



<b>SUBJECT</b>	<b>DOUGLAS T. KENNY BUILDING (PSYCHOLOGY) FOURTH FLOOR RENOVATION</b>
<b>MEETING DATE</b>	<b>JUNE 14, 2018</b>

Forwarded to the Board of Governors on the Recommendation of the President

**APPROVED FOR  
SUBMISSION**

Santa J. Ono, President and Vice-Chancellor

<b>DECISION REQUESTED</b>	<b>IT IS HEREBY REQUESTED that the UBC Board of Governors grant BOARD 1 approval for the Douglas T. Kenny Building Fourth Floor Renovation project for the Department of Psychology, with a funding release of \$500,000 to commence schematic design.</b>	
	Preliminary Capital Budget	\$7,640,000
	Preliminary Operating Budget	See report
	Schedule	
	Project in Principle	
	Preliminary Program	
	Consultant Selection	
	Proceed to Schematic Design	
	<b>Funding Release</b>	<b>\$500,000</b>
	<b>Information</b>	
	Expenses to date	\$0
	Funding released to date	\$0

<b>Report Date</b>	May 18, 2018
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**Presented By** Andrew Szeri, Provost and Vice-President Academic  
Peter Smailes, Interim Vice-President Finance & Operations  
Gage Averill, Dean, Faculty of Arts  
John Metras, Acting Associate Vice-President Facilities  
Jennifer Sanguinetti, Acting Managing Director, Infrastructure Development

**EXECUTIVE SUMMARY**

UBC’s Department of Psychology, ranked first in Canada and tenth in the world by *Times Higher Education* in 2018, has reached this distinguished status from its primary home in the Douglas T. Kenny Building. Departmental members conduct leading research in a broad range of areas, including behavioural neuroscience, clinical, cognitive, developmental, health, quantitative, and social/personality psychology. The department expects to welcome five new faculty members in the next year, and needs to create lab space to support their research.

The fourth floor of the Kenny Building was originally fitted out as a dedicated animal research facility. It was decommissioned in spring 2017, and the research relocated to newer, custom-built research spaces elsewhere on campus as part of the overall consolidation of animal research facilities. As a result, the approximately 16,000 sq.ft. fourth floor is currently vacant and is proposed to be fully renovated to create research labs, similar to other labs in the building, that will be suitable to accommodate the required expansion of the department.

The project has a preliminary capital budget of \$7.64M and will be fully funded by the Faculty of Arts and the Department of Psychology. No central funding or financing is required for this project. Project completion is targeted for December 2019.

The Kenny fourth floor renovation project received Executive 3 approval on April 24, 2018. It was presented to the Property & Planning Advisory Committee and Senate Academic Building Needs Committee for information on April 17, 2018.

#### Attachments

- 1) Kenny Fourth Floor – Preliminary Area Requirements
- 2) Kenny Fourth Floor – Test-Fit Plan

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#### INSTITUTIONAL STRATEGIC PRIORITIES SUPPORTED

- Learning     
  Research     
  Innovation     
  Engagement     
  International  
 (Internal / External)
- or  Operational
- 

**DESCRIPTION & RATIONALE** The Department of Psychology at UBC Vancouver is one of the world's leading units of its kind, currently ranked first in Canada and tenth in the world by *Times Higher Education*. It is the largest unit within the Faculty of Arts, with seven primary research areas – behavioural neuroscience, clinical, cognitive, developmental, health, quantitative, and social/personality. Psychology is the most popular undergraduate program at the university, with a total of 2,203 majors/honours students and 7,750 unique students – all together constituting 18,984 enrollments in one of 137 sections of 44 courses. The graduate (MA/PhD) program has a total of 114 students, and faculty members additionally supervise about 20 non-psychology (primarily neuroscience) graduate students. The department also annually hosts over 20 postdoctoral research fellows.

The department's 52 tenure-stream faculty members are an exceptionally distinguished group, including five Canada Research Chairs, an incoming Canada 150 Research Chair, and a Killam University Professor. Half (26) have won the prestigious Killam Research Prize, and over one quarter (14) have received Killam Research Fellowships. One has won the Biely Prize, UBC's premier award for research. At the national level, five faculty members have been elected Fellows of the Royal Society of Canada, and one is a member of the Junior College of the Royal Society. Two are Officers of the Order of Canada, and two have received Queen Elizabeth II's Diamond Jubilee Medals. One has won the SSHRC Gold Medal – the highest research honour from that funding council. Faculty members also include three winners of the Gold Medal from the Canadian Psychological Association (CPA). Ten are fellows of the CPA. Internationally, one faculty member is a Fellow of the American Academy of Arts and

Sciences, and one is a Fellow of the American Association for the Advancement of Science. Four have been named “Rising Stars” by the Association for Psychological Science (APS). Thirteen are Fellows of the APS.

The department’s faculty members are highly successful in attracting external funding for their work. In 2015-2016, the department’s total research dollars were \$6,740,120, including \$3,541,840 in Tri-Council funding, \$1,253,980 in other government funding, \$1,144,300 in industry and non-profit funding, and \$800,000 in Canada Research Chair (CRC) funding.

The Department plans to welcome five new faculty members in 2018-2019, and it anticipates future faculty growth in subsequent years. Each new researcher will require a dedicated research lab plus space for their graduate students to work, but no such space is currently available. The department is also in need of space for teaching assistants to meet with students. In addition, the current undersized departmental lounge on the second floor is inadequate as the department’s only large meeting room, and there is a significant need for a multi-use space for departmental meetings, public lectures, and other events.

As a former animal research space, the fourth floor was designed with very few windows, making the space mostly unsuitable for offices. The few existing windows are anticipated to be used for shared offices for teaching assistants; based on experience with research labs on other floors, it is expected that the fourth floor research labs will not require windows, making this an ideal location for research lab expansion. The fourth floor is also an excellent location to create a new appropriately-sized multi-purpose departmental meeting space.

### ***Seismic Review***

As reported to the Board of Governors most recently in April 2018, UBC is currently renewing its seismic mitigation plan, which includes assessing the structural vulnerability of all buildings on campus. The initial screening assessment indicated that the Kenny Building is a Tier III building, which translates to a 20-49% risk of collapse in a very rare earthquake. As a result of this assessment and the proposed fourth floor renovation, the Kenny Building has been prioritized for detailed seismic modeling to fully understand the level of risk and vulnerability of the building. This modeling work is currently under way and will be complete in time for the results to be considered during the design phase of this renovation project. The anticipated maximum capital outlay before the team will have the results of the detailed modeling is less than \$100,000. The full results of the modeling and the associated design response will be presented in the Board 2 submission.

The renovation project team will incorporate recommendations from this investigation as appropriate to anticipate a possible future seismic upgrade. While there is a possibility that the recommendations would point to an urgent need to upgrade or, in the worst case, replace the building, the current shortage of research space will only become more marked with the pending increase in research faculty. As outlined in the Risks section below, there is also a risk with slowing or stopping the renovation and not

providing the space that would allow the department to meet its research priorities in a timely way. Consequently, the fourth floor renovation is considered a prudent and necessary investment to meet Psychology’s needs over the coming years.

#### ***Area Allocation – Provincial Metrics***

Using the BC University Space Standards (BCUSS) area allowance calculations, the Department of Psychology is significantly under-allocated in research space: even if the vacant fourth floor is included in the department’s existing inventory, there is an overall shortfall of approximately 250 net sq.m. (2,600 net sq.ft.). Renovating the fourth floor of Kenny to primarily research space will bring the space allocation closer to the BCUSS-calculated allowance. (Although BCUSS figures are not intended to be prescriptive for detailed space planning, and do not represent an area “entitlement”, they can serve as a reasonable order-of-magnitude check to ensure proposed space increases are of an appropriate scale.)

#### ***Existing Facilities***

The department is currently located across three buildings. The Kenny Building is the primary, dedicated home for the department; there is additional faculty office and research lab space in the Audain Arts Centre and the CIRS Building. The department also holds space for its group of behavioural neuroscience faculty members and their research teams in the Centre for Brain Health/Koerner Hospital. These faculty members' animal colonies are located in the nearby Centre for Disease Modeling in the Life Sciences Centre. Psychology is currently working with the University Sustainability Initiative to ensure space allocations in the CIRS Building support sustainability-related research. The current project considered incorporating some faculty offices from CIRS as part of the fourth floor renovation project. However, the fourth floor is not a desirable location for faculty offices due to the deep floorplates and limited access to windows. The department will find other space for these users if needed, including relocating graduate students and sessional lecturers from the Audain Arts Centre to Kenny, and moving occupants from CIRS whose research is not sustainability-related to the Audain Arts Centre. These moves are outside of the scope of the current project, and are being concurrently reviewed by the department.

#### **BENEFITS** Learning, Research, Financial, Sustainability & Reputational

- The fourth floor of the Kenny Building is currently vacant after over 30 years of use as animal research labs. Renovating the space will provide a significant amount of much-needed capacity to a signature department in the Faculty of Arts with minimal impact on surrounding buildings and no impact on the campus’ limited site capacity.
- The renovation will allow the department to continue to attract leading research faculty for several years.

#### **RISKS** Financial, Operational & Reputational

- The Kenny Building was ranked in the Tier III structural vulnerability category in the 2017 campus-wide Seismic Resilience Study, with a 20-49% risk of collapse in a very rare earthquake. A detailed structural assessment is currently underway to fully understand the seismic risk. The results of this assessment are unknown at this point and could create additional cost and an increase in scope in order to

appropriately address life-safety risks within the building. This will be further assessed as design work progresses and results of the structural assessment become available.

- The building was constructed in 1983 and is expected to require major renewal work in the next 10 years. Renewal of the roof was recently completed; renewal and upgrade of the atrium glazing and skylights and major components of the building's mechanical systems are currently underway, as part of the Routine Capital program. Some building system renewal will be undertaken on the fourth floor as part of this project. Given the critical need for additional research space, the Department of Psychology is prepared to move forward with the renovation project with the understanding that further operational disruption may be incurred in the building to address future building renewal and seismic upgrade requirements.
- Current market conditions are resulting in unusual levels of cost escalation due to a high level of market activity that has reduced contractor availability and bid coverage. An escalation contingency of 6% has been included in the cost estimate to mitigate this risk.
- Due to its age, the Kenny building has significant asbestos remediation requirements. While the project team has done as much due diligence as is feasible at this stage of the project, there is still a risk of unexpected asbestos or other similar findings such as lead paint, chemical leaching or mould. This risk has been factored into the construction contingency allowance.

### **COSTS Preliminary Capital Budget**

Capital &  
Lifecycle  
Operating

The capital cost estimate below was prepared by UBC Project Services based on a program investigation prepared by Studio HuB Architecture. Project Services has estimated the total cost of the project to be \$7.64M based on the latest Class D estimates provided by Ross Templeton + Associates (cost consultant), IT Services, AV Services and Secure Access.

<b>CAPITAL BUDGET</b>		
<b>Component</b>	<b>Total \$</b>	<b>\$/gsf</b>
Construction	\$ 3,440,000	
General Conditions	\$ 619,000	
Construction Management Fee	Included above	
Construction Contingency	\$ 474,000	
<b>Total Construction</b>	<b>\$ 4,533,000</b>	<b>290</b>
FF+E	\$ 240,000	
UBC IT + AV Equipment Allowance	\$ 455,000	
Fire, Safety & Security	\$ 68,000	
Building Operations	\$ 71,000	
Design Contingency (10%)	\$ 405,900	
Escalation Contingency (6%)	\$ 267,900	
<b>Total Cash Allowances</b>	<b>\$ 1,508,000</b>	<b>96</b>
Design Consultants	\$ 914,000	
Project Management	\$ 423,000	
Permits - BP/IIC	\$ 37,000	

Insurance/Legal	\$ 3,500	
Commissioning Insp + Testing	\$ 22,500	
<b>Total Soft Costs</b>	<b>\$ 1,400,000</b>	<b>89</b>
<b>Project Subtotal</b>	<b>\$ 7,441,000</b>	<b>475</b>
Tax	\$124,500	
Construction Period Financing	-	
Retained Risk Fee	\$74,500	
<b>PROJECT TOTAL</b>	<b>\$7,640,000</b>	<b>488</b>
Gross Area (ft <sup>2</sup> )	15,650	

**Operating Cost**

There is no increase in building area required for this project. Therefore, there will be no change in the annual operating cost and no requirement for additional operating funding.

**FINANCIAL**  
Funding Sources, Impact on Liquidity

The Faculty of Arts and the Department of Psychology will fund this project by utilizing reserves. The Faculty can fund the project up to the cost noted in this estimate. Should the estimated project cost increase, scope reductions will be investigated to bring the project back within budget. Treasury has taken the accompanying liquidity draws into account and confirmed that there is sufficient liquidity to support the project. Internal debt financing will not be required for this project.

**SCHEDULE**  
Implementation Timeline

It is estimated that the design, construction and fit up can be completed in approximately 18 months. The preliminary project schedule including approval steps is outlined below.

Milestone	Target Date
Executive 1+2	April 2018
Property & Planning Advisory Committee + Senate Academic Building Needs Committee	April 2018
Executive 3	April 2018
Board 1	June 2018
Board 2	December 2018
Board 3	February 2019
Construction Start	March 2019
Occupancy Permit	December 2019
Board 4	December 2021

**CONSULTATION**  
Relevant Units, Internal & External Constituencies

The Kenny 4<sup>th</sup> Floor Renovation Project was presented for information at the April 17, 2018 meeting of the Property & Planning Advisory Committee (PPAC) and the Senate Academic Building Needs Committee (SABNC).

UBC Project Services will manage the design and construction of the project. A shortlist of architectural consultants will be presented at the Board Property Committee meeting on June 5, 2018.

**Attachment 1: Kenny Fourth Floor – Preliminary Area Requirements** (all areas in Sq.Ft.)

<b>DESCRIPTION</b>	<b>REQUIRED</b>	<b>TEST FIT</b>
<b>RESEARCH LABS - DEDICATED</b>	<b>6,910</b>	<b>7,105</b>
Social Lab (Shariff Lab – C150 Chair)	970	990
Health Lab	970	1,055
Clinical Lab	970	1,035
Development Lab	970	910
Quant Lab	1,090	1,140
Flex/Future Labs	1,940	1,975
<b>RESEARCH LABS - SHARED</b>	<b>300</b>	<b>320</b>
Shared Research (Wet)	95	110
Shared Research (Dry)	205	210
<b>TA OFFICES &amp; SUPPORT</b>	<b>1,980</b>	<b>2,055</b>
Consulting Rooms (TA) Small	400	385
Consulting Rooms (TA) Large	165	205
Shared Offices (TA)	1,345	1,415
Lockers (TA)	70	50
<b>DEPARTMENTAL SUPPORT</b>	<b>1,455</b>	<b>1,195</b>
Large Meeting Room	955	900
Storage	415	215
Kitchenette	85	80
<b>TOTAL NET AREA</b>	<b>10,645</b>	<b>10,675</b>
<i>Gross-up</i>	<i>1.47</i>	<i>1.47</i>
<b>TOTAL GROSS FLOOR AREA</b>	<b>15,650</b>	<b>15,650</b>

Attachment 2: Kenny Fourth Floor – Test-Fit Plan

