

UD Support of Core Facilities: A Recommendation from the UD Core Facility Task Force

INTRODUCTION

The University of Delaware recognizes that institutional investment in faculty-led core facilities, responsive to their user bases, is critical to the research and teaching missions of the University. Core facilities are those that provide shared access to resources that are too expensive or complicated for individual investigators to acquire and/or maintain. Core facilities are increasingly essential as research becomes more interdisciplinary and reliant on expensive instrumentation. In 2011, the Vice Provost for Research established a core facility task force to study capabilities, needs, financing, administration, and compliance on the topic of core facilities at UD. The group (see Appendices A and B for participants) met regularly starting in the 2010-2011 and 2011-2012 AY and produced two formal reports describing their findings. The first report (Appendix A) includes a definition of a core facility, a list of existing cores at UD, and a study of best practices from other academic institutions. It helped establish a survey of a subset of UD faculty that potentially use cores. The second report (Appendix B) updates the definition of a core facility and identifies important characteristics of a successful core facility as well as desirable features of a core facility at UD. Here, we propose principles and implementation mechanisms for supporting such facilities.

Institutions that organize and invest in core facilities realize financial benefits as well as academic benefits. For example, cost savings are achieved and efficiency gained when faculty share access to expensive instrumentation rather than duplicate technologies across campus. Faculty recruitment and retention are improved by providing access to state of the art instrumentation, and our students benefit both in their training and research capabilities. One challenge presented with core facility administration is compliance with very complicated and evolving Federal regulations. An organized approach to management of core facilities enables a better understanding of relevant federal guidelines and improves compliance. Further, excellence in certain technology platforms can lead to an improved academic reputation in the relevant field, even without investment in new faculty hires. Thus, although many core facilities cannot practically achieve 100% cost recovery through direct user fees alone, ongoing institutional support of core facilities is a worthwhile investment in the University mission.

This document describes a framework of support for core facilities that are managed, organized, and maintained by units around campus - "distributed core facilities". That is, core facilities where the fiscal and administrative management is by faculty, centers/institutes, departments, or colleges. It also describes a plan to create an infrastructure to support world-class core facilities that serve a broad cross-section of the University community. These facilities would be "centrally-organized core facilities" meaning that fiscal support and administrative management would be at the level of the Provost, VPR, or a University-wide academic unit. Because of the broad range of possible core facilities, technologies, technical staff, and research interests, we highlight that both "distributed" and "central" core facilities should be nurtured at UD. The objective is not to push central organization of all core facilities, but to create a mechanism and pool of resources to allow for central organization of cores in cases where faculty deem it appropriate.

RESOURCES FOR ALL UD CORE FACILITIES

"Distributed" and "central" core facilities must comply with all relevant federal guidelines (e.g., OMB circular A-21) when charging federal grants and contracts and may have needs in terms of basic infrastructure to support faculty research. Thus, all such facilities should be eligible to receive:

- (1) guidance in the determination and establishment of user fees;
- (2) access to available information technology platforms to facilitate billing, accounting, and data management; and
- (3) opportunities to compete for capitalization funds from external sources (e.g., NSF Major Research Instrumentation program slots).

A NEW PROGRAM TO SUPPORT CENTRAL CORE FACILITIES

Some core facilities serve a very broad cross-section of the University community. One example is the Bioimaging Facility that has faculty clients from nearly all colleges. Cores with a broad user community may be best organized under either a "distributed" or "central" model. To determine which core facilities are priorities for central support, several factors should be considered. Central cores should:

- (1) have broad impact on the research, education, and outreach missions of UD and our partner institutions;
- (2) provide services in a fair and transparent way to any PI, department, or unit;
- (3) rely on faculty input for scientific and strategic direction;
- (4) be fully compliant with all appropriate accounting guidelines (where pricing is set in a way that considers, but does not necessarily charge, the true cost of the service);
- (5) have a reasonable expectation regarding cost recovery or can justify facility costs by the breadth of impact on research and education; and
- (6) have a sunset and/or recapitalization plan.

We propose that a process be created that will allow existing or new core facilities to be considered for five years (renewable) of central support, with central support providing:

- (1) funds to cover operational deficits for the financial costs of technical staff, service contracts, operating supplies, etc. based on a five-year budget model and business plan;
- (2) support for hiring and HR liaison functions;
- (3) administrative support for logistical and organizational activities; and
- (4) administrative support for budgeting, invoicing, establishment of fees, projections, reconciliation, etc.

In exchange for central support, each central core facility should agree to:

- (1) have a faculty advisory committee (with a UD faculty chair) that meets regularly;
- (2) demonstrate intellectual impact and visibility commensurate with its level of institutional support;
- (3) conduct annual evaluation of fee structures and benchmarking against similar cores at other universities as part of a business plan;
- (4) provide quarterly financial and user-base updates;
- (5) undergo three- and five-year reviews by a committee knowledgeable in the technology; and
- (6) have recapitalization and/or sunset plans in place for each five-year period of operation.

PROPOSED PROCESS

Periodically, the Vice Provost for Research or other appropriate administrator can issue a call for proposals that invites faculty to propose new or existing core facilities for central support. Each proposal should include a description of the relevance, importance, context, and impact of the proposed facility as well as a budget, faculty advisory committee membership list, and sunset plan. The applications should be considered by a group of relevant, well-respected faculty leaders that can prioritize the importance of proposed facilities. Facilities can then be implemented based on available resources, and the chair of the faculty advisory committee for the proposed core facility can sign a memorandum of understanding describing obligations listed above before the facility receives institutional support.

Members of the Core Facility Task Force Submitting this Recommendation

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