

White Paper: School of Medicine Core Facilities Action Plan

In a continuing effort to enhance user science, develop efficiencies, and productively coordinate activities within and among the various core facilities at the School of Medicine, in November 2012 the Vice Dean for Research approached leaders from the SOM, the Case Comprehensive Cancer Center, the Center for AIDS Research, and the Clinical and Translational Science Collaborative to advocate a retreat on the topic of core facilities. This effort would require the support of these key leaders to ensure that the event, and future policies regarding core facilities, was in tune with the concerns and goals of core facility directors, users, administrators, and other stakeholders.

These leaders gave their support, and in January 2013, a planning group for the retreat was convened, consisting of administrators from the major centers, core facility managers and directors, and a member from an outside partner institution. The committee developed a list of Scientific Core Facilities, defined as *an administrative unit that provides access to specialized technologies, services, and expertise that are necessary and important to the scientific mission of the institution, not easily available in an individual research laboratory, and servicing multiple departments, schools, and/or institutions*. This definition delineated approximately 40 facilities to include in the retreat planning. After further vetting by the Vice Dean for Research and other key stakeholders, targeting a retreat to this group of cores offered the most potential gain to the institution in terms of customer service, recruiting, grantsmanship, and cost effectiveness, while serving the widest interests of the School of Medicine community.

The committee immediately engaged the larger SOM community to guide the discussion at the retreat and for any future decision-making and planning. In June 2013, a survey was deployed via REDCap to assess what topics and issues regarding core facilities needed open discussion and dissection. After collecting over 345 responses, the committee analyzed and synthesized the responses and constructed the retreat agenda. Additionally, the survey responses were used to define a set of goals and action plans for the SOM core facilities. These goals were to be discussed at the retreat and refined into a timeline of actions. The retreat was held on August 26th, 2013, with 110 people in attendance including core facility directors and managers, core facility users, center and department administrators, school leadership, and key partners outside the School of Medicine. The program consisted of moderated panels on Identification, Access, and Visibility; Coordination, Reporting, and Billing; and Investment and New Core Development. In addition, breakout sessions centered on Leadership Coordination; Metrics, Reporting, and Administrative Tools; Instrumentation Grants; Creative ways to make Core Facilities more efficient; CTSC Pilot Grants; and Core Facility Roles and Responsibilities. A poster session for core facilities was also scheduled, 40 cores responded and presented highlights of both their services and accomplishments.

Proposed Follow on Actions

Five themes at the retreat were crystallized into action steps presented to the attendees at the close of the event: Create a Centralized Core Infrastructure, Establish a Core Advisory Committee, Provide Transparency, Establish a Research Support Director, and Measures to Increase Investment. The action steps are outlined below.

1. Definitions of Core Facilities

The School of Medicine will refine the definitions of Scientific Core Facilities by first establishing the concept of an "Institutional Scientific Core Facility". In return for providing metrics on a regular basis, setting and meeting expectations for productivity, participating in policy discussions, and promoting core facility use to benefit faculty grants and faculty recruiting, an Institutional Scientific Core is eligible for investment from the SOM. As

such definitions will drive many of the decisions to be made over the coming year(s), the following three definitions are proposed:

- a. *Institutional Scientific Core Facilities* - An institutional unit that provides access to specialized technologies, services, and expertise that are necessary and important to the scientific mission of the institution, not easily available in an individual research laboratory, and servicing multiple departments, schools, and/or institutions. An Institutional Scientific Core Facility will be eligible for investment by the School based on criteria and metrics to be set forth by an advisory committee of Scientific Core Facility Managers and Department and Center Administrators, and agreed to by the Vice Dean for Research.
- b. *Departmental Scientific Core Facilities* - A departmental resource that provides access to specialized technologies, services, and expertise that are necessary and important to the scientific mission of the department. Access and investment are entirely within the purview of Departmental Leadership.
- c. *Service Centers* - Provide a discrete technical, engineering, or support service either to individual departments or school-wide that is typically transactional in nature. Examples of these would be the Scientific Instrument Repair Center, departmental centrifuge or tissue culture rooms, or vendor supply closets.

2. Visibility

Visibility and Access are key components of core success. The action steps listed below will help cores capture data for reporting, provide important information to users, allow users to interact directly with cores, and provide advertising for services and products.

- a. *Website* - A comprehensive website is going to be developed housed on the Office of Research Administration's site. This will include all institutional scientific core facilities and institutional service centers and have links back to each facility's individual website.
 - i. As of now, existing information on the retreat, including goals, slides and other information, are posted.
 - ii. Over the next 6 months - Cores will be identified and web content enhanced. Enhanced information and progress related to this increased visibility will ease navigation.
 - iii. Over the next year: Solutions will be discussed in consultation with Central ITS, SOM ITS, and other stakeholders around a common web-presence that will ultimately be a requirement of an Institutional Core Facility. This must serve as a discovery and access tool for prospective and current end users, while satisfying the needs and requirements of the various centers and grants that support the facility, as well as be flexible enough to serve the needs of the facility
- b. *Core news and updates* – Updates will be developed for dispersal to the School of Medicine. One type of dissemination for this will be the "Did you know" document currently in place at the Cleveland Clinic, which spotlights a single facility every 2 weeks, describing their services and capabilities, and celebrating their achievements in publishing, presenting, and grantsmanship. A second will be short updates on the plasma screens. This will be rolled out before the end of the year

3. Core Steering Committee and Research Support Director

Coordination and Investment will allow leadership to understand common issues and concerns, disseminate successful strategies, and provide ongoing feedback. New infrastructure will allow coordination and investment to be performed seamlessly. The new positions are listed below.

- a. *Core Focus Committees* - will be established and will be based on loose discipline commonalities for core facilities. Some current suggestions include: -omics, animals, biostatistics/bioinformatics, cellular imaging, clinical and translational imaging, drug development, and biophysics/structural biology. A representative for each committee will be identified. The representative must be a core facility director and faculty member. The representative will be responsible for collecting and representing the views of the facilities represented by their committee.

- b. **Steering Committee** - An Institutional Scientific Core Facility Steering Committee will be established, made up of Center/Department Administrators and the Core Focus Committees representatives. This body will be charged with:
 - i. Establishing common metrics for Institutional Scientific Core Facilities
 - ii. Sharing best practices
 - iii. Communicating between cores
 - iv. Representing cores in policy planning
 - v. Conducting periodic core reviews
 - vi. Reviewing/recommending new core requests
 - vii. Developing tracking metrics

4. Transparency

Transparency was identified as a key issue in creating a more cohesive, efficient standards for core facilities. Specific steps to increase the transparency of the investments in, and operation of, core facilities are proposed:

- a. This white paper will be included in the School of Medicine Strategic Plan and cores will be an established part of strategic planning going forward.
- b. Investment criteria to determine eligibility as an Institutional Scientific Core Facility will be determined and disseminated by the Steering Committee, with input from the Dean and senior school leadership.
- c. Current investments in cores will be made public, and future investments will be publicized.

5. Billing

In support of transparency and visibility, a committee of administrators will review current billing practices and procedures. The committee will investigate tools that may support common workflow and billing practices. The committee will make recommendations to the Core Steering Committee regarding the standardization of billing practices and procedures.

6. Reporting

Committee of administrators will be convened to assess current approach to reporting to the SOM and funding agencies regarding core utilization and efficiencies of cores. The committee will make recommendations to the Core Steering Committee regarding reporting best practices and reporting requirements for Institutional Scientific Core Facilities.

Proposed Timeline

- October 2013: The white paper will be complete and submitted to school leadership with the aim of including it in the School of Medicine Strategic Plan.
- November 2013: During this month, the white paper will be presented to and reviewed by school leadership, stakeholder groups including basic science chairs, the research committee, faculty council, and center directors. Their input and advice will be considered and added to the plan.
- December 2013: Core definitions will be instituted and publicized, including the review process, metrics and other requirements to be considered an Institutional Scientific Core Facility. Facilities at this time will be invited to declare as an Institutional Scientific Core Facility.
- January - March 2014: The Institutional Scientific Core Facility Steering Committee will begin meeting to establish a charge and procedures. The website upgrades will be moving ahead. Work will begin on the 2014 Scientific Core Facilities Retreat.
- March-June 2014: Data and metrics will be collected by the Institutional Scientific Core Facility Steering Committee by March 2014. The Committee will analyze the data and make recommendations to senior leadership.
- August 2014: Core Retreat II