



University of Toronto

CAPITAL PROJECTS DEPARTMENT

TO: Business Board

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AGENDA ITEM: 4(c)

ITEM IDENTIFICATION:

Capital Projects Report – Centre for Cellular and Biomolecular Research (“CCBR”)

JURISDICTIONAL INFORMATION:

Pursuant to Sector 5.2.(b) of its Terms of Reference, the Business Board approves expenditures for, and the execution of, approved Capital Projects.

PREVIOUS ACTION TAKEN:

On June 21, 2001, the Business Board approved the expenditure of up to \$10 million for the design and site development work related to the CCBR.

HIGHLIGHTS:

Genome sequencing – viewing the entire set of genes and their organization in an organism – is enabling for the first time comparisons of species at the molecular level. The fruits of molecular genetics and the advent of prodigious computing power, providing huge quantities of data and its efficient organization and analysis, has fuelled the expansion of biomedical knowledge, offering unprecedented opportunities for disease treatment. The University of Toronto and its affiliated institutions are world leaders in the quest to link genes to disease. Full exploitation of the exciting possibilities presented by the genomic revolution cannot be met without sophisticated laboratories and tools. The proposed Centre for Cellular and Biomolecular Research will build on the University’s research strengths in biomolecular research, and translate them into the design and delivery of new generations of pharmaceutical and therapeutic agents. It will be an advanced research centre capable of competing with the world’s top R&D institutions.

The facility is required for reasons of the research synergy that will be achieved with co-located research groups and to realize efficiencies and economics of scale in order to achieve the quality of modern infrastructure required to maximize the efforts of our top-flight researchers. The CCBR will enable the participating molecular biologists, pharmaceutical scientists, and biomedical engineers to create solutions faster and more effectively than can be accomplished by working in physical isolation in eleven separate buildings spread across the St. George campus.

The investigators at the proposed new Centre – representing a critical mass of focused and integrated expertise – will also work with their colleagues across the University and at the Hospital for Sick Children, the Samuel Lunenfeld Research Institute, and the Ontario Cancer Institute/Princess Margaret Hospital/The Toronto Hospital.

A key feature of the CCBR is the inclusion of a state-of-the-art isolation facility to house a transgenic animal facility, advanced microscopy facilities for functional imaging, facilities for the analysis of protein shape, methods for mass screening of gene expression, and a facility for the creation of artificial biological (tissue-engineering) components. These cannot be accommodated effectively in existing facilities even with massive renovation. Plans for the new building must be modern, and configured to co-locate approximately 60 faculty members from the Faculty of Medicine, the Faculty of Applied Science and Engineering, and the Faculty of Pharmacy, and their research groups, along with ancillary equipment rooms, research offices, and meeting rooms. The Centre will house more than 400 research workers (technical staff, graduate students, and postdoctoral fellows) within five interactive research programs:

- Proteomics and Bioinformatics,
- Protein Structure,
- Animal Models and Mechanisms of Human Diseases,
- Cellular and Molecular Engineering, and
- Cellular and Molecular Functional Imaging.

The proposed facility for the CCBR will provide 20,000 gross square meter or 215,000 gross square feet of new state-of-the-art research facilities. It is planned to open in the summer of 2005. These facilities will form a link between the existing Medical Sciences Building, Fitzgerald Building and Rosebrugh Building, and will draw on existing support facilities and services. It will be located on Taddle Creek Road fronting on College Street and will create a new, visible and prominent entrance and address to the University academic health science complex. The CCBR is one of two buildings that make up the Health Science Complex Capital Project, the other, to house the Leslie L. Dan Faculty of Pharmacy and enable it to double its undergraduate enrolment, will be located to the South of the Tanz Neuroscience Building and complete the link between all buildings in the health science complex.

FINANCIAL AND/OR PLANNING IMPLICATIONS:

- In June 2001 the project was approved at a cost of \$81.1 million plus \$4 million for equipment for the animal isolation facility and related built-in equipment. The project includes a strategy to shell the top six (6) floors until sufficient funding is raised. The funding gap at the time was \$16.6 million.
- In 2002, Terrence Donnelly committed \$5 million in private donations in support of the project. The donation was accepted and required that the project scope be increased to accommodate an atrium connection within the Rosebrugh Building and expanded connection with the Medical Sciences Building which improves circulation and requires the renovation of the existing cafeteria.
- The additional scope is estimated at \$2.5 million thereby increasing the project cost from \$81.1 to \$83.6 million plus \$4 million for equipment for the animal isolation facility and related built-in equipment.

TOTAL PROJECT COST:

a. Project Cost	=	\$83.6
b. Equipment Cost	=	<u>\$ 4.0</u>

TOTAL CCBR COST = \$87.6 Million

TOTAL FUNDING:

a. Project Funding Commitments:

• CFI	=	\$29.2
• OIT	=	\$30.0
• UIIF	=	\$ 2.8
• Investment Income	=	\$ 0.5
• L'Anson Fund	=	\$ 2.0
• Terrence Donnelly Donation	=	<u>\$ 5.0</u>

Total Project Funding To-Date = \$69.5 Million

b. Equipment Funding Commitments:

• CFI	=	\$ 1.6
• U of T McLaughlin/OIT	=	<u>\$ 2.4</u>

Total Equipment Funding To-Date = \$ 4.0 Million

TOTAL FUNDING = \$73.5 Million

PROJECT FUNDING SHORTFALL = \$14.1 Million

Additional private donor fund raising is underway however; the backup to the funding shortfall will be contributions from three (3) key faculties, either in cash or through increased PhD enrollments.

- Faculty of Medicine *(\$9.15 M)* \$9.1
 - Leslie Dan Faculty of Pharmacy *(\$1.995 M)* \$2.0
 - Faculty of Applied Science & Engineering *(\$2.992 M)* \$3.0
- \$14.1 Million**

To-date the project has received Committee of Adjustment approval for a minor variance from the City and should receive Site Plan Approval within the next month. The City has agreed to provide us with an Excavation Permit in advance of Site Plan to allow the University to commence construction. In December we tendered the Phase I work which included the Excavation, Sheet piling and Shoring work and the relocation of site services for CCBR. The tenders came in under budget however; we cannot award and commence this work as we will exceed the original \$10 million amount approved by the Business Board in January 2001. At this time we are seeking Business Board approval to release additional funds of \$5 million to allow this work to proceed.

The Phase II tender, which will be the construction of the entire building, will be ready for tender in May 2003. At that time when all costs have been reviewed we will present to the Business Board and request full project funding.

RECOMMENDATION:

THAT the Vice President, Business Affairs be authorized to expend up to an additional \$5 million to complete site service relocations, excavation, sheet piling & shoring work.