutions (and investigators) to get the best rates.

From the university's perspective, one of our most important responsibilities in the negotiating process is documenting what we spent for research support and where we spent it. This the step that costs many institutions percentage points in their negotiations. If the plumbing in my lab

needs to be repaired and the department pays for it on an account that is in the instructional side of the ledger, no record of that repair and that cost ever gets into the F & A negotiation. Add those up and it can become a significant issue. A 1% point change in the rate for an organization that does more than $100M of research is a lot of money. This is the reason the institution worries so much about classifying space as for research, instruction, or administration. Space use is one of the most important elements of the negotiation.

As noted above, the costs are reviewed in two broad components, Facilities Components and General and Administrative Components. Facilities Components include (% is the contribution of this component to the total rate, based on FY00) Building Use Allowances (1.79%), Equipment Use Allowance (3.03%), Interest Cost (0.33%), Operation and Maintenance Cost (9.36%), Utility Cost Adjustment (1.3%), and Library Cost (0.72%). One of the research investment areas we need to review is that regarding building depreciation and major research and facility infrastructure. Many of our buildings are older than 50 years and therefore largely fully depreciated. There are some strategies to invest that might allow us to recognize more of our costs for depreciation, interest and lease costs (see for example http://www.tuff.gatech.edu for an innovative approach). This is an area that requires some review

General and Administrative Components include General Admin and Expense Cost (6.45%), Departmental Admin Cost (15.66%), Sponsored Projects Admin Cost (1.54%), Student Services Admin Cost (0.13%), and Faculty Department Admin Cost (3.60%). The General and Administrative components total 27.38%, but the Federal Government caps the rate at 26.00%. The total for OSU that year was therefore 42.53%..

An aside, since I've asked this question before. What's in General Admin?—all those functions that support the entire University—the President's Office, Chancellor's Office, Academic Affairs, VP for Finance, VP for Information Services OHR, EEO/AA, and so on. Departmental Admin Costs include a depreciation allowance for unit admin space, an operations and maintenance allowance, and all the general admin costs (chairs, classified staff, student works, local IS staff) at the unit and college level.

DHHS reviews the documentation and negotiates with OSU's representatives. Not all of the costs we incur are necessarily reimbursable. The Federal Government capped administrative costs at 26% of direct costs some time ago. Most of us (as faculty members) have at one time or another rolled our eyes at how much money is spent on "administration". However, if we consider the increasing regulatory requirements of any research that involves human subjects, animal subjects, environmental impacts, waster disposal, etc. it is clear that there are real and substantial costs in complying with regulations, once we have accepted certain kinds of grants. We do not, in general, recover the full cost of providing those oversight services---most institutions don't.

The negotiations produce a set of rates to be charged for reimbursement the following three to five year period. The duration is actually part of the negotiation. These rates are usually subdivided for broad categories of work such as on-campus, off-campus, and ship operations. Once agreed upon, these rates are operative for grants and contracts with most Federal Agencies (the Department of Education and U.S. Department of Agriculture are two major exceptions). The university system has agreed with the Oregon Department of Administrative Services to cap F&A charges on state grants and contracts to the rate allowed by the federal government, and by tradition, OSU charges private entities the full federal F&A rate. (Interestingly, a very few, mostly private universities, have decided to charge private companies as much as 10% more than their federal F&A rate.) The rates sete a reimbursement level that DHHS is satisfied would cover our real costs incurred for supporting research work on the campus IF all on-campus research activities were to pay the negotiated F&A rate. That "if" is a significant caveat because, as we are all aware, we accept many grants and contracts that recover less than the full federal rate.

There is an interesting chicken and egg issue here. I sometimes hear (or say) "well, OSU collects indirect costs to support research facilities so they ought to be paying for X (let's say a technician to support a large expensive instrument)". However, since the F&A rates are negotiated on the base year actual expenditures, if we were not paying for that technician during the base year, it is in fact not a reimbursable cost, and we do not get to include the cost of the technician in the F&A rate computation. If we want the F&A rate to include those costs, we need to be able to pay for them during the base year and then document them in the negotiation. Hence the problem. We can't get reimbursed for it until we make the expenditure but we haven't got enough cash to pay for it until we get reimbursed.

Why do I get charged if my research doesn't cost much?

There are indeed differences in what it costs to maintain different kinds of research. These differences are driven most by the kind of space required to do the work. In fact, any research on campus has an overhead cost. Most of OSU's faculty members are expected to do research as part of their appointment. Even if that research requires only a small office, a computer to write on, and a lot of thought, there are still overhead costs involved. The parts of utilities, space maintenance, the library, etc. that go to support that part of a faculty member's time are costs to support research. That overhead is indeed probably lower than it is for programs that need large and complex labs. It is also true, however, that many of those lower cost programs do not have the same opportunities for external support that the higher cost programs do. Most Universities probably do not recover the costs of maintaining those research programs, but it is recognized that the research is important. All large research institutions commit some part of their base budget (from state support and tuition) to funding the part of the research enterprise that does not recover its F & A costs.

Before those of us in disciplines that do have access to lots of grant money become too smug, it is also not clear that most of us recover the full costs of our research programs. If we include the actual costs of our lab space, the portion of our base salary that covers time spent in research, and the cost of all the support facilities, an individual investigator needs to produce very substantial annual grants to recover the whole overhead costs attributable to his or her particular research operation. . OSU needs to document more clearly the total actual overhead cost for research in different areas, so that we can clearly understand our investments and our cost recovery.

The F & A negotiations are designed to be done at an institutional level, and average over the institution. This approach is manageable and provides consistency over time.

What about waivers of indirect costs?

As pointed out in the paragraphs above, even when a grant pays the full F & A cost rates, OSU still does not recover all of its costs for supporting research. Any time that we accept a grant that pays less than the full F & A rate, for whatever reason, we forgo the reimbursement of costs we have incurred. We must pay those costs somehow, and in general they are made up out of the state and tuition portion of the E&G budget (the Statewide Public Services do include in their budget allocations approximately $2.5M of reimbursements to the E&G budget for facilities costs).

Does this mean that we should not accept grants that do not carry full F & A costs? Not at all. There are many grants and contracts that do not support full F & A costs, but that support projects that directly further the mission of OSU. The expenditure of the direct costs from those projects support students, research faculty, support personnel, and have an impact on the economy of the community, the benefits from the research itself aside.

We do need to recognize that we are subsidizing projects to a greater degree when we do not recover full F&A costs. We need to be aware of the mix of our grant and contract activity and

that we need to maximize our return from agencies that do support full F&A reimbursement. Every additional dollar we recover in F&A costs is one less tuition or state dollar that we need to spend supporting the research infrastructure.

When do we waive some part of the F & A costs? Some agencies cap the rate of reimbursement that they honor. In those cases, if the accepted rates are clearly stated in the agency's published policies, we accept the grant under those conditions.

Private entities that wish to enter into a contract with the University not uncommonly wish to reduce the reimbursement rate. Most research universities, OSU included, expect that for-profit private entities will honor the full-negotiated F&A costs.

Principal investigators will sometimes argue to accept a reduced rate to make a particular grant appear more competitive (i.e. of a lower cost). It is very rare that this is in the University's best interest. If a Federal Agency agrees to a certain indirect cost rate, it is to our advantage in the long term to pursue the maximum rate we can.

The point to remember, again---F&A costs are a reimbursement for costs incurred. When we don't recover the F&A funds, we still incur the costs—we just need to pay them from a different source.

How are F&A Costs Treated in the Budget?

The F&A costs are paid to the University as reimbursement for the costs of providing research infrastructure. As such, they are simply put into the general operating fund of the university and are allocated like any other part of the budget. With only a couple of exceptions, these funds are not "earmarked" for special research purposes. They are to defray legitimate costs of supporting the research enterprise.

The two exceptions are for Building Use Credits (BUC) and Research Equipment Reserve Funds (RERF). The Federal guidelines governing Facilities and Equipment Costs (OMB Circular A21 for those of you tempted by daunting documents) requires that 4% of the F&A Costs on fully recovered federal funding be spent on improvements to research space (BUC) and that 8% be spent on improvements in research equipment (RERF).

The balance of the F&A funds are put into the general fund budget and distributed. Prior to FY03, the F&A funds were distributed to units (the Library, Facilities, Research Accounting, etc.) in roughly the proportion that was negotiated. The balance of the base budget for those units was then made up from the tuition and state dollars.

The Budget Allocation Model that was used first in FY03 does not differentiate the F&A funds from other sources of general fund income. The intent was to identify a reasonable share of the total operating budget for essential support functions like the library. With the exception of the BUC, RERF, and the overhead returned to units (see the next section) the F&A funds are not tracked separately.

If we returned to allocating the F&A funds in proportion to the negotiated rate, it would not increase the funding to any particular unit…the library for example. Such a change would mean that the budget allocation model was used to allocate only state and tuition dollars rather than the total general fund. The library's share of that state and tuition pool would be less in a modified model, as the library would be getting funds from the F&A pool. The difference is not in the overall allocation but in how the funds are tracked and distributed.

What About Returned Overhead?

There is probably no part of the budget that is less understood than what is called Returned Overhead (ROH). This is an amount of money that is distributed to units based upon their overall recovery of F&A costs. The percentage returned varies from 26% to 43%.

There is nothing in the negotiations with DHHS or in OMB 21A that mandate that some part of the F&A Costs be returned to units for research. Quite the opposite. Those costs are reimbursement for indirect support costs, not for direct costs related to grants. What we term ROH is not in fact some mandated share of the F&A dollars. The ROH is an internal budget mechanism to provide incentives to pursue grants and contracts that recover F&A costs for the University.

Put another way, OSU has chosen to provide a budget allocation to units over and above the base budget allocation. That additional budget allocation is calculated using the unit's F&A cost recovery as a yardstick. This budget allocation is an incentive to pursue work that generates F&A. It might be better termed a Research Incentive Allocation. Many research institutions do something similar, all with the same purpose---to stimulate the pursuit of grants and contracts that produce F&A costs.

Almost any proposal to "use" indirect costs to support some research enterprise has the same issue. It is really just proposing to use part of the General Fund (since F&A is part of the General Fund) to support a research cost. As pointed out in an earlier section, until we make those research expenditures, they can't be used in negotiating our rate and we can't get reimbursed for them. The pool of F&A funds is not there to support new research initiatives. The funds are to pay real costs and whenever we try to move funds to some new purpose, we need to be aware that those funds have to be made up some place else in the budget.

Where do we Generate F& A Recovery?

OSU's Colleges have a wide range of missions and diverse portfolios of teaching, research and instruction. That is reflected in the patterns of grant funding and indirect cost recovery. The following tables are a brief attempt to show the flow of grants, contracts, and F&A costs in the University. The first table indicates the total new grant and contract awars in three fiscal years. Note that all grants and contracts (and hence all returned overhead) for Forestry and Ag Sciences run through their statewide public service arms, the AES and FRL. Also included in the first table is the FY01 state and tuition dollar base budget for those units (this excludes returned overhead, Federal direct allocations, and sales and service income). The data is derived from the annual Research Office reports (and does include grant awards from the Agricultural Research Foundation).

Unit:	98-99	97-98	00-01	FY01 Base Budget
Ag Sci. AES	$ 21,180,592	$ 26,664,610	$ 25,630,037	$ 32,023,328
Liberal Arts	$ 489,707	$ 446,560	$ 571,844	$ 15,738,144
Engineering	$ 10,774,154	$ 11,809,734	$ 15,425,093	$ 12,193,672
Foresty/FRL	$ 8,674,237	$ 15,088,432	$ 11,751,300	$ 6,836,415
Health Human Perf.	$ 1,701,144	$ 1,501,419	$ 2,660,212	$ 3,840,355
Home Ec. Education	$ 1,639,371	$ 2,175,505	$ 3,585,622	$ 4,529,132
Oceanography	$ 23,421,314	$ 21,224,226	$ 24,132,734	$ 3,386,601
Pharmacy	$ 826,663	$ 1,418,603	$ 2,124,930	$ 3,533,351
Science	$ 30,473,697	$ 12,230,458	$ 14,909,312	$ 18,935,605
Vet Med	$ 442,241	$ 137,217	$ 631,486	$ 6,255,043
Centers/Sea Grant	$ 9,168,595	$ 8,720,569	$ 8,583,534	dispersed
Business	$ -	$ -	$ -	$ 4,934,004

The next table below shows the five-year average grant expenditures and the associated indirect cost recovery for some of the major research units on campus . This table points out a copule of things. First, one has to be very carefl with the data. This is expenditure data, not new grant income as documented in the first table. For Forestry, a tally of what is accounted for as "grant" expenditures must include some portion of the FRL statewide allocation, as the expenditure number is far higher than the new grant number. Second, it is apparent that the "effective" indirect cost recovery is much lower in every unit than the negotiated 43%.

There are two reasons that the "effective" rate is so much lower than the "full" F&A rate. First, indirect costs are not calculated on the total direct costs of a project, but on the modified direct costs. Student tuition, capital equipment, and subcontracts over $25,000 are all excluded. COAS receives nearly all of its funding from agencies that pay "full" F&A, and their return of 21-23% indirect costs is therefore a good measure of the upper end of F&A recovery. . Note that the numbers below are the annual averages over the 5 year time period

Fiscal Years 1997 - 2001	**Grant Funding**	**ICR**	**Effective % ICR**	**ROH Rate %**	**ROH Funds**	**Net OSU ICR**
COAS	22,083,546	4,898,528	22.2%	42%	2,057,382	2,841,146
Ag Science	23,639,138	2,970,650	12.6%	26%	772,369	2,198,281
Science	15,400,254	2,489,471	16.2%	26%	647,262	1,842,208
Engineering	12,608,867	2,261,889	17.9%	26%	588,091	1,673,798
Forestry	18,825,411	1,079,332	5.7%	26%	280,626	798,705
Research	5,273,566	1,018,970	19.3%	26%	264,932	754,038
Total	97,830,783	14,718,839	15.0%		4,610,663	10,108,177

*grant funding e is direct cost expenditures; effective ICR rate is simply the ICR divided by the total expenditures.

The percentages less than 22% reflect the diversity of funding sources for grant activity in different units. Forestry and Agricultural Sciences, for example, receive significant funding from USDA, PNNL, USFS and other agencies that do not pay full F&A.

The table above also notes how much of the F&A funds are returned to the unit and how much is left centrally for OSU to distribute. A more detailed look at the "net" F&A produced by each unit is shown below. This table includes the FY02 distributions of BUC and RERF to units as well as the indirect cost and returned overhead.

2001-2002 Distribution of Indirect Cost Recovery (ICR) by Major College or Unit

College / Unit	ICR Generated	ROH	BUC	RERF	Net Retained by OSU
COAS	$ 5,194,351	$ 2,181,628	$ 176,700	$ 91,059	$ 2,744,965
Ag Science	$ 4,078,302	$ 1,060,358	$ 77,900	$ 505,235	$ 2,434,808
Engineering	$ 3,088,422	$ 802,990	$ 95,300	$ 319,495	$ 1,870,637
Science	$ 2,855,843	$ 742,519	$ 91,100	$ 286,401	$ 1,735,823
Research Centers	$ 2,290,918	$ 595,639	$ 49,300	$ 361,474	$ 1,284,505
Forestry	$ 1,336,378	$ 347,458	$ 16,500	$ 46,321	$ 926,099
Home Ec	$ 570,413	$ 148,307	$ 6,200	$ 42,130	$ 373,776
Pharmacy	$ 495,258	$ 128,767	$ 11,400	$ 28,782	$ 326,309
Health/HP	$ 355,154	$ 92,340	$ 6,000	$ 15,600	$ 241,214
Liberal Arts	$ 124,825	$ 32,454	$ 2,200	$ -	$ 90,170
Vet Med	$ 41,180	$ 10,707	$ 700	$ 55,194	$ (25,421)
Totals	$ 20,431,044	$ 6,143,168	$ 533,300	$ 1,751,691	$ 12,002,886

One of the essential tasks in any discussion about budget and finances is understanding the current state of affaris. I've come to learn the hard way that achieving that understanding is not always straightforward! This is a very complicated institution.

I hope that this document is useful as background. Errors in interpretation or representation are entirely mine and I'd appreciate it if you could bring them to my attention. Any corrections, questions, or differing interpretations are welcome. If you think it would be helpful for discussion, please feel free to share it with colleagues for their feedback to the committee. Please be sure to note that this is not a policy document, a position paper, or a consensus view of anybody but me.

Thanks,
Sherm