

Best Practices for Core Facilities: Handling External Customers

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This article addresses the growing interest among U.S. scientific organizations and federal funding agencies in strengthening research partnerships between American universities and the private sector. It outlines how core facilities at universities can contribute to this partnership by offering services and access to high-end instrumentation to both nonprofit organizations and commercial organizations. We describe institutional policies (best practices) and procedures (terms and conditions) that are essential for facilitating and enabling such partnerships. In addition, we provide an overview of the relevant federal regulations that apply to external use of academic core facilities and offer a set of guidelines for handling them. We conclude by encouraging directors and managers of core facilities to work with the relevant organizational offices to promote and nurture such partnerships. If handled appropriately, we believe such partnerships can be a win-win situation for both organizations that will support research and bolster the American economy.

KEY WORDS: ABRF, academic-corporate partnership, OMB, IRS, unrelated business income

INTRODUCTION

The U.S. President's Council of Advisors on Science and Technology,¹ National Research Council,² and National Science Foundation^{3,4} have each recommended strengthening the partnership between American universities and the private sector, especially with business and industry. This partnership is expected to galvanize new ideas and innovations that will lead to more high-end jobs, more efficient technologies, and more environmentally safe products that will propel the U.S. economy in the 21st century.

A stronger partnership between universities and the private sector has proponents⁵ and adversaries⁶ who see great opportunity or conflicts of interest, respectively. Whereas partnership would help shift some of the burden of research funding from the government to industry, it comes with a cost. Industrial research is more attuned to applied science, short-term impact, and global markets, whereas federally sponsored research traditionally focuses

on advancing basic scientific knowledge, long-term benefits, and enhancing domestic markets. Aside from practical differences, there is concern that a more integrated partnership could erode the public's trust in universities and their role as protectors of the common good.⁶

In spite of such concerns, universities, nonprofit research institutions (NPRIs; foundations, institutes, centers), and national labs have made significant investments in research facilities and infrastructure that they are struggling to sustain. It is therefore not surprising that many of these organizations are moving forward aggressively to find alternative sources of funding.⁷ Some academic leaders have called for a new model for education and research—one that recognizes and nurtures a global, knowledge-driven economy.⁸ This call is bolstered by the growing recognition that science is inextricably linked to the economy and that an ivory tower mentality has long since been replaced by the burgeoning research enterprise.⁹

One of the major investments by the federal government in universities, NPRIs, and national labs has been core facilities.¹⁰ These are laboratories with specialized services and instrumentation that are shared by researchers. This model of sharing services is driven by the high cost of instrumentation and the technical expertise needed to operate this equipment. Consequently, researchers have be-

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come increasingly reliant on core facilities to provide state-of-the-art instrumentation and services in a safe, productive, and cost-effective manner.

A number of public initiatives and private ventures are in progress to expand access to specialized services and technology provided by core facilities—regionally and nationally—with the overall goal of improving science and enabling efficiency. These developments are likely to increase awareness of existing core facilities as alternatives to establishing new and possibly redundant facilities. For example, The Association of Biomolecular Resource Facilities (ABRF) has recently launched the ABRF Marketplace (http://www.abrf.org/index.cfm/page/resources/ABRF_Core_Marketplace.htm), a tool for providing a one-stop shop for research core facility services. Federal agencies, in particular, have seen the value in supporting the registry model as a means of ensuring that grant funding does not result in unnecessary duplication of resources and have funded a number of related projects, including the Vermont Genetics Network, which hosts a searchable core facilities database now linked to the ABRF Marketplace,¹¹ and the eagle-i network initiative,¹² which has developed a web-based application that encourages resource sharing among individual researchers, as well as across core facilities.

A looming challenge for these organizations is sustaining investment in core facilities and resource sharing. Whereas researchers pay part of the cost for the services provided by cores, many organizations subsidize services to help keep costs down for researchers. A recent survey of biomedical core facilities indicated that organizations subsidize, on average, 33% of the direct costs to operate core facilities, with another 19% coming from core grants and private funds.¹³ In addition, most core facilities operate on a direct-cost recovery model and therefore, may rely more or less heavily on institutional support for indirect costs related to infrastructure, such as space, utilities, and maintenance. This model is likely to be unsustainable in the current economic climate for all but the most heavily endowed organizations. Not surprisingly, many institutions and individual core facilities are looking to the private sector to help support and use these services. As corporate philanthropy has been replaced by a renewed interest in university-industry partnerships, there is an excellent opportunity for core facilities to contribute to these partnerships in formal and informal ways.

INSTITUTIONAL POLICIES AND FINANCIAL CONSIDERATIONS: ESTABLISHING BEST PRACTICES
Offering services to the private sector is a potential win-win situation. If handled inappropriately, it can also be a source

of problems, misunderstandings, and potential liabilities. In general, start by seeking out experts in your institutional offices for finance, research, contracts, and technology transfer. In our experience, many core managers and directors are not aware that institutional policies, offices, and specific roles exist to help them navigate the complex financial and regulatory landscape that governs core facility operations. These resources will be your best guides, if available. However, many directors and managers of core facilities operate in organizations that are highly decentralized, where guidance and support may not be easily accessible. In this section we offer a number of best practices to help core facilities exploit opportunities to develop and establish a successful approach to working with external customers.

Best Practice 1

Familiarize yourself with your institution's policies related specifically to core facilities (if existing) and generally, to accounts payable, indirect costs, unrelated business income, export compliance, and other relevant areas. As mentioned above, the advice of experts in these fields can be extraordinarily helpful, even if they are not familiar with the exact nature of the services you provide. In addition, peer groups and professional organizations may provide resources to help core directors and managers understand general policy implications. A good source of support and information is the Core Administrators Network of ABRF, which sponsors an on-line discussion forum, as well as regional and national workshops on core facility management.¹⁴

Best Practice 2

Assess your core's capacity to serve a new or expanded user-base. Will you need to hire new staff, or purchase new instrumentation to meet increased demand? Develop a specific business plan for managing the financial impact [both costs and revenue; see discussion of unrelated business income (UBI) tax below] of external business.

Best Practice 3

Know and understand the current funding and subsidies to your core. If your core is recipient of institutional or federal subsidies or is part of a P30-funded center, it may be problematic to prioritize service to noninstitutional, non-federal, or noncenter customers. If possible/applicable, talk to your Research Office or P30 center leadership about your plans. In general, in the absence of any specific guidance from your organization, it is appropriate to ensure that internal and federal customers have priority over any external for-profit users.

Best Practice 4

Understand why your customer wishes to work with your core. Is it because of the price or your reputation for quality work? Ensure that your customer knows that your core is a cost-recovery operation that typically serves federally funded researchers. One possible best practice is to avoid taking business from a commercial customer that is filling a gap in its own supply chain.

Best Practice 5

Make sure the customer understands that although you use quality-control measures, there is no warranty or guarantee of results. Whereas this constraint is addressed by ABRF's research groups, for example, it will take time to reconcile what is appropriate for the more applied, fast-paced realm of industrial research. A notable exception to this is if your core facility is involved in some aspect of human subject research, such as for radiopharmaceutical production. In such cases, institutional review board (IRB) and U.S. Food and Drug Administration (FDA) requirements must be considered and may even be a rationale for excluding external use of your core.

Best Practice 6

Try to avoid projects involving exchange of intellectual property (IP), whether your own or your customers'. If you suspect that IP may be involved, contact your institution's Office for Sponsored Research or Technology Transfer, and discuss options for documenting appropriate terms. It may be appropriate in such cases to engage in a formal research sponsorship agreement or contract.

Best Practice 7

In general, it is best to accept only samples that will be subject to analysis or experimentation. Minimize or restrict the need for certain other research materials that might be brought or shipped to campus by customers (e.g., chemicals, reagents, other hazardous substances, cell cultures, etc.). Animal transfers will routinely require quarantine or barrier procedures and approval by your Institutional Animal Care and Use Committee (IACUC). As needed, get approval from your institution's Safety, Export Control, or other relevant offices.

Best Practice 8

Minimize inviting customers to your organization or campus. If an on-site visit is necessary, get approval from your institution's Safety and/or Risk Management Offices.

Best Practice 9

Avoid performing work for customers who are employed by non-U.S.-owned companies or who reside overseas,

especially if this involves transfer of materials or technology. If unavoidable, consult with your institutional office charged with compliance and oversight for regulations regarding export controls. These involve federal regulations administered by the Department of Homeland Security overseeing international commerce and technology transfer and require serious review before engaging in any international agreements.

INSTITUTIONAL PROCEDURES: ESTABLISHING TERMS AND CONDITIONS

Besides familiarity with your institution's policies, it is also necessary to establish procedures for handling external customers. The following procedures should be addressed *before* you offer your services. As Benjamin Franklin cautioned, "an ounce of prevention is worth a pound of cure."

First, become familiar with the standard business procedures and recordkeeping practices at your institution, including handling of invoices, billing, and accounts receivable. In addition, determine whether your institution has a formal process for establishing internal and external recharge rates (i.e., cost-study procedures, business planning, or research project planning support). If not, there may still be guidance available via your Finance Office; most organizations will have policies for allowable direct costs and taxable income, even if there is no specific office for oversight of core facilities. In any case, it will be helpful for you to become familiar with the basic principles of the relevant federal rules and regulations (see Federal Regulations and Compliance, below).

Next, determine if your Contracts or Research Office has developed template contracts or agreements that might be applicable to the provision of core facility services to external customers. Such a template could be a valuable tool in formalizing your business relationship with your customer (Fig. 1). In addition, some customers require a formal agreement to engage in research, even when your institution does not (e.g., because there is no IP or other issue requiring a sponsored research project or contract). Even if you intend to provide fee-for-service access to your core without using an agreement, consider establishing a line (either cost or size of project), above which you would use an agreement or contract. In determining this line, think about how much money your core could afford (or not afford) to lose if an external customer did not pay a bill. In general, use of formal agreements and purchase orders (PO) are good practice and protect both parties by having the terms and conditions clearly stated prior to performing work.

If a template is not available, the following considerations are important to investigate and document as "terms and conditions" before beginning work.

IP

As mentioned in Best Practices above, it is better to avoid IP issues. However, if IP is involved in the project, then it is imperative that you work with your institutional offices for technology transfer, sponsored research, contracts, or general counsel, as appropriate, to negotiate a confidentiality agreement with a customer's company. It is recommended that such negotiations be handled by these offices, instead of conducting them yourself. As a general rule of thumb, if your organization owns the IP (e.g., for developing a new procedure or technique), then it will likely dictate the terms and conditions of the agreement. Conversely, if the customer owns the IP, the customer's terms will govern the agreement. In some cases, it may be prudent to develop a mutual confidentiality agreement that specifies the responsibilities of both parties in the case of potential new discoveries. Again, it is important to seek advice on these matters from the relevant office at your institution.

Regulatory and Safety Concerns

If materials (e.g., chemicals, animals, cell cultures, etc.) are to be sent or brought to your facility for analysis, then you may need to develop a material "transport" agreement (not to be confused with a material "transfer" agreement that describes terms for sharing material protected by IP) to ensure that the customer does not send/bring regulated materials to campus (e.g., contagious, hazardous, or toxic substances or materials regulated by the FDA, U.S. Environmental Protection Agency, or other federal agencies). Check with your Safety, IRB, IACUC, or other appropriate office for guidance on the safety or regulatory status of the materials. If they are unable to make a determination (e.g., as a result of insufficient information about the materials), then it may be best to decline the work until sufficient information is available to make an informed decision.

Customers On-Site

If a customer visits your facility with the intention of observing experiments, then your institution may require the customer to sign a release from liability or proof of insurability. If the customer wants to use your instrumentation, additional training and documentation may be required for the visitor, above and beyond learning how to use the instrument properly. This is likely the case if there are regulated materials or instruments used in your facility (e.g., radioactive compounds, hazardous waste, blood-borne pathogens, lasers, gas cylinders, liquid nitrogen). In either case, contact your institutional Safety, IRB, IACUC, or other appropriate office for guidance.

POs

Many customers prefer to pay with a PO, and most institutions are set up to accept them. Carefully examine any vendor "set-up" forms that are often contracts in disguise and may bind you to onerous terms. Make sure that there are no guarantees or warranties in fine print on the PO. If you are unclear on the terms, ask your Finance, Sponsored Research, Contracts, or General Counsel Offices to review and clarify any uncertainties.

Credit Card Payments

Although some customers may prefer to pay by credit card, your institution may not accept credit cards, as it has not established procedures for authorizing and handling credit-transaction confirmation. Be sure to check whether your institution has a policy or infrastructure in place for handling credit cards before proceeding. Also, keep in mind that credit card companies charge a transaction fee for processing requests. Depending on your institutional direct-cost guidelines, you may not be able to recover this cost in your service rates and may need to identify an alternate source of funding to cover this expense.

Finally, develop procedures for tracking your core revenues. When an external client uses services from more than one core facility at your institution and prefers to make a lump-sum payment for all services, make sure you have a system in place to direct the funds to the appropriate core accounts, keeping in mind that a system may already exist in your Finance or Accounts Receivable Office. We know of circumstances where a single payment for services provided by multiple cores was credited to only a single core account. We have also seen situations where an outside institution shorts payment to a core, as some other unrelated operating unit in the institution owes the external customer money. This raises an important general recommendation: it is extremely useful to be able to "see" all of your expenses, revenue, and core account balances and to track this against your own recordkeeping of core usage and billing so that you know what you are owed. In the case of lump-sum payments, this will be invaluable in justifying your receipt of a portion of that payment.

FEDERAL REGULATIONS AND COMPLIANCE**Office of Management and Budget (OMB) Regulations**

The OMB is responsible for advising, developing, and managing the budget of the U.S. government. It assists all branches of government by establishing budget policies and procedures, including the management of federal grants and contracts. If your external customers pay with federal grants or contracts (regardless of whether they are nonprofit or for-profit institutions), then you must abide by the regulations outlined in this section. Sometimes it is

TABLE 1

Unallowable/Excluded Direct Costs
Debt principal payments and internal interest
Fund transfers
Advertising
Alcoholic beverages
Bad debts
Contributions and donations
Entertainment
Fund-raising
Public relations

difficult to determine the actual source of payment (even if you ask your customers, they may not be able to track it easily), especially when working with nonprofit organizations (NPOs). Therefore, it is a good practice to assume that federal dollars are involved to avoid inadvertent non-compliance with federal regulations.

The OMB recognizes two types of NPOs: educational institutions (universities and colleges) and nonprofits (foundations, corporations, associations, cooperatives). For purposes of this discussion, we will group both into NPOs to distinguish them from commercial organizations (COMs). As you will see, this is a more useful distinction for our purposes.

OMB regulations for educational institutions (OMB Circular A-21¹⁵) and NPOs (OMB Circular A-122¹⁶) are actually extensive guidelines for establishing allowable direct and indirect costs for payment with federal funds. The regulations are similar but differ, primarily in the calculation of indirect-cost rates (facilities and administrative costs). For a core facility, a direct cost is the actual or allocable cost of providing the service at reasonable capacity (e.g., dollar/h during a 40-h work week). A second test is applied when it comes to assessing appropriate direct costs—that of allowability. Federal regulations stipulate that certain direct costs are never allowable as charges to federal grants (Table 1). It is also important to note that indirect costs vary from institution to institution; as whatever is not an indirect cost is a direct cost, direct costs will also vary across institutions. Therefore, care must be taken to understand your institution's particular direct-cost guidelines as well as federal guidelines, taking into account allocability and allowability. Core facilities may only pass along allocable and allowable direct cost to internal users of the facility. The indirect cost cannot be included in charges to internal users, as these costs have already been charged to the federal grant paying for the service. However, indirect costs may be charged to external users.

There are four important guidelines when applying OMB regulations to external customers: all customers paying with federally sponsored funds must be charged the same rate; there is no limit on what you can charge COMs; your COM rates may not be lower than other commercial providers of similar services; and your facility must not become a profit center. These guidelines are expanded on below, but they are not a substitute for reading and understanding the actual regulations. Nevertheless, we believe they will provide a basic understanding of the issues.

Guideline 1

Federally funded customers must be charged at the same base rate regardless of whether they are internal and external customers. The base rate is the allocable and allowable direct cost of delivering the service by *your* facility. It does not have to be the same rate charged by facilities at other organizations, but it must be justified and auditable. Your cost may be more or less expensive depending on your specific cost of doing business. Factors include subsidies, the level of technical support, number of service contracts, equipment depreciation costs, and the availability of services after hours and weekends (which might have higher or lower rates). We strongly advise that you work with your Finance, Business, or other appropriate office when setting the rates to ensure appropriate methodology and documentation.

Guideline 2

Your core should charge COM customers an appropriate indirect-cost rate for your institution to recover the administrative burden of providing the service, on top of the base rate. We also highly recommend that you charge external NPO clients the appropriate indirect-cost rate. In our experience, charging external NPO clients indirect costs has never resulted in push-back or audit comments from federal regulators. In addition, many institutions have a process for internal "taxation" of external revenue received by cores to recover indirect costs, in which case, your core will lose money if the indirect cost is not part of your charge to external customers.

Guideline 3

Although there is no upper limit on what you can charge COM clients, and although you can appropriately grow your external business, it is best to ensure that this growth does not conflict with the mission of the core within your institution. In addition, there are three important consequences of growing your external business—some good, others less so.

- less time and capacity for your internal customers, which is typically the primary purpose of a research core facility;
- potential for reducing your base rate for internal customers (see Guideline 5 below; sharing the cost of providing service with your external users will be a positive benefit to your internal customers);
- potential liability for tax payments resulting from generating income unrelated to your organization's mission [i.e., UBI; see Internal Revenue Service (IRS) Regulations below].

Guideline 4

If there is a commercial vendor with comparable services within a defined radius of your institution, then you may not be allowed to provide services to COMs that are below that rate. You may provide your service at comparable or higher rates, however. Your institutional guidelines on this may vary in terms of the distance restriction.

Guideline 5

There is no limit to the amount of external income a core facility can receive per year; however, your institution may have specific rules governing this type of revenue. In general, if you generate an overall profit of more than 2–3 months of income, then you will need to take action to adjust your business plan for the following year. Actions may include: lowering the base direct-cost recovery rate, hiring new staff, or incurring additional appropriate expenses. Similarly, if you generate an overall deficit, you would take action to reduce expenses or raise rates the following year to recoup the loss. Either way, careful records must be maintained and made available to federal officials when requested.

In short, the income generated from external customers is an excellent way to garner additional income, which can be used to keep rates low for NPO customers while growing your operation (adding staff, renovating space). In particular, revenue generated from COMs can be an excellent way to fund new equipment purchases, which would otherwise not be appropriate expenses for a core that served only internal or NPO users. If this approach is taken, accurate and precise accounting is necessary to ensure that new equipment purchases are made only from COM-generated funds. More generally, external revenue is an effective way to reduce internal subsidies and pay for amenities that are otherwise not billable to clients paying with federally sponsored funds.

IRS Regulations

The IRS is the U.S. government's agency responsible for tax collection and tax law enforcement. Of course, even tax-exempt organizations have regulations that they must abide by or face punitive actions that may result in fines and/or imprisonment. Thus, it is essential to understand the taxable consequences of your external business before proceeding. This section provides a general introduction but is not a substitute for your institutional guidelines or more detailed discussions with your institution's General Counsel, Research, and/or Finance Offices.

IRS Publication 598 (rev. 3/2010)¹⁷ defines UBI as income not "substantially related to the charitable, educational, or other purpose that is the basis of the organization's exemption". It also states that "The term research, for this purpose, does not include activities of a type normally carried on as an incident to commercial or industrial operations, such as testing or inspecting materials or products, or designing or constructing equipment, buildings, etc. In addition, the term fundamental research does not include research carried on for the primary purpose of commercial or industrial application".

This may be interpreted to mean that all income received from COM customers constitutes UBI and is therefore taxable and must be reported. On the other hand, income from external customers that is paid using a federally sponsored grant (NPO or COM) is unlikely to be considered UBI. The IRS has typically shown no interest in NPO clients during audits, regardless of the form of payment. If possible, you should document the source of payment to differentiate between NPO and COM; however, the distinction may not always be clear, and your institution may still be subject to IRS audit merely because your core has received external revenue.

Income from COMs, on the other hand, may be taxable, unless it can be shown that it is related to the research mission of your organization, e.g., through a sponsored project, which results in benefits for the common good of the institution or results that appear in a scientific publication. The IRS has typically shown interest in all forms of income from COMs regardless of whether it is sponsored. This is especially the case when the core is providing a "pass-through" service that is part of a supply chain for the core's customer. In this case, the revenue will very likely be considered unrelated and taxable, and we recommend that core facilities not engage in this type of activity. Overall, as a result of the complexity of the tax code, we, once again, highly recommend that you consult with your General Counsel, Research, and/or Finance Offices for advice and guidance.

STRATEGIES FOR DEVELOPING CORPORATE RELATIONSHIPS

There are additional benefits of offering services to external customers, especially corporate clients. Use of core facility services provides a natural gateway to more substantial research collaborations and partnerships that could offer long-term benefits for your institution and your clients'. In the case of corporate clients, initiating such relationships may lead to corporate-sponsored research and increasing likelihood that the research will be commercialized. As emphasized by proponents of enhanced university-corporate partnerships,^{1-5,7} the common good could reap substantial benefits when these interactions are handled appropriately. To enhance such opportunities, we recommend investigating mechanisms for working more closely with your Corporate Development, Corporate Relations, or Technology Transfer Offices to facilitate communication and cooperation within your institution. These offices are staffed by experts who have already developed relationships with corporations and corporate foundations and who know how to develop new relationships. They can be a great ally in solidifying them.

In general, a key to developing productive interactions with external customers is to develop relationships with the relevant central offices and experts within your own institution. Get to know the people who are involved in research administration, contracts, and grants. Make an appointment to talk to staff from the Corporate Relations or Technology Transfer Offices, and learn more about what they have to offer. Find out if your institution has a specific office that provides financial or scientific oversight for some subset of, or even all, core facilities. Participate in research symposia, departmental retreats, or poster sessions whenever possible.

Overall, your goal is to raise the profile of your core facility within the institution and demonstrate the value to the research community and to individuals who may be in a position to assist you in your goal of expanding an external customer base. This assistance comes in many forms; we have discussed here the practical value of consulting with experts in research safety, policy, and finance to ensure that your core complies with applicable regulations. Your internal network of contacts may include scientists, administrators, financial accountants, policy experts, or outreach experts; any one of these individuals could be the avenue to a new scientifically and financially fulfilling relationship with a corporate client.

Finally, it is important to emphasize that as a service provider or potential collaborator with external nonprofit or commercial customers, your core facility is an ambassador, of sorts, for your institution. This brings opportunities to represent the best of your institution to these clients, but it also makes your *responsible conduct of research* and all that this term

implies—research ethics, regulatory compliance, quality controls, financial accountability—even more imperative.

DISCLOSURES

There are no financial conflicts of interest.

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Laboratory Service Agreement
TERMS AND CONDITIONS

This program is intended to serve a mutual benefit to both [name of university and corporate address] (hereinafter called "University") and the [name of external customer and corporate address] (hereafter called "Requesting Entity") described herein.

REQUESTING ENTITY HEREBY ACKNOWLEDGES AS FOLLOWS:

That the University, an educational institution of higher learning and research, in order to support the community, and further its academic mission, is making available, on a limited basis as described herein, academic research facilities and resources, where those facilities may be unique in the geographic area and as available when not in use by faculty or students who retain the priority status for their use; and

That this limited arrangement is consistent with National Science Foundation ("NSF") Important Notice #91 dated March, 11, 1983 and NSF Important Notice #122 dated June 16, 1998; and

That the University must remain in strict compliance with federal regulations pertaining to the use of federally supported facilities and equipment including IRS Rev. Proc. 2007-47 (updating IRS Rev. Proc. 97-14), OMB Circulars A-21, A-110 and A-133 and other applicable regulations; and

That participation in this *Laboratory Service Agreement* is by special arrangement only and that this program is intended to be of a short duration and minimally intrusive to the active workings of the University and therefore, the terms of this agreement are non-negotiable. For activities not falling within the limited scope of this program, traditional sponsored research is available through the University's Office for Sponsored Research.

THE PARTIES HEREBY AGREE:

1.0 PROJECT: The University agrees to undertake certain tasks set forth in the Project Specification (in the form of Exhibit A), which may include training of Requesting Entity's personnel in the use of the University's equipment.

2.0 REPORTS: If Applicable, as set forth in the Project Specifications, the University's project director shall furnish Requesting Entity with a final report consisting of the data and test results generated by University in conducting the Project, within thirty (30) days after completion of the project. The parties acknowledge that for the University's operations and auditing purposes, it may provide information regarding this Agreement to the University's auditors and, as necessary, regulatory entities or authorities.

3.0 PUBLICATIONS: Requesting Entity recognizes that the University is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code and must serve a public rather than a private interest and must maintain the discretion to present or publish, at its discretion, the University's methodologies developed or used in the Project.

4.0 INTELLECTUAL PROPERTY: Each party shall retain ownership of its own intellectual property. The University's intellectual property policy may be viewed at: [website]. Copies of all data and test results generated during the execution of this project shall be delivered to and become the property of the Requesting Entity.

5.0 CONFIDENTIALITY: Requesting Entity will not disclose confidential information to the University unless a Mutual Confidential Disclosure Agreement has been signed by both parties.

6.0 TERM AND TERMINATION: This Agreement is effective as of the date of last signature of this Agreement and shall continue through completion of the work provided in the Project Specifications. The University may terminate this Agreement at any time with twenty (20) days written notice to the Requesting Entity, and shall refund any fee paid to Requesting Entity. Requesting Entity may terminate

this agreement at any time with twenty (20) days written notice. Upon termination by Requesting Entity, Requesting Entity shall pay within 30 days of termination the fee payable under the Project Specification. Requesting Entity's indemnification and payment shall survive termination.

7.0 INDEMNIFICATION: Requesting Entity agrees to indemnify, hold harmless and defend the University, its officers, trustees, employees and agents against any and all claims, suits, losses, damages, costs, fees, and expenses resulting from or arising out of this project, including but not limited to: (i) any breach by Requesting Entity under this Agreement; (ii) any injury to persons or damage to property caused by Requesting Entity's employees or agents; or (iii) Requesting Entity's use of any data, materials or other information obtained pursuant to this Agreement. Requesting Entity shall not be liable for actions resulting from gross negligence or willful misconduct on the part of the University.

8.0 INSURANCE: Each party agrees to maintain reasonable coverage for such liabilities either from commercial insurance or a reasonable self-insurance mechanism, verification of which will be reasonably provided to the other party upon request. Requesting Entity shall furnish the University with two (2) original Certificates of Insurance, with the University named as an additional insured, showing the following minimum coverage with an insurance company acceptable to the Director of Risk Management. Further, the Certificate of Insurance shall state that coverage provided is primary to any other coverage available to the University. The foregoing Certificates shall contain a provision that coverage afforded under the policies will not be cancelled or non-renewed until at least sixty (60) days prior written notice has been given to the University:

TYPE OF INSURANCE MINIMUM INSURANCE COVERAGE

Combined Single Limit Per Occurrence / Aggregate

Commercial General Liability including: \$3,000,000 / \$3,000,000

Premises - Operations

Explosion, Underground and Collapse Hazard

Products / Completed Operations

Contractual Insurance

Broad Form Property Damage

Independent Contractors

Bodily Injury

Automobile Liability \$3,000,000 / \$3,000,000

Owned, Non-owned, or Rented

Workers' Compensation and Occupational Diseases As Required by Applicable Laws

Employer's Liability \$3,000,000

9.0 NEGATION OF WARRANTY: REQUESTING ENTITY ACKNOWLEDGES AND AGREES THAT LABORATORY EQUIPMENT, SPACE AND SERVICES PROVIDED BY THE UNIVERSITY UNDER THIS AGREEMENT (INCLUDING ANY DATA, MATERIALS AND INFORMATION) ARE PROVIDED "AS IS". THE UNIVERSITY MAKES NO EXPRESS OR IMPLIED WARRANTIES OF ANY KIND WITH RESPECT TO THE PROVISION OF SPACE, PERFORMANCE OF ANY SERVICES, OR PROVISION OF ANY DATA, MATERIALS OR TECHNICAL INFORMATION DERIVED FROM THIS PROJECT PURSUANT TO THIS AGREEMENT, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF SUCH DATA, MATERIALS OR INFORMATION. THIS AGREEMENT GRANTS NO TANGIBLE OR INTANGIBLE PROPERTY OR PROPERTY RIGHTS.

10.0 ASSIGNMENT: This agreement may not be assigned by either party without the prior written consent of the other.

11.0 PUBLICITY: Neither party will use the name of the other, any of the other's personnel, or any officer, trustee, employee or agent of the other in any publicity, advertising, or news release without the prior written approval of the other.

12.0 MATERIAL TRANSPORT: In no event shall Requesting Entity provide the University with any materials which are toxic, contagious, hazardous in nature or which are regulated by the FDA, EPA, or other federal agencies with the authority to control regulated substances and materials.

13.0 EXPORT CONTROLS: Requesting Entity acknowledges that under National Security Decision Directive 189 the University performs only fundamental research and Requesting Entity will not provide any export controlled materials or information to the University. The University does not restrict access to its programs or facilities based upon nationality or citizenship status.

14.0 NOTICES: As provided in the *Laboratory Service Agreement* Project Specification

15.0 CONFLICT OF LAWS: This Agreement shall be governed by and construed according to the internal laws of the State of [name of State] without reference to rules of conflict of laws. The parties agree to the exclusive jurisdiction of the state or federal courts sitting in {name of county and State}, for any resolution of disputes arising under this Agreement.

16.0 AMENDMENTS: This Agreement represents the entire agreement of the parties with respect to its subject matter. Any amendments must be in writing and signed by both parties.

17.0 RELATIONSHIP BETWEEN REQUESTING ENTITY AND THE UNIVERSITY: Please describe all known personal or organizational business relationships between the Requesting Entity and the University. If there are any conflicts of interest that would result under the project contemplated herein, a statement of the potential conflict of interest and a proposed mitigation statement describing how such conflict of interest will be addressed, is provided below.

_____ No Known Conflict of Interest

_____ Potential Conflicts of Interest exist and will be addressed as follows: (attach additional exhibits as necessary)

Laboratory Service Agreement and Project Specification

This *Laboratory Service Agreement and Project Specification* is between [name of university], an [name of state] corporation having its corporate business address at [address] (hereinafter called "University") and [name of external customer] having its corporate business address at [address] (hereinafter "Requesting Entity").

1. The Laboratory Service Agreement Terms and Conditions TERMS AND CONDITIONS () are attached hereof and incorporated herein by reference.

2. Project Title: _____

3. Terms: The University agrees to undertake certain testing, analysis or evaluation as set forth in the following Attachments to this Project Specification, which are hereby made a part of this Agreement:

I. This Laboratory Service Agreement and Project Specification:

II. Scope of Work in Appendix A

III. Laboratory Service Agreement TERMS AND CONDITIONS (11/23/2011)

3. University Project Director:

Name:

Title:

Phone #:

Fax #:

e-mail:

4. Requesting Entity Project Manager:

Name:

Title:

Phone #:

Fax #:

e-mail:

5. Project Period, Amount, and Invoicing:

a) Project Period

Start date _____

Completion date _____

b) Project Amount \$ _____

c) The University will invoice per the following schedule:

6. Export Controls Certification:

Requesting Entity certifies and warrants that any subject technology or material to be provided to the University is NOT Export Controlled.

7. Requesting Entity shall comply with all applicable University rules governing laboratory access and use, which rules shall be provided to Requesting Entity upon Requesting Entity's request.

[name of REQUESTING ENTITY]:

[name of UNIVERSITY]:

Signed: _____

Signed: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

FIGURE 1

Example of a Laboratory Service Agreement for Work Performed in a University Core Facility for an External Customer That Is a Fee-for-Service and Not a Sponsored Project.