UNIVERSITY OF TORONTO

OFFICE OF THE GOVERNING COUNCIL

FOR RECOMMENDATION **CONFIDENTIAL** ***IN CAMERA* SESSION**

TO: Academic Board

SPONSOR: Professor Scott Mabury, Vice President, University Operations
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PRESENTER: Professor Scott Mabury, Vice President, University Operations
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DATE: May 20, 2016 for May 30, 2016

AGENDA ITEM: 17(a)

ITEM IDENTIFICATION:

Lab Innovation for Toronto (LIFT) Project - St. George Campus - Total Project Cost

JURISDICTIONAL INFORMATION:

Pursuant to section 4.2.3. of the Committee's Terms of Reference, "…the Committee considers reports of project planning committees and recommends to the Academic Board approval in principle of projects (i.e. space plan, site, overall cost and sources of funds)."

Under the *Policy on Capital Planning and Capital Projects*, "…proposals for capital projects exceeding $10 million must be considered by the appropriate Boards and Committees of Governing Council on the joint recommendation of the Vice-President and Provost and the Vice-President, University Operations. (…) Normally, they will require approval of the Governing Council. Execution of such projects is approved by the Business Board. If a project will require financing as part of the funding, the project proposal must be considered by the Business Board."

GOVERNANCE PATH

A. Project Planning Brief

1. Planning and Budget Committee [for recommendation] (May 11, 2016)
2. **Academic Board [for recommendation] (May 30, 2016)**
3. Business Board [(financing, for recommendation] (June 16, 2016)
4. Executive Committee [for endorsement and forwarding] (June 14, 2016)
5. Governing Council [for approval] (June 23, 2016)

B. Execution of the Project

1. Business Board [for approval] (June 16, 2016)

PREVIOUS ACTION TAKEN:

At its meeting on May 9, 2016 the Executive Committee approved in principle the following:

> THAT the two projects being submitted by the University of Toronto to the Federal Government's Post-Secondary Institutions Strategic Innovation Fund (SIF):
>
> the Lab Innovation for Toronto (LIFT) Project (with an estimated total project cost of $190,000,00), and, the Innovation Centre Phase 1A (with an estimated total project cost of $70,000,000).

The Chair of the Governing Council signed a letter that formed part of the University's submission to the Government of Canada formally confirming that governance approval had been received and that the University of Toronto would process with completion of these projects pending confirmation of funding support from the Federal and Provincial Governments.

HIGHLIGHTS

See open session document.

In the event the project receives partial funding then we will first determine our ability to deliver the bulk of the project objectives through the normal value engineering process. If further budget alignment is required we would then assess the relative need and worthiness of the individual sub-components and strategically allocate available funding for the highest positive impact.

St. George Campus Components

Faculty of Arts & Science

1. Ramsay Wright
   NASM: 5357 **Cost: $26,759,691** Researchers: 158
   A total of 26 labs will be renovated in the Ramsay Wright Building. Cell & Systems Biology and Ecology and Evolutionary Biology research labs on the 3rd, 5th and 6th floors will be renovated to meet current standards and consolidated into one space (currently EEB has space in Earth Science building). Research support spaces including the Aquatics facility, Vivarium and Microscopy Suite will be renovated and expanded.

   Current Psychology teaching labs on the 3rd floor will be renovated and converted into wet research labs for faculty currently working in the basement.

2. Lash Miller Sustainability Upgrades
   NASM: 16,730 **Cost: $18,628,653** Researchers:75

This project will reduce energy consumption and modernize the infrastructure in the Lash Miller Building. The work includes new ventilation, cooling, fire protection, building controls, lighting and electrical supply.

3. Koffler Scientific Reserve Lab Expansion in Racing Barn
   NASM: 535 **Cost: $3,240,000** Researchers: 38

This project will take the remaining 75% of an inhabitable racing barn and transform it into a modern research facility. 3 dry labs will be created and new roof top 60 kw solar panels will be installed.

Dalla Lana School of Public Health

1. Research Lab Renovation
   NASM: 400 **COST: $1,500,164** Researchers: 15

10 discrete labs will be renewed in Gage Building, and the mechanical systems will be upgraded. Two additional laboratories will be created from currently unused space in the basement of the building.

Daniels Faculty of Architecture, Landscape, and Design

1. Expansion of Grit Lab
   NASM: n/a **COST: $2,124,625** Researchers: 8

The expansion of the GRIT Lab will be housed at One Spadina Crescent and include both roof and at-grade structures A green roof, smart irrigation system, Silva cells and planting soil, porous paving and high-reflective concrete paving, earthworks and plantings will be installed.

Faculty of Dentistry

1. Research Lab Renovation
   NASM: 3,800 **COST:$30,000,000** Researchers: 65

95 labs will be renovated into 21 labs, located on the 4th and 5th floors of the Dentistry Building. The overall renovation will provide large, open-plan labs, shared support rooms, faculty offices, dedicated trainee space as well as shared multi-user collaboration space. The building systems will be upgraded with new energy-efficient ones and energy-efficient equipment.

Faculty of Applied Science & Engineering

1. UTIAS Lab Renovation
   NASM: 351 **COST:$3,260,000** Researchers: 26

The UTIAS project at 4925 Dufferin Street will update the current Field Robotics Lab and expand and renovate the Sustainable Aviation Design Lab.

2. Civil Engineering and Electrical & Computer Engineering Lab Renovations
   NASM: 3,944 **COST:$10,050,000** Researchers: 178

44 labs will be renovated in the Galbraith and Sanford Fleming buildings; and the Engineering Annex. These renovations will bring the research lab space up to current standards, including the much needed environmental controls (temperature and humidity) needed to support sensitive

research equipment. Many of the spaces will also be opened up to create more collaborative facilities that will support a higher number of grad student researchers.

3. Mechanical and Industrial Engineering Lab Renovations (Lassonde &Haultain)
NASM: 221 **COST:$1,159,000** Researchers: 16
5 labs will be renovated in Lassonde Mining building and the Haultain building. These renovations will revitalize the research labs and bring their capabilities up to our standard labs, providing clean, modern, and well-serviced facilities for thermal & fluid sciences and energy & environmental engineering research.

4. Mechanical and Industrial Engineering Lab Renovations (Mechanical Engineering Bldg)
NASM: 157 **COST:$3,871,000** Researchers: 5
6 labs will be renovated in the Mechanical Engineering Building. The proposed renovations include complete renewal of the research labs, the replacement of 6 existing fumehoods, the addition of 2 new fumehoods, and the installation of new HVAC systems.

5. IBBME Lab Renovation
NASM: 629 **COST:$1,450,000** Researchers: 17
10 labs will be renovated in the Rosebrugh Building for the Institute of Biomaterials & Biomedical Engineering. The proposed renovations include opening up the research environment to create a more collaborative work space, the replacement of fumehoods, the provision of emergency power, and the installation of new mechanical and electrical services.

6. Materials Science & Engineering and Chemical Engineering & Applied Chemistry Lab Renovations
NASM: 893 **COST:$11,801,000** Researchers: 94
10 labs will be renovated in the Wallberg and Pratt buildings, and the infrastructure in both buildings will be upgraded. The proposed renovations include new fumehoods, new lab furniture, window replacement, and the replacement and modification of the mechanical and electrical services.

<u>Faculty of Medicine</u>

1. Research & Teaching Lab Renovation
NASM: 12,243 **COST:$40,000,000** Researchers: 272
The Medical Sciences Renewal Project includes 3 separate areas of the building; the research floors, the Anatomy teaching and support facilities, and the NMR facility. The research lab renovations are planned for lab and lab support rooms on floors 3 to 7 in MSB, with the exception of the 4th floor of the west wing (Block B), which will serve as temporary lab spaces for the remaining occupants during the renovations. 389 research and teaching labs will be renovated to current standards with upgraded infrastructure and centralized facilities. A new structural slab, emergency power and stair will be provided for the NMR facility.

Faculty of Music

1. Electro-Acoustic Music Studio Renovation
   NASM: 122 **COST:$1,150,000** Researchers: 6

   The Electro-Acoustic Music Studio at Edward Johnson Building will be renovated to improve air quality, extend performing space and provide adequate acoustical separation.

The following components are on the UTM and UTSC campuses and as such the governance approval path is different. These items will be considered by the respective Campus Councils before proceeding to the Executive Committee.

UTM

1. Davis Building Research Lab and Infrastructure Upgrades
   NASM: 6,859 **COST:$17,100,000** Researchers: 95

   Six inter-dependent elements are planned in the Davis Building: Back-up Power, A-wing HVAC Renewal, a Retrofit of Electrical Power System, renovations of 1st Floor D Block BIO & FISH research labs, and the 3rd Floor A Block Research Labs. A total of 63 labs will be renewed.

UTSC

1. Campus Vivarium & S-Wing Research Labs Renovation and Growth
   NASM: 2,030 **COST:$17,800,000** Researchers: 38

   20 research labs and 11 teaching labs that will be fully renovated. The Campus Vivarium will be undergo renovation and growth to remedy serious compliance and space recommendations. Infrastructure will be upgraded to support existing and planned levels of research, improve efficiency and reduce environmental impact.

FINANCIAL IMPLICATIONS

a) Total Project Cost Estimate

The proposed Total Project Cost (TPC) has been established at **$189,894,133**. The St. George Campus portion of the TPC is **$154,994,133**

b) Funding Sources

The funding sources are as follows:

Strategic Investment Fund	$ 76,239,254
Faculty of Arts & Science	$24,314,172
Dalla Lana School of Public Health	$750,082
Daniels Faculty of Architecture, Landscape, and Design	$1,524,625
Faculty of Dentistry*	$17,500,000
Faculty of Applied Science & Engineering	$16,591,000
Faculty of Medicine	$ 17,500,000
Faculty of Music	$575,000
UTM *(different governance path)*	$8,550,000
UTSC *(different governance path)*	$8,900,000
Total	$189,894,133

The Province of Ontario's Facilities Renewal Program requires expenditure of deferred maintenance funds for this project. These will be allocated within the sub-projects.

* The Faculty of Dentistry may seek borrowing for an amount of $8million.

RECOMMENDATION:

Be It Recommended to the Governing Council:

THAT the Lab Innovation for Toronto (LIFT) Project – St. George Campus Components, with a total project cost of $154,994,133, to be funded as follows:

Strategic Investment Fund	$ 76,239,254
Faculty of Arts & Science	$24,314,172
Dalla Lana School of Public Health	$750,082
Daniels Faculty of Architecture, Landscape, and Design	$1,524,625
Faculty of Dentistry*	$17,500,000
Faculty of Applied Science & Engineering	$16,591,000
Faculty of Medicine	$ 17,500,000
Faculty of Music	$575,000
Total	$154,994,133

be approved.

DOCUMENTATION PROVIDED:

- U of T Lab Innovation Project Briefs