Optimizing Institutional Approaches to Core Facility Investment to Enable Research

NORDP 2015 – Jeff Horon, Consultant, Elsevier Research Intelligence

Abstract

In “Optimizing Institutional Approaches to Enable Research,” authors Grieb, Horon, Wong, Durkin, and Kunkel present a comprehensive set of best practices for providing leading-edge core facilities that contribute to the successful execution of research and increase competitiveness for external sponsorship. The authors conclude:

“... This approach has created a number of standardized, transparent processes to effectively manage central infrastructure that enables enterprise-wide research, including a process for capital equipment planning, a procedure to evaluate new cores, a method for reviewing and managing the lifecycle of existing cores [invest, maintain, or sun-down], an investment in the administration and operational efficiencies of the cores, and support for the development and implementation of new methodologies for our investigators. The execution of these processes has provided faculty with forward-looking technologies to facilitate innovative research and provide a competitive edge for extramural support.”

Therefore the mechanisms for improvement of core facility management and the tangible benefits thereof are understood, but it is often initially not understood how to identify and diagnose sub-optimal funds flows and investment decisions. Funds flows, particularly those related to capital equipment depreciation, can have significant effects on core facility fees to investigators, indirect cost recovery, and availability of funds for equipment replacement/upgrades and provision of new services. Increased understanding of these funds flows can lead to better investment decisions involving strategic allocation of funds to urgent equipment and facility needs as identified by scientific advisory (versus haphazard or ‘hat in hand’ voluntary fundraising models) and periodic review, both to elicit new services investigators would benefit from and to phase out services that have become inefficient or commoditized.

Understanding Funds Flows

Capital equipment ‘on core facility books’ vs... .... ‘on university books’

- be factored into investigator-facing costs, reducing the need for subsidization and providing automatic return of funds to repair, replace, and upgrade equipment; however, higher investigator-facing costs may also reduce perceived competitiveness and/or utilization
- fall into capped cost pools, reducing overall indirect cost recovery to the institution

- be factored out of investigator-facing costs, increasing perceived competitiveness and/or utilization; however, funds flows need to be understood and managed such that there are funds to repair, replace, and upgrade equipment; increased subsidization may be required, and some of the benefits may accrue to users external to the institution
- fall into uncapped cost pools, increasing overall indirect cost recovery to the institution

Investment Decision Framework

(adapted from Grieb, et. al., Fig. 1)

By understanding funds flows, institutions can enable strategic decision-making, such as the core facility investment decision framework presented in Grieb, et. al.

In particular, the existence of designated funds for equipment repair, replacement, upgrades, and new equipment purchases implies that there will be input from a scientific advisory board (“What sorts of new equipment and services do our investigators require?”) and/or executive leadership, determining how funds will be allocated from a strategic perspective.

This comprehensive view may lead to further improvements in business processes, e.g. phasing out services that have been commoditized.