I. Executive Summary

In late 2014, then-Interim Vice Chancellor for Research and Graduate Education Marsha Mailick, Ph.D., appointed and charged the Working Group on Scientific Core Resources ("Working Group") to complete an environmental scan of core resources on the UW-Madison campus, evaluate campus core governance structure(s), recommend optimal business models (including subsidies and fees) for cores, and catalog the utilization, capacity and capabilities of each core resource. The membership of the Working Group included core directors, campus leaders and core users from across campus (Appendix A).

The Working Group defined “core resources” by modifying the NIH definition of cores, http://grants.nih.gov/grants/policy/core_facilities_faqs.htm#3597. For purposes of this report, research cores are “centralized, shared research 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 the institution and may have dedicated personnel, equipment, and space for operations. In general, core facilities recover their costs, or a portion of their costs, through user fees that are charged to an investigator’s funds, often federal grants.”

Based on the findings of four Working Group subcommittees, the recommendations in this report propose methods for cross-campus operations and coordination of core facilities and services. Implementation of these methods should contribute to a supportive, sustainable environment for research at UW-Madison.

Goals and Desired Outcomes of the Working Group on Scientific Core Resources

The University of Wisconsin-Madison is a world-class research university whose faculty, staff and students utilize world-class technologies to advance their research and sustain the competitiveness of their programs. The Working Group undertook its charge with the following goals in mind:

1. Effectiveness
   a. Researchers have access to core facilities with the capability to do their research, including open access to cores for those who don’t have access currently.
   b. Through enhanced communication, researchers are aware of the campus shared resources that are available to support their research.
   c. Campus core facilities have the capacity to serve all who need their services.
   d. Higher end capabilities are achieved by coordination of the activities of similar or complementary core facilities and pooled campus resources in support of cores.

2. Efficiency
   a. Each core facility is used to its fullest, including offering services to external customers as work schedules and core capacity allow.
   b. Duplication of core services is eliminated, except where demand and accessibility require it.
   c. Costs are contained through core life cycle management.
   d. Investments to enhance core capabilities or capacity, are made strategically with cross-campus input.

3. Financial Sustainability
   a. Operating costs are met principally through charge backs, grants and institutional subsidies.
   b. External users are offered access at a charge. Such sources of funding may contribute to the financial feasibility of otherwise prohibitively expensive facilities.
Table 1: Summary of Working Group Observations and Recommendations

The following table summarizes the key observations and recommendations contained within this report.

<table>
<thead>
<tr>
<th>Observations</th>
<th>Recommendations</th>
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<tr>
<td>UW-Madison would benefit from coordination of campus core resources, which is a common practice among UW-Madison’s peer institutions.</td>
<td>Create a process for cross-campus coordination of new core proposals and periodic reviews of existing cores to achieve greater efficiency, effectiveness and financial sustainability of campus core resources.</td>
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<td>There is need for a coordinated approach to the establishment and management of core facilities, aiming for reduced redundancies in core capabilities across campus and centralized information concerning the availability and accessibility of core facilities.</td>
<td>Develop methodology for core subsidies that is based upon (1) core participation in the process for cross-campus coordination of cores and (2) evaluation of periodic reports of core activities, finances and plans.</td>
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<td>UW-Madison’s complex research core environment merits a systematic budget methodology for determining the provision of subsidies, material resources or other support for cores.</td>
<td>Establish a comprehensive set of Operating Principles and Best Practices; establish core “clusters” to facilitate communication of best practices among cores with similar or complementary capabilities.</td>
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<td>Systematic communications strategies are needed to communicate UW-Madison’s campus core resources, making potential users (internal and external) aware of our research core capabilities.</td>
<td>Create a central web site that provides ready access to information about campus cores, including their capabilities and availability to internal and external users; develop best practices for individual core communication to existing and potential core users.</td>
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Advantages Resulting from Implementation of Recommendations

- The proposed processes for cross-campus coordination will reduce redundancies and inefficiencies in the provision of core services and ensure that core facilities are used to fullest capacity.
- The combination of reduced redundancies and increased operational efficiencies promises to reduce costs in the provision of core services.
- The collection and availability of data regarding core operations and technical capabilities will allow for informed strategic decision making regarding the management and funding of research core facilities and the adoption of new capabilities.
- Core clusters will provide an organized and facilitated venue for core directors to share best practices, normalize fee structures, discuss collaborative opportunities and jointly market services.
- Organized processes for core proposals and periodic review will provide the information needed for a comprehensive, well-maintained inventory of campus core resources, making it easier for users (internal and external) to identify available services.
Figure 1: Proposal for Cross Campus Coordination of Research Cores

The figure below illustrates the proposed organization for coordinating core facilities across campus and forms the basis for the recommendations included in this report.