

Core Research Facilities Guidelines

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Acknowledgment

Policies and procedures from the following Universities were used as references for the guidelines: Arizona State University, Brown University, Cornell University, Harvard University, MIT, University of Massachusetts Lowell, Amherst and Worcester campuses, University of Southern California and Vanderbilt University.

Purpose

The purpose of these guidelines is to provide oversight and procedures for the financial and administrative management of Core Facilities at the University of Massachusetts Dartmouth (UMassD) in order to ensure compliance with federal, state, university and sponsor requirements.

Definitions

Acquisition Cost	The cost of acquiring materials, supplies and capital assets, including taxes, freight, and installation costs to place the materials and/or assets into intended use. For donated capital assets, acquisition cost is the fair market value at the time of the donation (plus any acquisition related expenses such as freight and installation).
Break-even Period	A reasonable time-period over which cumulative revenue for a service or product equals cumulative expenses. Generally, break-even period is one year and should not exceed three years.
Carry-forward	The over or under-recovery of operating costs from one period that is included in the user fee calculation of a subsequent period to promote break-even operations. Carry-forwards are allowable cost adjustments to subsequent year user fee computations.
Core Research Facilities (CRF)	<p>The National Institutes of Health (NIH) defines core facilities as centralized shared resources that provide access to instruments, technologies, services, as well as expert consultation and other services to scientific and clinical investigators. The typical core facility is a discrete unit within an institution and has dedicated personnel, equipment, and space for operations.</p> <p>UMass Dartmouth Core Research Facilities provide sophisticated instrumentation, unique facilities and specialized expertise and research training to university and community. "Core research" refers to primarily a multi-user research facility with anticipated internal and external users.</p>
Department Core Facility (DC)	Provide services to external customers and have typically low volume with annual revenue less than \$50,000.
Depreciable Life	The time period over which the cost of a capital asset is distributed to determine annual depreciation.
Depreciation	The systematic allocation of the cost of a long-term tangible capital asset to those accounting periods in which the university expects to benefit from the use of the asset. Depreciation expense is recognized in each accounting period during the asset's depreciable life.
Expense	An expenditure of the facility incurred, whether paid or accrued, that benefits only the current fiscal period.
External User	<p>A facility customer who does not pay for goods or services with a university account.</p> <p>Note: Transactions with collaborators at other institutions are considered external transactions involving external users.</p>
Internal User	<p>A facility customer who pays for goods or services using a university account.</p> <p>Note: Transactions with other UMass system entities are considered internal transactions involving internal users.</p>

Operating Cost	The total cost of providing goods or services (e.g., supplies, salaries, benefits, and depreciation).
Revenue	User fees recovered for providing goods or services.
Unit of Output or Billing Unit	A specified quantity of product from a CRF or DC, such as a test, an hour of machine time, or an hour of labor, that acts as the basis for the calculation of a user fee.
User Fee or Billing Rate	The cost charged to the customer for a unit of service. The rate is determined by total annual cost of the service divided by total expected billing units.
User Fee Subsidy	A subsidy provided to a facility in order to lower the user fee charged to customers for a given product or service. Note: User fees charged to federal funds, either directly or indirectly, must not subsidize non-federal users or user fees in any way.

Criteria & Characteristics of Core Research Facility (CRF) and Department Core (DC):

CRF	DC
<ul style="list-style-type: none"> ➤ Annual Revenue exceeds \$50,000. ➤ Services and/or instruments benefit several departments across campus. ➤ Formal budgets are submitted, reviewed, and approved on an annual basis. ➤ Rate calculations are formulated based upon Uniform Guidance 2CFR200 §200.468 guidelines. ➤ Published price lists are required and are to be reviewed and approved on an annual basis. ➤ University subsidies are requested on an annual basis and must be approved prior to the start of the fiscal year. ➤ All users are required to pay for services or instrument use and training based upon published rates. ➤ Professional lab managers (at least part-time) oversee lab operations. ➤ All users are required to complete applicable safety training prior to use of instruments. 	<ul style="list-style-type: none"> ➤ Annual Revenue is less than \$50,000. ➤ Only External non-federal customers are charged for services. ➤ Budgets are revenue based. Budgets and proposed rates are submitted, reviewed and approved annually. ➤ Published price lists are required and are to be reviewed on an annual basis. ➤ No subsidy is provided by the University. ➤ Departments are responsible to reconcile any deficits on an annual basis. ➤ Equipment is operated by grad students, technicians and/or faculty. ➤ External Customers are required to sign Core Research Facility Agreement. ➤ DC is responsible for ordering, invoicing, and following required safety protocols and documentation. Payment collection and reconciliation is provided by Controller/A&F Office.
Must have an established inventory asset account if inventory totals \$100,000 or more.	
Separate operating account(s) are required.	
Each CRF/DC will be assigned a unique department number.	

Establishing a Core Facility

The individual(s) wishing to create a new Core Facility must submit a formal request for review and approval. The proposed facility must be viable and compatible with the University's mission. The request for a new Core must identify:

- The proposed service(s) to be provided
- The expected customer population
- The benefits to be provided by the new facility along with an analysis of existing providers of the service both internally and externally and the impact of the new unit on any existing facility
- An annual operating budget required to support the unit
- Amount of any operating expenses that will be covered from departmental or other sources
- Billable measure of the product - hours, tests, etc. depending on the nature of the service provided
- Billing rate calculation and backup including equipment depreciation schedule
- Estimated sales and revenues along with plan as to how expenditures will be met as the unit gears up to full production.

The Dean and the Department Chair or the Administrative Vice Chancellor is responsible for the operation of all Cores within their organizational structure. An operating account or accounts as needed will be established to capture all revenue and operating costs of the facility. Only costs necessary to the operation of the facility should be recorded in the operating account.

Approvals from Core Director, Department Chair, Dean, Sponsored Projects Administration, Vice Chancellor for Research, Provost, and Vice Chancellor for Administration & Finance must be in place before a Core can begin operations.

Core Governance

- All user fees should be calculated annually so as to recover no more than federal allowable cost for goods or services. Over-recoveries and under-recoveries are incorporated into the subsequent year's rate.
- Institutional subsidy to CRF shall not normally exceed the revenue generated from services.
- All Cores should operate in separate accounts/funds, normally Miscellaneous Revenue funds created solely for the purpose of recording revenues and expenditures related to the service(s) provided.
- Each Core should provide training as needed.

Budget and Rate Preparation

Budgets and billing rates are submitted annually for review and approval. An approved rate schedule is required for audit purposes.

While Cores are expected to break-even, the rates charged may be offset by an approved subsidy. The budget must include all costs to operate the facility even if the facility is to be partially subsidized. All subsidies must be approved as part of the Core approval process and each annual rate approval. Billing rates are calculated on full actual costs or estimated amounts if a new Core and not on competitors' rates. If a portion of the costs are to be subsidized, calculations of the full rate and the subsidized rate are to be presented. If a Core provides different services, individual rates and budgets are developed for each.

Because revenue and expenses must be tracked by unit, separate chartfields are required for each core and for any subsidized costs. Circumstances may result in a surplus or deficit at the end of a particular year especially at startup. The surplus or deficit is factored into the next year rate in order to reach breakeven status over a reasonable period of time. In order to cover an anticipated deficit, the subsidy maybe increased with approval from the account holder of the subsidy.

All University Core Research Facilities are required to follow the rate calculation guide in the table below.

Rate Type	Cost Basis	Basis of rate calculation	Rationale	Agreement Type
Internal	Cost Recovery	Direct (base) & indirect costs are billed internally	Uniform Guidelines requires that the Government is charged for actual costs and does not subsidize costs of other users	As applicable
Government	Cost Recovery	DHHS approved indirect rate is added to direct costs to establish billing rate	Approved DHHS cost rate is applied to meet federally capped cost recovery	CRF Agreement
Academic	Full Cost Recovery	UMass Dartmouth actual indirect rate is added to direct costs to establish billing rate	Actual indirect cost rate is applied to achieve full cost recovery	CRF Agreement

Industry	Actual Cost Recovery plus off-set	UMass Dartmouth actual indirect rate multiplied by X, e.g., by 3, is added to direct costs to establish billing rate. General billing practice by Universities is to triple indirect rate	Full cost recovery and to build reserve for equipment replacement and enhanced services.	CRF Agreement
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Allowable Costs

Only approved & allowed costs by Uniform Guidance 2 CFR 200 may be included in the Core operating budget. The costs must be reasonable, allocable, allowable and consistently treated.

Costs directly related to providing the service:

- direct salary and fringe benefits
- Materials and supplies
- Equipment depreciation excluding equipment purchased with federal funds
- Equipment repair and maintenance
- Equipment lease or rental

The cost of equipment is not allowed to be direct charged rather the annual depreciation amount can be included when determining the rate. If depreciation is included in rate calculation, it will be excluded from the development of the University's F&A cost rate. A&F will provide the most recent depreciation schedules. Other expenditures deemed unallowable per Uniform Guidance 2 CFR 200 include entertainment, institutional advertising, bad debts, public relations, alcohol, contributions and donations and goods for personal services.

All Core accounts ending a fiscal year with a positive balance of more than 10% of their operating budget may direct 15% of the total sum of *industry* indirect income to a reserve account to be used for CRF related expenses such as repair and replacement of equipment. Additionally, revenue generated from depreciation cost element of the rate calculations will be transferred annually to the specific CRF reserve account.

Documentation Retention

Each facility is responsible for maintaining records for 6 years to answer any audit related questions or other inquiries.

Documents to retain include:

- Expenditure and other supporting data used in the rate calculation
- Method used to calculate the rate and track billable units
- Billing records identifying the chartfield/project number speedtype or external customers charged, service performed or products sold, number of units billed and unbilled, user logs, rate charged, total amount
- Inventories remaining at year end must be counted.

Invoicing

Cores are responsible for timely invoicing all customers. Prebilling is not allowed. Invoices should be processed within 30 days of providing the goods and services. At year end, billings for the month of June should be prioritized so that they are recorded on the accounting system by no later than the 2nd closing for June. Late invoicing may result in unpaid bills as grants could expire or accounts may have no available budget when the invoice is processed. Invoices should include the name of user, service performed, date, amount of service provided (i.e. number of hours, tests or other appropriate unit of measure), the billing rate and the total amount as well as the Core Chartstring for revenue deposit. Account Holders must approve all invoices; PIs must approve charges to a sponsored project.

Annual Fee/Rate Proposal and Review Process

1. It is recommended that Cores operation cycles begin on July 1st and end on June 30th with the second closing of the University's books.
2. Once the initial rate structure of a Core receives approval, annual proposals for updated rates should be submitted by May 31st. All proposals should include:
 - a. Annual financial operating report, including revenue and expenses for the year just ended.
 - b. Proposed rate structure for the upcoming year. If fees/rates are based upon calculations previously approved by appropriate parties and there have been no changes in methods, only a listing of proposed rates is required.
 - c. Description of any changes in methods of calculating rates from those previously approved.
3. SPA will facilitate the review and approval of all rate proposals, including those that are based upon previously approved rate structures and will notify departments when completed. If any

subsidy by college &/or department is provided, the proposed rate changes may need approvals by other offices.

4. For all proposed new CRFs, rates should be submitted at least 60 days prior to the start of the fiscal year. The above steps will become effective after the first complete year of operation under approved fee/rate structure. Exceptions for submission of the potential CRF(s) proposals mid-year might be approved, though the proposed periods for consideration have to align with the fiscal year. It is recommended to submit preliminary proposals in February/March timeframe to allow for future fiscal year budget planning.

Annual Financial Operating Reports

An annual financial operating report is required as part of any rate change proposal and review process. The information will be used to determine among other things, that Cores are operating at or near breakeven and that expenses are allowable and properly allocated to Core accounts.

Appendix C shows the recommended format that may be used when preparing annual financial operating reports. While departments are free to select alternative formats, the following key elements should be contained in all reports:

1. Core name, contact person's name, e-mail & phone number.
2. Statement of the time period for which the report is being prepared (normally, this period will coincide with the University's fiscal year from July 1 to June 30).
3. Breakdown of revenues by source. At a minimum, the breakdown should include revenue from external and internal billings. It also is recommended that usage for instructional purposes be segregated from usage for research purposes.
4. Breakdown of expenditures by cost element. This section of the report should include at least the type of expenses shown in Appendix C.
5. Totals for revenue, expenses and net surplus/deficit from operations.
6. The amount of any University or other subsidy.

Any questions regarding the preparation of annual financial operating reports may be addressed to SPA.

Appendix A

Checklist for Establishing a Core Facility

- Read the most recent Core guidelines (<http://www.umassd.edu/provost/resourcesforfaculty/>)
 - Do you meet the requirements for a Core as defined in the guidelines?
- Complete Core Business Plan*
- Prepare Rate Development Worksheet*
- Complete Core Request form (Appendix B)
 - Obtain approvals from:
 - Faculty Director
 - Department Chair
 - Dean
 - SPA & Vice Chancellor for Research
- Once reviewed and approved by the above:
 - Forward all items to the Provost or his/her designee
 - The Provost's Office will forward the application to the Vice Chancellor for Administration and Finance, or his/her designee
 - The Office of the Vice Chancellor for Administration and Finance will forward the application package to SPA and Controller's Office to complete the process
 - An operating account will be established to capture all revenue and operating costs of the facility.

*Templates are available upon request submitted to spa@umassd.edu.

Appendix B

Core Request Form

----- Complete Items Below -----	
Date of Request	
Name of Core	
Core Service(s) (List services or provide attachment)	<input type="checkbox"/> Attached
Core Director Name / email	
Sponsoring Department/Unit/School	
Requested Start Date	
Please attach:	
• Written Proposal/Core Business Plan	<input type="checkbox"/> Attached
• Core Rate Analysis/Rate Development Worksheet	<input type="checkbox"/> Attached
% External Users	
% UMassD Internal Users	
% Non UMassD Internal Users	
% UMassD Internal Users from Federal Sources	

Signatures:

Core Director

I agree to monitor the activities of the Core to ensure that the services provided are as described on this request form and that expenses charged to this Core directly benefit the activities of the Core.

 Director Signature Date

Administration Approvals

It is agreed that the establishment of this Core is critical and that the Department/Unit, School & Administration will provide the necessary administrative and financial support needed to maintain this Core and to cover any deficits on this account on a fiscal basis as stated in the proposal and in the comments below.

 Department Chair Signature Date

 Dean Signature Date

 SPA Signature Date

 VC for Research Signature Date

 Provost or his/her designees Signature Date

 VC for A&F or his/her designees Signature Date

Request Approved	<input type="checkbox"/>	
Request Denied	<input type="checkbox"/>	_____ Date

Remarks:

Appendix C

Annual Financial Operating Report

Core Name	
Core Director	
Fiscal Year	
Income:	
• External Billings	
• Internal Billings	
• Total Income	
Expenses:	
Salaries	
Fringe Benefits	
Materials & Services	
Travel	
Equipment (Depreciation Only)	
University Services	
Subcontracts	
Other	
Total Expenses	
Net Operating Surplus/Deficit	
Subsidy (if appropriate)	
Operating Account Number	
Contact Person:	
• Name	
• E-mail	
• Phone	

Appendix D

Usage Log Template

Usage Log		CRF Name								
		Billable Measure Exp.								
Date	User	Time-In	Time-Out	Qty	PI (Manager)	Speed/Type	Service Performed	Invoice#	Billed Amount	Payments
Totals								<u>\$-0.00</u>	<u>\$-0.00</u>	
Due								<u>\$-0.00</u>	<u>\$-0.00</u>	

Appendix E

Invoice Template



Core Research Facility INVOICE

University of Massachusetts Dartmouth
285 Old Westport Road, North Dartmouth, MA 02747
Phone 508-999-#### Fax 508-999-####
Manager or PI@umassd.edu

INVOICE # _____
DATE: _____

BILL TO Company or Person
Address Line 1
City, State Zip
Attention: Name
Tel direct ###-###-####

COMMENTS

DATE	DESCRIPTION	AMOUNT
MM-DD-YYYY	Service Provided (Billable Measure of product- hours, tests, etc.)	\$000.00
	!	
	Total Due	\$000.00

Make all checks payable to UMASS Dartmouth
SERVICE UNIT ACCOUNT #####
THANK YOU FOR YOUR BUSINESS!



Core Research Facility Invoice

University of Massachusetts Dartmouth
 285 Old Westport Road, North Dartmouth, MA 02747
 Phone 508-999-8000 Fax 508-999-8868
Manager or PI@umassd.edu

INVOICE # _____
 DATE: _____

BILL TO:
 PROJECT: GRANT or I/C
 PI: PI (MANAGER NAME)
 Speedtype: SPEED TYPE #
 DEPT/FUND: DEPT#/FUND

TRANSFER TO:
 DEPT: Department #
 Description: Service Unit
 Speedtype: Speed Type #
 Fund: Fund #

DATE	DESCRIPTION	AMOUNT
MM/DD/YYYY	Service Provided (Billable Measure of product- hours, tests, etc.)	\$0,000.00
	Total Due	\$0,000.00

I approve the above charges as being allocable and allowable to my account or project indicated

 PI (Manager) Signature Printed Name

 Date

Appendix F

Uniform Guidance 2CFR200 §200.468: Specialized Service Facilities

(a) The costs of services provided by highly complex or specialized facilities operated by the non-Federal entity, such as computing facilities, wind tunnels, and reactors are allowable, provided the charges for the services meet the conditions of either paragraphs (b) or (c) of this section, and, in addition, take into account any items of income or financing that qualify as applicable credits under §200.406 Applicable credits.

(b) The costs of such services, when material, must be charged directly to applicable awards based on actual usage of the services on the basis of a schedule of rates or established methodology that:

(1) Does not discriminate between activities under Federal awards and other activities of the non-Federal entity, including usage by the non-Federal entity for internal purposes, and

(2) Is designed to recover only the aggregate costs of the services. The costs of each service must consist normally of both its direct costs and its allocable share of all F&A (indirect) costs. Rates must be adjusted at least biennially, and must take into consideration over/under applied costs of the previous period(s).

(c) Where the costs incurred for a service are not material, they may be allocated as F&A (indirect) costs.

(d) Under some extraordinary circumstances, where it is in the best interest of the Federal government and the non-Federal entity to establish alternative costing arrangements, such arrangements may be worked out with the Federal cognizant agency for F&A costs.