

## EXECUTIVE SUMMARY

**Roadmap for the Establishment of a Sustainable Core Facility Portfolio for  
the Schulich School of Medicine & Dentistry**

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## PREAMBLE

The academic missions of the Schulich School of Medicine & Dentistry are guided by an ambitious strategic plan that “strives to raise the bar in our research, education and clinical endeavours”. One central priority of this plan is RESEARCH IMPACT which states a “commitment to be a top-tier, research-intensive organization and to elevate our prominence in an increasingly competitive and global environment.” The strategic plan also acknowledges that “research requires sound infrastructure” and “we will invest in core facilities that support the work of existing researchers and improve our ability to attract and retain top talent”. To respond to these stated goals, this document outlines a “roadmap” to be implemented in 3 phases for the establishment of a sustainable portfolio of core facilities that will support the aspirations of the Schulich research community. While initially focused on core facilities housed within Schulich on the campus of Western University, it is expected that the scope of this initiative will expand as it gains momentum to promote integration with core facilities and research infrastructure housed within other constituencies at Western and its affiliates. Overall, as stated in the Schulich strategic plan, “the Time is Now” as there is an urgent demand to keep pace with the rapidly evolving research ecosystem accompanied by increasing reliance on enabling technologies and intensifying competition for funding.

## CORE FACILITY DEFINITION

For the purposes of this plan, the definition of a Core Facility from the Western Policies and Procedures for the Establishment, Governance and Review of Core Research Facilities developed will be adopted:

*Core Facility: A unit within the institution that provides users with access to state-of-the-art research services, analyses, instruments, technology, expertise, resources, and/or training that are typically too expensive, complex, or specialized to be maintained by individual scholars. A core facility typically operates on a fee-for-service basis, supports multiple users, and is available to qualified users without any requirement for collaboration or co-authorship. A core facility is recognized and supported by the institution, has a sustainability plan, and a clear governance and management structure. The facility provides benefits such as financial savings through economies of scale, expert operators, training opportunities, and reduced duplication of services and effort within the institution.*

## ESTABLISHING A SUSTAINABLE SCHULICH CORE FACILITY PORTFOLIO

**Background.** Over the past two decades, investments by the Canada Foundation for Innovation (CFI) have transformed the Canadian research ecosystem (including >\$750M from CFI and partners within the London research community). These investments have spurred the establishment of core facilities housing state-of-the-art infrastructure that have supported the aspirations of the Schulich research community. While Schulich core facilities continue to promote research excellence, there is an urgent demand to keep pace with the rapidly evolving research ecosystem accompanied by increased dependence on enabling

technologies and intensifying competition for research funding. Taken together with strategic/targeted faculty renewal articulated in the 30 by 30 plan and Western's commitment to invest in the renewal of building infrastructure through the BioConvergence Centre and related initiatives, the Schulich research community is poised for transformation – with core facilities representing a central foundation for this transformation.

**Environmental Scan.** Environment scanning included tours of core facilities at Schulich and other institutions, online surveys of the Schulich research community and consultations with individual stakeholders and/or stakeholder groups as outlined below:

- Basic Medical Science Chairs
- B7 Committee (chairs of Departmental research committees)
- Western Associate Deans Research Network
- Core Facility Personnel (including Directors, Manager, Technical Staff)
- Core Facility presentations (Clinical Research Retreat -10/23; Schulich Research Retreat – 01/24; Schulich Research Town Hall – 01/24)
- Open Town Hall on Core Facilities for Schulich Researchers (January 2024) ➤ Core Facility Focus Groups – Schulich Research retreat (January 2024)

While there are certainly exemplars of high-functioning Core Facilities within Schulich that are promoting ground-breaking research, it is also evident that significant gaps and/or threats exist within the Schulich complement core facilities. At this stage, the intent of this initiative is not to distinguish high-functioning facilities from those that are facing challenges. Rather, the goal of this roadmap is to identify the conditions for success and establish principles for achieving sustainability of the research infrastructure that is critical for enabling the Schulich research community to realize its aspirations.

## RECOMMENDATIONS

In three phases outlined below, the roadmap strives to identify forward-looking strategies to enable the Schulich core facility portfolio – and by extension the Schulich research community – to keep pace with the rapid evolution of the research ecosystem.

### Phase One: Formal Recognition of Core Facilities.

The main goal of this phase is to formalize the recognition of core facilities and put in place supports (administrative/financial expertise) to support the core facilities in the development of sustainable business plans while also providing any incremental funding that may be available to alleviate current financial stress. Timeline: Immediate initiation.

#### i) Formal Recognition of Schulich Core Facilities.

The impending approval of Western Policies and Procedures for the Establishment, Governance and Review of Core Facilities presents a timely opportunity to formally recognize (or in some cases renew formal recognition) of Schulich core facilities. Establishment of a Core Facility Management Committee and a Core Facility Advisory Committee should be undertaken to oversee recognition and evolution of core facilities. ii) Dedicated Support for Finance and Administrative Activities.

A recurrent finding in the environmental scans relates to dramatic variations in the governance and financial operations of individual core facilities across the complement of Schulich core facilities. Support for Finance/Administration will augment the technical/research expertise that resides within the core facilities and will also facilitate harmonization of practices between individual facilities. iii) Immediate Incremental Support for Core Facilities.

As soon as additional funds are formally allocated/available, these funds need to be deployed to contribute to the re-launch of the Schulich Core Facility Support program.

## **Phase 2: From a Collection of Core Facilities to a Core Facility Portfolio**

The main goal of this phase is to reinforce the administrative/business support of individual cores and work with each of the cores to develop a coordinated portfolio of cores aligned with the research aspirations of the research community. Timeline: This phase should be initiated as soon as there is capacity to provide support and can begin concurrently with Phase 1.

- i) Harmonize operations between facilities (to the maximum extent possible) •  
Adopt common core management software solution • Conduct harmonized tracking of objective metrics.
- ii) From Business Model to Business Case  
  - Institutional Accountabilities*
    - Strategic deployment of resources currently used to support research
    - Fundraising/Development support for mission critical infrastructure
  - Community Accountabilities*
    - Fee structures that encourage conscientious use and recover sufficient revenues to enable sustainable operations.
    - Institute mandatory quotes from cores to support grant applications
    - Mandatory acknowledgement of core facility (publications, knowledge dissemination)
  - Core Facility Accountabilities*
    - Adherence to sound governance and financial principles
    - Annual reporting and regular meetings of Advisory Committee, Operations Committees and/or User groups as outlined in Governance
    - Support/engage the research community (access, user fees, services etc.)
    - Active pursuit of funding opportunities
    - Expansion of client base to maximize utilization
  - iii) Empowering the Core Facility Facility Director
    - Establish clearly defined terms of appointment, workload and performance expectations
    - Incorporate succession planning within Faculty recruitment plans
  - Staff Complement*
    - Align core facility staff complement with facility needs
    - Actively promote career satisfaction and development of facility personnel
    - Promote professional development
  - Research Trainees and Other Users*

- Receive certified formal training
  - Provide GTA (or equivalent) to enable doctoral students to gain experience/contribute to facility operations. Establishment of a formal training program (NSERC-CREATE, Mitacs etc.) should be considered.
- iv) Raising the Profile
- Communications strategy (strengthen relationships and gain shared understanding with stakeholders)
  - Maintain up-to-date websites (on Schulich research website)
  - Develop promotional materials (ie. posters, videos etc)
  - Establish regular series of workshops/seminars
  - Promote achievements arising from research conducted in core facilities • Introduce core facility achievement award(s)

Overall, it is expected that the actions undertaken during this phase will strengthen relationships between core facilities and the research community that are needed to enhance the operations and sustainability of individual core facilities. It is also expected that these actions will promote alignment of the operations and missions of core facilities leading to establishment of a high-functioning Schulich Core Facility Portfolio.

### **Phase 3: Evolution of the Portfolio**

It is recommended that a Schulich Office of Research Infrastructure be formally established under the portfolio of the Vice Dean – Research & Innovation. This office will have a critical role in the ongoing oversight of the Schulich Core Facility portfolio and ensuring that the portfolio evolves to keep pace with the ongoing evolution of the research ecosystem and continues to serve the needs of the Schulich research community. Key actions to be undertaken include:

- Formal establishment of a Schulich Office of Research Infrastructure (with staff dedicated to Finance and other relevant administrative functions)
- Appoint Director of the Office to work closely with Schulich, Director of Research Operations and Robarts, Operations Manager
- Convene regular meetings of core facility Directors and/or Managers (relationship building, sharing of best practices, developing synergies)
- Ongoing analysis of core facility performance (systematic collection and dashboard of objective metrics and/or annual reports)
- Conduct regular surveys to assess community satisfaction and alignment with current and future research needs and aspirations
- Liaison with partners within the London research community (Western, Western faculties, affiliated hospitals) to maximize alignment and integration
- Develop regional relationships/partnerships to establish reciprocal access to facilities with complementary capabilities
- Annual review of the portfolio by the Schulich Core Facility Advisory Committee

## **CLOSING REMARKS**

A central pillar of the strategic plan that captures the priorities and aspirations of the Schulich School of Medicine & Dentistry is a “commitment to be a top-tier, research-intensive organization and to elevate our prominence in an increasingly competitive and global environment”. Moreover, the strategic plan commits that “we will invest in core facilities that support the work of existing researchers and improve our ability to attract and retain top talent”. To meet this challenge, this document outlines an ambitious “roadmap” for the establishment of a sustainable portfolio of core facilities that will be implemented in 3 phases. The initial phase will be focused on formal recognition of core facilities accompanied by identification of resources needed to enable the success of these facilities. Building on momentum established in Phase 1, the second phase will further promote the success of core facilities and strive to establish a high-functioning portfolio of sustainable core facilities aligned with the research aspirations of the Schulich research community. The final phase of this roadmap will foster a strategic approach to core facilities under the oversight of an Office of Research Infrastructure. Overall, by ensuring that the Schulich portfolio of core facilities evolves with the research ecosystem, the Schulich research community will be well positioned to address the needs of society and to raise research productivity and impact.