Report to Senate

External Reviews of Academic Units and Programs at UBC Vancouver 2014 – 2015

January 6, 2016

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External reviews were conducted on the following academic units and programs at UBC Vancouver between September 1, 2014 and August 31, 2015. Key findings and recommendations made by the reviewer teams, along with the Faculty and/or Department responses, are highlighted on the following pages and comprise the remainder of this report.

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School of Architecture and Landscape Architecture Faculty of Applied Science

Summary of External Review: September 2014

Highlights and Key Findings:

- SALA has made tremendous progress since 2010 under the leadership of Professor Leslie Van Duzer.
 This includes full merger of the programs in Architecture and Landscape Architecture into SALA,
 making impressive forays in community outreach including assembly of an advisory board, attracting significant interest from potential donors and much progress toward a new building for the School.
- Several challenges were identified that will need SALA's attention going forward.

Key Recommendations and Unit's Response:

- Recommendation: Create much-needed infrastructure in support of research.
 - Unit's Response: SALA acknowledges the need to improve research infrastructure overall and especially for early career faculty and anticipated new faculty hires in particular. New SALA director Ronald Kellett will chair the School research committee with a charge to address this issue and define the necessary infrastructure requirements, priorities and implementation resources.
- Recommendation: Improve the undergraduate education and student learning by making changes to the ENDS program.
 - Unit's Response: This process is well underway. A new four year, first year entry curriculum has been designed to replace the current two year curriculum. A proposal to implement that curriculum is in development for submission to Senate this academic year. Transition to the new curriculum could begin as soon as Fall 2016. However, full implementation achieves a tripling of enrolment that requires expansion of SALA teaching space.
- Recommendation: Clearly define the roles of the MASA and MASLA programs as the first step towards a Ph.D.
 - Unit's Response: SALA acknowledges the need to refresh MASA / MASLA program roles and the logic of working toward a SALA PhD. Prior faculty working groups have considered the future of the current programs and the feasibility of a PhD program to replace or complement them. SALA aspires to move in the direction of a design-oriented PhD program but currently lacks the resources to initiate it. However, it is possible to start by exploring partnerships with a companion PhD granting academic unit or units. In addition, SALA will seek to build internal capacity through new faculty hires (due to retirements) anticipated over the next several years.

 Recommendation: Review the practice of allocating core courses for teaching to ensure a diversified perspective in some core courses.

Unit's Response: SALA is a relatively small faculty of 23 delivering four complementary but distinctive degree programs, two with multiple accreditation-driven core course requirements. Options to diversify teaching assignments within these core courses are limited. However, SALA has initiated opportunities to consolidate some common core courses across programs (research methods, professional practice and digital media, for example) and team teach them. Under such models, SALA is also better able to integrate part-time professional adjuncts in these teaching teams.

Recommendation: Improve communication at all levels.

Unit's Response: It is difficult to interpret and respond to the generality of this concern. SALA was created less than 10 years ago out of independent programs a kilometre apart reporting to different faculties. While still spatially separated, integration of academic programs has improved significantly in recent years. However, evolution of shared models and cultures of governance and communication has been more challenging. Several effective but incremental steps (more integrated committee membership, faculty and staff meetings, for example) have been taken. This academic year, SALA will undertake a more systemic review and reorganization of its internal governance and committee structure with intent to achieve greater sharing of responsibility, better working relationships and more effective communication channels.

 Recommendation: Create a clear vision statement for SALA, a written strategic plan and a strategic hiring process.

Unit's Response: SALA had initiated an internal strategic planning effort a few years ago but tabled the project pending development of a new APSC Strategic Plan. With that plan now complete in 2015, SALA can return to developing its own strategic plan with APSC's new strategic plan as context. This effort will include a vision for faculty hiring priorities. However, in the interim, planning to define and guide immediate faculty hires will be initiated in consultation with program chairs and faculty.

• Recommendation: SALA should build funded research relationships with industries in BC.

Unit's Response: Over the past year, SALA has increased its interaction with APSC units (SCARP, Civil Engineering and Materials Engineering, for example) and others (Forestry and Computer Science, for example) to improve the School's access to, and capacity for, funded research with industry. These interactions have been particularly valuable to several early career faculty who have found new opportunities and taken initial concrete actions to build upon them.

Civil Engineering Program Faculty of Applied Science

Summary of Accreditation Review: November 2014

The Civil Engineering Program's Bachelor of Applied Science (BASc) degree was reviewed in November 2014 for reaccreditation by the Canadian Engineering Accreditation Board (CEAB) of Engineers Canada.

Highlights and Key Findings:

- Wonderful personnel, including all of faculty, technical support and admin support.
- Excellent lab facilities, including shop for fabrication and maintenance of equipment, experimental setups, etc.
- Good diversity of faculty complement; some faculty are more focused solely on the undergraduate program, including the Professor of Teaching, while others are of the "classic" teacher-scholar model (i.e., very active in research while also contributing to the undergraduate program).
- Very good progress has been made on developing policies and procedures related to CEAB's
 outcomes-based assessment methodology. The intention of better measuring the success of the
 program in terms of student performance and continual improvement thereof is being realized.

Key Recommendations:

In June 2015 the Faculty of Applied Science received confirmation from CEAB that accreditation of the Civil Engineering BASc program was renewed for an additional three years, with a report required by June 30, 2017 to address two concerns:

- At the time of the visit, the Dean was not an engineer licensed to practise in Canada.
- There must be documented processes and policies for promotion and graduation of students. It appears that there is no uniform process or policy for submission of grades.

- The Dean has now obtained his engineering license to practise in Canada.
- We are currently in the process of developing a uniform process and policy for submission of grades and expect it to be in place by January 2016.

Computer Engineering Program Faculty of Applied Science

Summary of Accreditation Review: November 2014

The Computer Engineering Program's Bachelor of Applied Science (BASc) degree was reviewed in November 2014 for reaccreditation by the Canadian Engineering Accreditation Board (CEAB) of Engineers Canada.

Highlights and Key Findings:

- The program curriculum is strong with at least one significant team project each year (EECE 281, EECE 381, EECE 409).
- The department has a large number of well-qualified and dynamic faculty members and instructors.
- Faculty, staff and student morale is very good.
- There appears to be a very good level of satisfaction in the department leadership.

Key Recommendations:

In June 2015 the Faculty of Applied Science received confirmation from CEAB that accreditation of the Computer Engineering BASc program was renewed for an additional three years, with a report required by June 30, 2017 to address two concerns:

- At the time of the visit, the Dean was not an engineer licensed to practise in Canada.
- There must be documented processes and policies for promotion and graduation of students. It appears that there is no uniform process or policy for submission of grades.

- The Dean has now obtained his engineering license to practise in Canada.
- We are currently in the process of developing a uniform process and policy for submission of grades and expect it to be in place by January 2016.

Electrical Engineering Program Faculty of Applied Science

Summary of Accreditation Review: November 2014

The Electrical Engineering Program's Bachelor of Applied Science (BASc) degree was reviewed in November 2014 for reaccreditation by the Canadian Engineering Accreditation Board (CEAB) of Engineers Canada.

Highlights and Key Findings:

Faculty, facilities and atmosphere are very positive overall.

Key Recommendations:

In June 2015 the Faculty of Applied Science received confirmation from CEAB that accreditation of the Electrical Engineering BASc program was renewed for an additional three years, with a report required by June 30, 2017 to address two concerns:

- At the time of the visit, the Dean was not an engineer licensed to practise in Canada.
- There must be documented processes and policies for promotion and graduation of students. It appears that there is no uniform process or policy for submission of grades.

- The Dean has now obtained his engineering license to practise in Canada.
- We are currently in the process of developing a uniform process and policy for submission of grades and expect it to be in place by January 2016.

Environmental Engineering Program Faculty of Applied Science

Summary of Accreditation Review: November 2014

The Joint UBC/UNBC Environmental Engineering Program's Bachelor of Applied Science (BASc) degree was reviewed in November 2014 for reaccreditation by the Canadian Engineering Accreditation Board (CEAB) of Engineers Canada.

Highlights and Key Findings:

• The program provides students with a broad exposure to a variety of elements of environmental engineering and environmental science.

Key Recommendations:

In June 2015 the Faculty of Applied Science received confirmation from CEAB that accreditation of the Environmental Engineering BASc program was renewed for an additional two years, with a site visit required in fall 2016 to assess progress on addressing the following concerns:

- At the time of the visit, the Dean was not an engineer licensed to practise in Canada.
- There must be documented processes and policies for promotion and graduation of students. It appears that there is no uniform process or policy for submission of grades.
- The mapping of graduate attributes is incomplete. Exclusive use of examination grades as assessment tools for all graduate attributes is insufficient. Indicators and a sustainable data collection scheme to demonstrate student achievement of graduate attributes have not been sufficiently developed, documented and applied. Therefore, results from data collection are insufficient to develop and apply a continual improvement process. A stakeholder group for consultation in a continual improvement process and a documented process for continual improvement need to be more developed.
- There is insufficient engineering design curriculum content delivered by faculty licensed to practise engineering in Canada. The specific Accreditation Unit count is below the required value of 255. At least one capstone design project showed little or no engineering design content.
- The program has limited and insufficient content in discrete and numerical mathematics.
- There is very little communication with UNBC students during the processing of transfers to UBC and decisions are not made in a timely manner.

- The Dean has now obtained his engineering license to practise in Canada.
- We concur with all the recommendations of the CEAB and are working diligently to implement the specific recommended actions in advance of the next reaccreditation review in 2016.

Morris and Helen Belkin Art Gallery Faculty of Arts

Summary of External Review: November 2014

Highlights and Key Findings:

- Reviewers praised the Gallery for maintaining a high level of quality and offering a thoughtful balance of internally-curated and guest-curated exhibitions.
- Reviewers identified that the Gallery maintains excellent relationships with area artists, galleries, and professional arts institutions. The Gallery also furthers UBC's priority of engagement with representatives of First Nations and the development of globally aware graduates through its acquisitions, exhibitions, and public programs. It serves as a visible face and welcome centre for UBC visitors, exemplifying excellence, and it engages major donors both in the arts and for the university's larger mission.
- Reviewers singled out the current Director of the Gallery, who is also its founding director, as the institution's "greatest strength" because of his widely respected curatorial ability.
- Reviewers identified the need for a facility expansion and better collections storage solutions as two long-standing goals.

Key Recommendations:

- Permanent funding for both the curator of academic programs and the curator/associate director need to be secured and the Gallery needs to be able to retain the full-time director position.
- Consider a moratorium on acquisitions or identify specific storage space for those acquired until the collections storage situation is remedied.
- Create an advisory council or committee that would be charged to create a new strategic plan for the Belkin and identify resources for a building addition, off-site storage, and/or other critical needs.
- Recognizing the likelihood of reduced Canada Council annual grant funding (nationwide), identify diverse sources of earned income, including a friends group, donation box, and private support.
- Working with art history faculty, and with proper consultation with the Belkin Gallery administration, institutionalize the role of the Belkin in providing support and integration of CCST students in professional gallery practice beginning with their arrival on campus.

Unit's Response:

The Gallery has recognized the need for permanent funding for a Curator and a Curator of Academic Programs as priority since the last review, and it has been discussing the issue as part of annual planning with the Faculty for the past few years.

Regarding the collection storage space, the Gallery, together with the Faculty and the University, is committed to searching for a viable solution to the storage and access for research and learning. Fundraising work is an ongoing priority.

Since 2007, the Gallery has doubled the number of paid opportunities open to students, having employed 30 graduate students (PhD and MA) and 14 undergraduates. The Belkin's ability to hire more students, apart from volunteer research positions, depends on student availability, eligibility requirements, and funding (work-learn funding competition and government student-employment grants), and it employs students now to the maximum of its abilities in terms of resources.

Faculty's Response:

The Faculty of Arts has solidified leadership at the Belkin through the reappointment of the Director and the appointment of a new Associate Director/Curator through to June 30, 2018. In addition, the Faculty has made a commitment to continue funding for the Curator of Academic Programs. The Dean's office has studied the possibility of moving the collection to a new location, however the retrofit costs were too high, and continues to work with the University to explore permanent storage of the University art collection. We also continue to work with Development on this issue, and a case for support has been developed.

Cognitive Systems Program Faculty of Arts, Faculty of Science

Summary of External Review: March 2015

Highlights and Key Findings:

- Reviewers praised the Cognitive Systems Program for accomplishing its educational goals very
 effectively, commending the program for high levels of student enthusiasm, alumni success, and the
 social structure of the program.
- Reviewers described the overall quality of Cognitive Systems' faculty as excellent, and their degree
 of commitment to the program as very high.
- Reviewers identified the need to address the degree of difficulty in the introductory computer science course, suggesting it is harder and more discouraging, particularly for students with an Arts background.
- Reviewers found the program at a critical turning point, with significant enrollment and facing leadership transition, but in need of a better structure and more support in order to remain successful, and realize its very real potential for future growth.
- Reviewers identified the need for better space as imperative.

Key Recommendations, Faculties' Responses and Program's Responses:

- Reviewers advocated for an open search for a new director and for hiring a full-time program coordinator with a wider range of duties.
- Reviewers recommend provision of more and better space, including private meeting space for program advising discussions.
- Reviewers suggest increased funding, consistent with enrollments.
- Reviewers recommend formation of a faculty advisory committee, with one representative from each linked department.
- Reviewers recommend for priority consideration the design of a more appropriate and accessible introductory Computer Science course.
- Reviewers suggest the curriculum could benefit from additional courses in: (a) neuroscience or
 cognitive neuroscience for students with interest in academic careers in cognitive science and
 related disciplines, and (b) text analytics and social network analysis for students with interest in
 industry careers in fields such as Data Science.

Program's Response:

The Program agrees with the need for an open search for a new director as well as a need to hire a full-time program coordinator to improve program outreach and internal governance. The coordinator position will also create a capacity to provide tailored synopsis of materials and relevant information about funding opportunities for Cognitive Systems students through online and interactive face-to-face services.

The Program agrees there is urgent need for improved space and increased funding as well as a memorandum of understanding between the program and the Faculties of Arts and Science.

Response from the Faculty of Arts and the Faculty of Science (co-sponsors of the Program):

Both Dean's Offices in Arts and Science will provide a modest budget increase to support the needs of the Cognitive Systems program. Both Faculties will work to identify an internal Chair and consider the possibility of appointing a co-chair. Both Faculties also support the creation of a full-time coordinator position and will work to find suitable space for students and the program coordinator.

School of Library, Archival and Information Studies (SLAIS) Faculty of Arts

Summary of External Review: December 2014

Highlights and Key Findings:

- Reviewers indicated that in general SLAIS has navigated well the significant changes in the larger intellectual, institutional, and professional contexts. Unlike many other iSchools, SLAIS has managed to begin developing a broader approach to the study of information while maintaining its strengths in the traditional domains of libraries and archives.
- Reviewers commended SLAIS faculty members as active, excellent contributors to research in a variety of areas, and accessing a substantial amount of external funding.
- The School's graduate programs are well-structured and functioning well, with the MLIS (Masters of Library and Information Studies) and MAS (Masters of Archival Studies) programs providing highquality educational experiences that prepare students for a range of careers in the information professions.
- The MLIS faces particular challenges and opportunities arising from changes to libraries and the larger information landscape, and also increasing interest in the core MLIS skills and knowledge among employers in the private and public sectors and from potential students.
- The MAS is uniquely well established and highly respected. It is unclear how the MAS as a relatively small program is developing new program leaders or preparing for future leadership transition.
- Reviewers commended the Master of Arts in Children's Literature as a model program with regard to partnerships and planning.
- Reviewers identified several aspects of SLAIS's governance, organizational structure, and
 administrative practises that need to be improved: (a) collaboration with the Faculty of Arts Dean
 and UBC administration, (b) ALA reaccreditation and SLAIS's institutional identity, (c) creation of an
 external advisory board (recommended in the two previous reviews), and (d) management of
 collegiality and diversity of perspectives from different disciplines.

Key Recommendations:

- Build connections within the university that leverage and make visible SLAIS's distinct contribution to the research priorities of the Faculty of Arts and the university as whole.
- Additional resources, such as more faculty, more funding, and additional space, would benefit SLAIS to further develop and realize its full potential.
- Shift from a program development strategy of identifying overlap and potential redundancy to focus
 on growing a set of complementary programs through partnerships and examine and develop each
 program with a focus on its role in the larger context. Develop materials and processes that show
 students how to leverage the richness of the course offerings both within SLAIS and UBC.
- Develop ways of attracting students with a broader range of backgrounds and preparing them for a broader array of careers both inside and outside the traditional information professions.
- Continue to strengthen procedures, structures, and practices to address concerns raised by the ALA accreditation Committee with the goal of acquiring full accreditation as soon as possible.

- Integrate strategic planning, thinking, and communication into every aspect of the School's
 administration and operations. Form an advisory board, with members from both the community
 and key units within the Faculty of Arts and elsewhere in UBC.
- Carefully manage the following goals of undergraduate education: developing high quality undergraduate education experiences, increasing awareness of SLAIS among undergraduate students, and increasing the number of high-quality candidates for SLAIS's masters programs.

School's Response:

The School recognizes and is taking steps to address the following: (a) further establish its vision and identity as the iSchool, (b) with the Faculty of Arts, work to create a better communication strategy for the School that articulates its goals and strategies with reference to the concerns of the Faculty of Arts, UBC, and the wider community, (c) create better internal documentation to support enrolled students and to recruit new students, (d) communicate with stakeholders to gain input on its programs and communicate its strategies, (e) plan for the development of an Advisory Board.

To improve identity, communication and outreach to communities, the School has initiated: (a) a new and broader mission statement to better reflect its identity as an iSchool and (b) focus groups with stakeholders at the annual Association of Canadian Archivists meeting and with local librarians and archivists in Vancouver.

The School recognizes that a decision on new directions also has consequences for the organization of existing programs and there will be a need to revisit the structure of the existing degrees. As well, the need to align the structures of the MAS and MLIS degrees is essential for the future management of the Dual MAS/MLIS program.

Evaluation for full accreditation with the American Library Association (ALA) is of major importance to the MLIS program. The following is planned to support the accreditation process: (a) a consultant will be hired to prepare the initial draft of the Program Presentation, and (b) a strong strategic plan for the MLIS program will be determined that addresses past and upcoming faculty retirements and the Acting status of the Director of the School in advance of the October 2016 site visit.

The School recognizes the importance of engaging with other units within UBC and has already begun informal liaison with the School of Journalism to explore possibilities and discussions with the Provost's Office and with other Faculties on Data Science. The potential for joint initiatives will also be a consideration for the New Programs Working Group as members consider iSchool directions and opportunities, and synergies with other departments and centres on campus.

Faculty's Response:

The Faculty has appointed an Acting Director and authorized searches for two new tenure-track faculty members in 2015-16. The Dean's office is also working closely with the School on governance and communications issues raised in the External Review.

School of Social Work Faculty of Arts

Summary of External Review: March 2015

Highlights and Key Findings:

- Reviewers indicated that the School of Social Work possesses a number of strengths including: a
 recent surge in the acquisition of external funding in support of faculty research, well-designed BSW
 and MSW curricula, strong leadership in the undergraduate program and the office of field
 education, good relationships with community agencies, a significant level of student satisfaction,
 and the addition of several energetic and productive new faculty members.
- The scholarly output of faculty members in the School places the School in the top tier of comparator schools in Canada with McGill and Dalhousie.
- The School has a number of strong individual scholars, and its research productivity is impressive given its small numbers and significant teaching workloads. In addition to its peer reviewed publications and presentations, the School's faculty members have made important contributions through applied reports and working papers in such areas as child and family welfare, Inuit and Arctic issues, and the needs of individuals with disabilities and their families.
- Throughout its history the School has sustained its engagement with international social work colleagues and the communities it serves.
- The research and scholarship of the faculty and some of the PhD students have a strong interdisciplinary component.
- MSW Foundation students indicated that the level of support they receive from faculty and staff is high.
- The primary concerns reviewers identified were: budget and resource restrictions, leadership and succession planning due to recent and impending retirements, need for increased resourcing in the area of field education, and faculty collegiality and work environment.
- Graduation rates for both MSW and PhD students are "phenomenally high" with students successful in obtaining post-graduation employment in either social service agencies or academic positions.

Key Recommendations:

- Initiate an external search for a new Director of the School who can provide strong leadership and a clear strategic direction for the School, enhance intra-School communication, raise the research profile of the School, and facilitate a process of succession planning and curriculum renewal.
- Revise the BSW and MSW curricula to meet the needs and expectations of the communities the School serves, particularly First Nations, and the changing practice environment.
- Suspend the PhD program until adequate faculty and financial resources can be obtained to place it on a more viable financial and educational foundation.
- Develop stronger ties with the School of Social Work at UBC Okanagan.
- Increase the resources provided to the Field Education program.
- Consider seeking mediation to assist the School in fostering a more collegial and genuinely inclusive work environment.

School's Response:

The School, with support from the Faculty of Arts, will initiate an external search for a new Director of the School to provide strong leadership and a clear strategic direction, enhance intra-School communications, raise the research profile of the School, and facilitate a process of succession planning and curriculum renewal.

The School has for the past two years switched to an alternate year intake for doctoral students and will not take on additional doctoral students in 2016-17 and until the program has been assessed. The review and revision of the curriculum is an ongoing process through the School's curriculum committees. Areas that have and continue to receive substantial discussion and review include specializations. The School has also been revising and developing its First Nations curriculum over the past three years, including a new undergraduate course taught in conjunction with the Musqueam Band. The School agrees that stronger links between the Social Work schools at UBC-V and UBC-O would benefit both units and have had discussions along these lines in the past.

Faculty's Response:

The Faculty engaged a mediator to complete an audit of the environment in the School of Social Work. That audit found that while real problems have emerged around issues of respect and collegiality, these problems are relatively localized and can be addressed by supporting the unit director with conflict management and moving toward more transparent governance.

School of Social Work Faculty of Arts

Summary of Accreditation Review: March 2015

Highlights, Key Findings and Recommendations:

The Canadian Association for Social Work Education recommended *Re-Accreditation with Conditions* for the School of Social Work, for a four-year period (July 1st, 2015 to June 30th, 2019) with a Progress Report due on or before April 1st, 2019 addressing the following conditions:

- 1. the status of the faculty renewal plan, with particular emphasis on hiring mid-level as well as junior faculty to positions vacated due to retirements
- 2. the status of the recruitment of a senior academic leader to serve as the new Director of the School
- 3. the status of maintaining the recent initiative to increase resources dedicated to field education coordination and delivery the "signature pedagogy of social work education", and
- 4. the development of an evaluation program to complement the current assessment and evaluation procedures.

School's Response:

- 1. It is the School's understanding that all retirement and other departures will be replaced.
- 2. The School shares the reviewers' concern on this issue and has agreed to seek an external appointment of a senior academic to replace the current director following the expiration of his current term. The School will update the Commission on Accreditation (COA) on this issue following the scheduled meeting.
- 3. The School suggests in its response that Field support is greater than the report indicates, and also acknowledges that increased support is required. To that end, the School has shifted to a model of two .6 Coordinator positions for a total of 1.2 FTEs in the Coordinator role. The School has also decided to reduce its BSW intake to 50 from the current 65 which will result in placement demand decreasing by 15 in the next academic year and by 30 in the following year. It is the School's understanding that clarification of the amount of support and these additional measures will address the concerns raised in the report.
- 4. The School indicates that it has several mechanisms for formative and summative evaluation drawing on student and community feedback, both through formal surveys and through the BSW and Field advisory committees as well as periodic formal consultation sessions. These mechanisms are in addition to the rigorous system of student course evaluations required by UBC, and a system of student evaluation of field placements. The School contends that it does not feel current processes fail to meet the current evaluation standards and as such should not be among the conditions for full accreditation.

General Practice Residency Program Faculty of Dentistry

Summary of Accreditation Review - July 2015

The Commission on Dental Accreditation of Canada visited Vancouver General Hospital's Health Facility Dental Service and Oral Health Care Centre, which are affiliated with UBC Dentistry's General Practice Residency (GPR) Program.

Key Recommendations:

- That the responsibilities of the Vancouver General Hospital and UBC Faculty of Dentistry, which supports the General Practice Residency Program, be clarified; and their commitment to the program and respective resource contributions be clearly delineated.
- That a needs assessment be conducted to clearly identify program/dental service future needs for professional staff, dental assisting staff, clerical and administrative support, to ensure that patient care and administrative functions are carried out in an effective manner.
- That the quality improvement process document the review and evaluation of the quality of patient care provided and patient outcomes; and initiatives addressing identified deficiencies.

Faculty/Program Response:

- At the September 21, 2015 Resident Education Committee meeting, the GPR struck a working group that has broad representation from UBC Faculty of Dentistry and VGH. This committee is reviewing and clarifying responsibilities of both parties and developing an implementation strategy for any changes. This working group will report to the Resident Education Committee by December 15, 2015 and required changes will be implemented for the following 2016-17 program year.
- An ad hoc working group with participation from the UBC GPR Resident Director, the Head of the VGH Dental Department and Medical Director, the VGH Dental Ambulatory Care Manager and a representative from the Resident Education Committee, will conduct a needs assessment in the spring of 2016 to be completed by June 15, 2016, with a plan to reassess on a yearly basis.
 - The committee will assess the clinic operation including general practice and specialty professional staffing, scope of practice, the breadth and scope of the resident educational experience, administrative support and assisting staff, hours of operation, adequacy of the facility and future space needs, a review of targeted patient care groups, and an assessment of quality of care and patient wait times. Appropriate changes will be instituted as required to ensure excellence and timeliness in patient care and the optimal resident educational experience.
- A new quality of care assessment form has been created and is now in use at the VGH ambulatory care dental unit. The form comprehensively and clearly identifies deviations from the expected standard of care both in execution and outcome, and sets out the actions taken.

Department of Curriculum & Pedagogy Faculty of Education

Summary of External Review: November 2014

Highlights and Key Findings:

- The reviewers reported finding a thriving and lively department, with much to commend its work in teaching, research, and service.
- Under the current Head's leadership, the EDCP Department had seen an increase in the number of events designed to stimulate fulsome discussion and debate about relevant curricular and pedagogical issues, a radical improvement on its situation in 2010.
- The Department has many productive scholars in this research-intensive academic unit, scholars who are also committed to Faculty priorities of teacher education and community outreach.

Key Recommendations and Department's Response:

- Recommendation: Develop a 5-year Strategic Plan.
 Unit's Response: This was seen as important and deliberated on at an off-campus retreat in May 2015. The strategic plan will be discussed at the department meetings in the fall of 2015.
- Recommendation: Take the lead in undergraduate teacher education (TE).
 Unit's Response: This was the focus of subsequent department research conversation around how the department can work with others to move the teacher education agenda forward at UBC.
- Recommendation: Expand the EDCP-based M.Ed. Program offerings.
 Unit's Response: The Department had already deliberated on this recommendation before the review but has yet to be quite explicit about the parameters circumscribing such offerings as they relate to faculty members' other responsibilities as scholars and teachers.
- Recommendation: Redefine and promote the M.A. and Ph.D. programs solely in terms of curriculum studies, without reference to specializations.
 Unit's Response: This recommendation provoked much discussion, debate, and controversy for both faculty members and graduate students.
- Recommendation: Continue to enrich and sustain the intellectual vibrancy present in the Department.
 - Unit's Response: This has the unanimous support and appreciation of the Department.
- Recommendation: Update dysfunctional lab equipment and spaces. Unit's Response: This provoked discussions of what needed to be done.

Departmental Prioritization of Recommendations:

"Redefine and promote the M.A. and Ph.D. programs solely in terms of curriculum studies." Faculty members noted that there is inherent tension within the department between a position steeped in the historically based status quo (i.e., keeping the subject area specializations intact) and the position recommended by the reviewers (i.e., dissolving them into new program formations under curriculum studies where there is a critical mass of researchers). It should be noted that there has been a longstanding sustained discussion within the department on this issue and the potential for clustering (e.g., Arts, STEM).

"Update dysfunctional lab equipment and spaces." This was seen as pressing. EDCP understands "lab" to refer not only to math, science (biology, chemistry, physics), technology, and home economics labs but also to music rooms and art studios. Specifically, the labs require considerable updating of equipment. For example, data projectors should be installed in the biology and chemistry labs to eliminate the use of computer carts, and music rooms need soundproofing.

"Take the lead in undergraduate teacher education" was seen as very important in terms of EDCP becoming a recognized collaborator with the TEO but not as a replacement for that office nor as a structural absorbing of the TEO into the department. This has led to greater understanding between the new Associate Dean, Teacher Education, and the department members.

"Continue to enrich and sustain the intellectual vibrancy present in the Department" was a positive reference to the department's scholarly activity and research productivity. EDCP considers the developing of a strategy for deepening and sustaining our continuing research purpose and productivity an important focus for moving the department forward.

Action Plan:

The Department established four task forces to address each of the four prioritized recommendations.

Task Force #1 grappled with the question of graduate programs in the department and the tension that is created around the recommendation to redefine and promote graduate programs around curriculum studies without reference to specializations. It involved an examination of how disciplinary, transdisciplinary, and inter-disciplinary work can be effectively undertaken in the same academic unit.

Task Force #2 addressed the question of updating lab equipment and spaces, including math, science (biology, chemistry, physics), technology, and home economics labs, music rooms, and art studios. Part of this work will involve a careful documentation of the centrality of the lab spaces to the distinctive contribution that EDCP makes to the undergraduate and graduate teacher education programs.

Task Force #3 examined the role played by the department in the teacher education program with a view to seeing how we can continue to work constructively with the TEO to move the program forward toward a highly regarded and outstanding preparation process that attracts high numbers of tuition-paying students.

Task Force #4 examined strategies for deepening and sustaining our continuing research purpose and productivity that is manifested in peer-reviewed publications in the department.

Together with the discussions held at the May 2015 department retreat, the reports of these four Task Forces provide the basis for the Strategic Plan to be deliberated on in the fall of 2015.

¹ Citing from the report, p. 7: "The expression 'Take the lead' means that EDCP would initiate a process in the Faculty of Education that would eventually result in the relocation of most, if not all, of the undergraduate TE program to the Department."

Department of Educational and Counselling Psychology and Special Education Faculty of Education

Summary of External Review: February 2015

Highlights and Key Findings:

According to the review panel, strengths of the ECPS Department include:

- nationally accredited programs in Counselling Psychology and School Psychology which are believed to bring prestige to the department
- hardworking and committed faculty with strong national and international reputations
- students' pride in the quality of faculty and teaching and supervision
- faculty commitment to research and professional development, and
- committed and dedicated staff with articulated and relevant areas of expertise.

Additional key findings can be found in the recommendations listed below.

Key Recommendations:

- The Review Committee sees the tension between individual programs and the collective whole as a structural source of distrust and competitiveness and therefore as a significant barrier to progress.
 To help resolve this, the Department is encouraged to begin active efforts toward surfacing and agreeing upon the ingredients of a coherent collective identity, set of goals, and future plans.
- Efforts to achieve a more widespread appreciation for the fiscal realities being managed by the Dean's Office generally, as well as the implications for planning at the level of the Department and its programs, might also serve to reduce the sense of competitiveness between programs within the Department that arises from misunderstandings of how decisions are made.
- The Department is encouraged to continue involvement in and expansion of BEd cohort themes in order to strengthen ECPS presence in the teacher education program.
- The Department is encouraged to develop a faculty renewal plan with a focus on diversity.
- Junior and mid-career faculty members would benefit from a well-thought-out mentoring program with a focus on career development and progression.
- The Department would benefit from a discussion on a collective approach to cross-cultural understanding, indigenization and internationalization.
- It seems an appropriate time to move beyond the current model of silo academic units and explore
 the potential benefits of expanded interactions, collaborations and synergies between units and
 across the Department.

Department's Response:

Following receipt of the review report the Department held a full-day retreat attended in person by 25 Department members and blogged for accessibility to Department members who were unable to attend in person. The intended outcome of the retreat was to discuss the report and to develop a plan for addressing a prioritized list of the recommendations from the report. Four additional recommendations were identified from the report. These include:

- Achieve a more widespread appreciation for the fiscal realities of the Faculty and department.
- Continue to be involved in the BEd cohort themes in order to strengthen ECPS presence in the teacher education program.
- Develop a faculty renewal plan with a focus on diversity.
- Discuss a collective approach to cross-cultural understanding, indigenization and internalization.

Additional Department discussions have been held at subsequent Department meetings and with the approval of members of the Department four task forces have been struck:

- Mentoring
- Departmental Structure
- Faculty Renewal
- Diversity

Task forces include all faculty members and interested staff. Meetings will be occurring throughout the 2015-2016 academic year with regular updates at department meetings. Final Task Force reports are due to the entire Department and will be presented at the February 2016 Department meeting and a final report from the Department including all task force feedback will be submitted to the Dean in March, 2016.

Master of Education Technology Program Faculty of Education

Summary of External Review: July 2015

The review team, by way of "external" and "internal" reports, made several key recommendations intended to further improve the program.

Highlights and Key Findings:

- The review teams found that the MET program has "high enrolment, satisfactory completion rates, and overall good course evaluations" but that updating the program curriculum and reaching out more effectively to international students was called for.
- The internal reviewer noted that the balance of tenure and non-tenure stream faculty benefitted the program, stating that the "different perspectives that the university, corporate and K-12 educators who generate and /or apply research bring to their course development and/or instructional roles are assets for the MET as an applied, non-research, course-based degree, and broaden the reach of the MET."
- The external team found "the commitment by some core Faculty of Education tenure stream faculty
 members to design courses and teach in the program, as well as the cadre of sessional instructors
 who carry out the bulk of the teaching" to be a strength, but suggested that increased academic
 oversight was needed and that increasing the number of tenure track faculty involved would benefit
 the program.
- The review teams noted that income exceeds expenses and thus that reinvestment in enhancements to improve the program is possible and timely.

Key Recommendations:

- Both reports suggested the creation of a "trans-department" or "inter-departmental" collaborative
 model of governance with academic leadership provided by a tenure-stream faculty member with
 expertise in educational technology, and online and distance learning. The external report went on to
 say, "with respect to placement of the MET program in an academic unit, since it is fundamentally an
 interdisciplinary program (and supported by TS faculty in all departments), the governance model
 should appropriately represent the dispersed representation of faculty working in this field across
 multiple departments."
- Both reports suggested the creation of a 5-year plan that states the program's "aims and objectives, strategic goals and priorities for research, teaching, and student recruitment and retention" as well as connecting this plan to both Faculty of Education and UBC strategic plans.
- The reports recommended a review of the MET curriculum including mapping "current course offerings to program goals and objectives... eliminate[ing] courses or content (in particular assignments and readings) that overlap."
- The internal report recommended that the Faculty "identify the optimal mix of tenure stream, lecturer and other (e.g. sessional, adjunct, contract) instructors for each course team to lead and inform course development that will enable achievement of the learning and program outcomes, and

ensure sufficient instructors are available to deliver needed courses." The external report recommended increasing the tenure stream involvement in the program.

- Both reports recommended that MET develop more Indigenous courses.
- Both reports suggested reinvesting surplus funds into the MET.
- Both reports suggested reviewing the MET human resource and infrastructure needs and roles, particularly in light of a new governance model. They also suggested reviewing the relationship with CTLT and considering how ETS might be of further support.

Department's Response:

To this point, the Dean invited a response from the MET community to errors of fact and perception in the reports. Meetings were held with the MET Budget and Management Committee, the MET Advisory Committee, and the MET instructors. The response was drafted by Dr. Sork and Dr. Edwards and submitted to the Dean on October 30th. The Faculty's response to the recommendations lies ahead.

School of Kinesiology Faculty of Education

Summary of External Review: November 2014

Highlights and Key Findings:

The External Reviewers positively assessed the School's national and international standing with respect to "research excellence and scholarship", as "one of the 'flagship' schools of the evolving academic discipline of kinesiology in Canada and as an exemplar of the integrated model of classroom and experiential learning", and with respect to "[the School's] outstanding engagement programs that extend and embed student learning".

Key Recommendations and Unit's Response:

- Recommendation: Employ a highly strategic approach to academic planning that aligns the allocation of time, energy, and other resources in accordance with the strategic priorities of the School, the Faculty, and the UBC.
 - Unit's Response: As part of annual planning in the 2015-16 academic year, the School will obtain updated information on the University's emerging priorities under the University's new administration, and will develop an action plan to ensure that the School's academic activities and initiatives and its strategic plan are supportive of and synergistic with the University's priorities.
- Recommendation: Develop a School of Kinesiology strategic research plan that aligns with the institutional strategic research plan, perhaps using the School's extant clusters as themes.
 - Unit's Response: The School will meet during the 2015-16 academic year to formulate a strategic research plan. The planning process will take account of the UBC Research Strategy, UBC Health Blueprint, the President's priorities for research intensification, and the School's strengths in key thematic areas emphasized in the UBC Research Strategy.
- Recommendation: It is now time for the School to take a leadership role in championing multidivisional research proposals, or at least to become a key player in such proposals.
 - Unit's Response: In conjunction with developing a strategic research plan during the 2015-16 academic year, the School will develop a strategy for addressing opportunities for leadership and increased participation in multi-divisional, "big ticket" research initiatives drawing on the School's expertise in the areas of physical activity and health as well as other areas of strength.
- Recommendation: The undergraduate program review should include reflection on current trends in kinesiology and related professional and other career paths, the currency of the current curriculum in light of such trends, and the identification of "learning outcomes" that will be aligned with those expected outcomes.

Unit's Response: Our "Undergraduate Program Report" (April 28, 2014), which provides a framework for revising the curriculum, already contains much of this information and a rationale for considering local, national and international trends in kinesiology and related professions. The School held a half-day retreat in June 2015 to consider these and other curricular changes.

• Recommendation: Explore alternative course delivery modes as one component of an evolution and refreshing of the undergraduate curriculum.

Unit's Response: The School will develop a strategy for increasing the use of alternative delivery modes in the undergraduate and graduate programs. Initial discussion took place at the June 2015 retreat.

 Recommendation: With a view to enhancing cohesion among the School's graduate students, establish a monthly graduate student seminar series that provides a multi-disciplinary flavour throughout the academic year.

Unit's Response: The School has launched a new speaker series with multi-disciplinary criteria that will bring together all research areas of the School and enable graduate students to build a strong academic community.

- Recommendation: Review the graduate curriculum course offerings to assess their alignment with School and UBC strategic objectives. Ground that assessment in the identification of desired learning outcomes and degree expectations.
 - Unit's Response: The Associate Director Graduate Affairs will lead a review of the School's graduate curriculum and the four graduate programs (MKin, MSc, MA, PhD) during the 2015-16 academic year.
- Recommendation: Continue with the expansion of the professoriate in order to nurture, sustain, and improve the academic experience and research productivity of this high performing unit.
 - Unit's Response: Opportunities for additional faculty hiring will be reviewed during the 2015-16 academic year in conjunction with the School's review of academic priorities. In addition, a review of teaching loads will be conducted with an emphasis on how teaching loads might be better configured to "nurture, sustain, and improve the academic experience and research productivity" of the School.
- Recommendation: Significant investment in centralized, state-of- the- art facilities to support teambased research programs and clusters, and their teaching and learning activities.

Unit's Response: The New Sports Medicine building has received sufficient financial support to proceed with construction in Spring 2016. A dedicated space of 2000 sq ft will house a new Physiology Research Laboratory. An Executive 1 proposal is being developed for a new Kinesiology Research and Education Centre.

Department of Language and Literacy Education Faculty of Education

Summary of External Review: September 2014

Highlights and Key Findings:

- The report begins with the comment that the "Department of Language and Literacy Education (LLED) ... is recognized as the top language and literacy education department nationally, and is widely recognized internationally for its programmatic expertise and research excellence." The key positive findings include: strong connections to local, national, and international associations and communities; very good engagement with issues related to Indigenous education and productive links to Indigenous communities; research that "shows considerable breadth and depth in the fields of language and literacy," and "an impressive number of awards and distinctions" for faculty members; well-structured and delivered graduate programs; a high rate of collegiality among faculty and satisfaction among graduate students; and, finally, that "The Department is a model for equity and diversity."
- The report ends thus: "The review committee commends this Department for its impressive scholarly accomplishments and recommends that the Department celebrate and build on its considerable strengths. It has been innovative, entrepreneurial and collaborative with local, national, and international initiatives in both teaching and program delivery, as well as in research and dissemination."
- The report also indicates findings that slow or impede the Department's strategic development: divisions between LLED's two program areas (language and literacy); lack of clarity around certain workload issues; the need for both new faculty members (in modern language education and Indigenous languages) and extra staff support; the need for more opportunities for graduate students to teach, and for more office/meeting space for graduate students; and the need to increase research funding; need for greater research collaboration within and beyond LLED.

Key Recommendations:

The report's key recommendations fall into five areas:

- 1. Faculty workload: clarify FTEs for admin buy-outs; clarify attribution/rotation of courses; regulate workload for new hires.
- 2. Graduate students: increase teaching opportunities; provide more space; acknowledge awards; link incoming students to faculty research.
- 3. Programs/courses: synchronize/integrate programs; conduct a course audit; revise and/or re-name courses.
- 4. Development: expand research and outreach possibilities; create research incentives.
- 5. Five-year plan: review hiring plan; identify key areas of expertise; develop short- and long-term initiatives; review staff needs; develop proposals for online professional degrees.

Department's Response:

Following receipt of the external review, LLED formed four working groups to develop responses to the review's recommendations and the Department's own self-study. The groups focused on: Workload; Programs/Courses; Graduate Experience; and Sustainable and Ethical Growth. Each group was given a mandate to provide recommendations and action items. In April of 2015, LLED held an all-day retreat at which the groups' findings and recommendations were discussed. Those requiring policy decisions were voted on. Three follow-up meetings have been held and more are planned. Some key developments include:

- Formation of a standing Workload Allocation Committee to review current access and course rotation practices and to advise the Head on all matters related to workload allocation.
- An ongoing review of both programs (language and literacy), leading to course retirements, re-naming, and creation. Attempts are underway to mix students from each stream in appropriate courses.
- Development of an exit survey for graduate students to determine areas of strength and areas in need of improvement; clarification of application review process and methods of linking students to relevant faculty members.
- Creation of seed grants for projects involving collaborations within and beyond the Department. This
 program has already funded eight projects designed to lead to larger collaborative teams and future
 research.
- Development of guidelines for review of partnership opportunities and an audit of current LLED connections with international bodies, including universities, research associations, and research partners.
- Identification of key areas of research and teaching strengths within LLED. This ongoing discussion has removed any lingering perception of divisions between program areas by exposing the considerable overlap among faculty interests and expertise. Five areas of greatest strength have emerged and will guide hiring plans, program revision, student recruitment, and web site re-design.

Undergraduate Programs Faculty of Forestry

Summary of External Review: March 2015

Faculty's Note/Response:

Our undergraduate programs have not had any such review since their establishment aside from the 4-year periodic accreditation reviews, which serve a different purpose: compliance with professional standards. However, the Faculty is increasingly becoming an international leader to deliver top-notch forestry education, and as such, our spectrum of multidisciplinarity and the corresponding skills of our graduates have become broader to accommodate global demands. This is a conversation the Faculty has with the professional foresters association (ABCFP).

The program reviews aimed to provide internal assessment of material being taught within each of our four undergraduate programs (three of them accredited). We invited external reviewers from around the world, to provide the employers' and science perspectives. We are pleased with the reports of the external committees, as these will serve as a stepping stone towards improvement and relevance — something that program directors or the Faculty in general may not be aware of, or can easily overlook. In general, all reviews were positive, and offered avenues for expansion based on our strengths and leadership position in North America in many areas of the forestry realm.

Committees for each program are now assessing the progress of follow-through on the recommendations.

Highlights, Key Findings/Recommendations:

- Bachelor of Science in Forestry (Forest Resources Management and Forest Operations majors):
 - Enrollment cap: Consider limiting the number of students so that graduates continue to be known as among the best and the brightest.
 - Curriculum: Strengthen student preparation in math and physical sciences especially for those who want to pursue graduate studies; and offer specialization in management (for career progress). Consider enhancing business/financial literacy and skills; geospatial instruction.
 - Consider a unique degree rather than five specializations. Employers tend to hire the best-rounded individual, well able to learn, rather than a weak specialist.
- Bachelor of Science in Natural Resources Conservation:
 - Reviewers recognized the consistently high quality of teaching, advising and mentoring; also increasing interest in the program and relevance to contemporary societal values. Also prominent is the set of critical thinking, communication and collaboration skills that students gain to serve them well regardless of their professional trajectory.
 - A merger of both majors is recommended, to address the challenges that have emerged as the program has grown and its capacity stressed.

- Content changes: Increase exposure to natural resources other than forests; consider advanced GIS course, expanding topics to include systematics and taxonomy, urban ecology, environmental assessment, renewable energy, environmental law, etc.
- Undertake a structured review of course syllabi to minimize redundancy, fill gaps and enhance topical depth.

• Bachelor of Science in Forest Sciences:

- Retain program flexibility because it facilitates and stimulates a multidisciplinary approach to forestry challenges; maintain and devote adequate resources to field, laboratory and other experiential learning activities.
- Work on student retention (first year mostly); provide structured guidance through the program.
- Enhance science communication skills: Introduce a keystone course for written and oral skill development; consider the roles of news media and science literacy in communicating science.

• Bachelor of Science in Wood Products Processing:

- Reviewers acknowledged the comprehensive nature of the program, attributed to strong industry connections; leading to technology contributions and exposure through the coop program. Very likely UBC is a world leader in developing its wood products processing curriculum and keeping it at a state-of-the-art level.
- The program is big enough to consider streaming using program/expertise strengths: wood building design; analyst and multi-criteria decision making; quality control; art/architecture; secondary manufacture; wood science/biomaterials.
- The program is well positioned for the coming decade.

Peter A. Allard School of Law

Summary of External Review: November 2014

Highlights and Key Findings:

The Report was strongly positive, emphasizing the significant accomplishments of the Allard School of Law and the deep and positive changes in student, faculty and alumni experience across the board since the period of the last external review in 2009. The Report noted in particular:

- the importance of the new law building as a foundational asset in carrying out the law school's mission;
- the quality of students and programs, with members of the local legal profession viewing "UBC Law graduates as on par with the very best law graduates in the country" and feeling "confident in assigning to them the most challenging files";
- the improvement in student experience, as measured in Law School Survey of Student Experience (LSSSE) scores and reflected in discussion with students, who report being very well supported;
- an extremely dedicated, thoughtful and committed staff across all areas;
- significant strengthening of faculty, with several important lateral appointments and the recruitment
 of exceptional and highly-qualified entry-level junior faculty, and an overall enhancement of
 interdisciplinary range;
- important steps towards "enhancing support for research and the research culture of the Faculty";
- a rich and sophisticated curriculum, with a balance of adjunct faculty adding breadth and practiceoriented range and full-time faculty teaching in the core curriculum;
- a leading graduate program with high student satisfaction; and
- the commitment of the alumni community to the law school's vision for leadership in legal education and research on national and international scales; alumni view themselves as partners in the law school's success.

Faculty's Notes:

The Report also stressed the fragility of the gains made, and, in particular, the need for fiscal stabilization in view of both the law school's structural deficit under the current University budget model and, under provincial policy, the lack of a tuition adjustment that would put the law school's resources on par with other leading law schools in Canada. Not addressing these fundamental issues would have implications in a number of areas, including maintaining commitments to smaller (first-year) class sizes; launching successful experiential learning programs and for-credit legal clinics for underserved populations; and sustaining levels of excellence in scholarship, all of which require not only a stable budget but an increase in faculty resources. According to the Report, the burdens and risks with respect to the current school resource constraints fall particularly heavily on junior and early-mid career faculty members. Teaching loads at the Allard School of Law are higher than at comparable schools, with service obligations spreading faculty members thin, leading to serious retention issues, among other concerns. In addition, gains in student recruitment, support and experience are also precarious without expanding faculty and professional staff complements.

Key Recommendations:

In terms of the resources necessary to sustain and build on the law school's advancement, the Report identifies four crucial elements: (1) the continued commitment and support of the central University; (2) continued development and fundraising work, in part by furthering the base of alumni participation; (3) exploration of further revenue-generating legal education programs; and (4) a re-alignment of JD tuition to levels commensurate with other leading law schools, to the extent possible under provincial government tuition policy. The Report emphasizes as well the need to tie any tuition adjustment to an enhanced program of student financial aid, in relation to which we the Faculty would highlight the need to address the existing documented financial aid shortfall for law students.

Other key recommendations include:

- an increase in support for front-line staff, demands on which are considerable;
- further growth of development staffing, particularly in the areas of communications and marketing;
- an increase in clinical program offerings (identified by both faculty and students);
- additional teaching relief available for ambitious scholarly projects or to manage heavy administrative loads, particularly for untenured faculty;
- a decrease of administrative work for faculty, in part by moving some work from committees/faculty to professional staff; and
- build additional faculty strength in core curricular areas, including business and private law, and build out more JD offerings in transnational law

Faculty Response:

With the exception of the last point, it should be noted that all of these recommendations involve, to a greater or less extent, enhanced fiscal resources beyond what the law school currently has available to it.

In relation to the broader financial questions, the law school continues to carry out a development strategy with ambitious targets and to consider the development and review of revenue-generating programs in the area of professional education in particular. The \$22.8 million contribution in the recent Faculty naming gift will contribute to the Faculty's operating budget fully in ten years' time. However, it is important to note that, on its own, even a gift of this magnitude does not make up for the underlying budget scenario and resource constraints which the Report has identified.

Beyond this, the law school is currently undertaking development of a new strategic plan, which will take into account both the recommendations of the Report and the Faculty's current fiscal limitations. However, progress has already been made on three important fronts. First, we are pleased to be offering a new clinical program this year, on a pilot basis, in the area of transactional business law, focusing on legal services for start-ups and not-for-profits; and we are in active discussion with a community partner about the development of a women's community legal clinic. Second, the Faculty has adjusted its allocation of Internal Research Grants to recognize faculty members who apply for SSHRC Insight Grants, and will award course releases to successful grant applicants. Third, committee and service work has been reduced across the board for faculty members this year. Finally, it should be mentioned as well that faculty hiring efforts this year (in replacement of retirements) have targeted several areas of expertise that encompass core curricular subjects.

UBC Library

Summary of External Review: December 2014

Highlights and Key Findings:

- The review committee recorded twelve common knowledge items and fourteen points of their own observation and data gathering to support a total of twelve paths forward based upon their review.
- The review report celebrated the excellent reputation of the Library with UBC faculty and students, identifying many resources and accomplishments in particular. Included among some of these achievements were the successes of Xwi7xwa Library's services, the integration of the Automated Storage Retrieval System (ASRS), the Library's leadership on copyright and access, and superb facilities that include the heavily utilized Irving K. Barber Learning Centre (IKBLC) and Koerner Library, and the newly constructed Library PARC facility.
- The report also provided the Library with numerous observations for moving forward based upon the review panel's discussions with internal and external stakeholders. Their findings identified challenges that are not necessarily unique to UBC Library among our peers at other North American research institutions, but which are nonetheless present and deserving of immediate attention. These include observations about the necessity of visible leadership and transparent communication from Library administration, the challenge of annual erosion of collections purchasing power, and relations with stakeholders outside of the University.

Key Recommendations:

Among the twelve points for improvement identified by the reviewers, several themes are apparent which the Library has condensed into five key observations from the report:

- Develop a stronger, viable collections budget to serve the diverse research needs of UBC faculties.
- Create an exceptional workplace by improving the Library's culture and morale.
- Increase visibility and awareness of the Library as a strategic research partner.
- Strengthen campus and external stakeholder relations.
- Work with UBC IT to implement the recommendations set forth in the IT Assessment Report.

Library's Response:

The Library has developed a comprehensive list of action items to address the comments made in this most recent external review, several of which were already underway at the time of the report. This includes the implementation of recommendations from our 2013 Workplace Culture Review and the 2014 UBC Workplace Experiences Survey: increasing the visibility of management to Library staff, and for the Library Executive to model the commitments set forth in its Leadership Charter and in so doing set expectations for others in our organization. In addition, the Library is developing a framework for a Staffing Plan that will align with our vision and direction.

To maintain the quality of the most fundamental activities of our unit in support of students and faculty, the Library will be developing a business case to obtain ongoing collections budget increases that will contribute to a stable and sustainable general operating budget for the Library. In order to further our visibility as a strategic research partner, the Library will also continue to position Librarians in the research stream to work closely with faculty to assist them in meeting Tri-Council standards and managing complex research data. Similarly, we will continue to assist graduate students in acquiring data research fluency sooner in their programs via support provided through the Research Commons. To then promote the dissemination of research at UBC, the Library aims to help achieve greater visibility via discoverability through Library platforms and portals (cIRcle, Summons, Open Collection).

In order to strengthen campus and external stakeholder relations, the Library aims to better support several key groups. Activities in service of this goal include facilitating Vantage College's use of the Library, exploring virtual service models with key stakeholders at St Paul's Hospital and BC Children's and Women's Hospital, working jointly with iSchool to highlight partnerships, initiatives and success stories of student employees, and giving meaningful attention to how the Library can support the recommendations arising from the Truth and Reconciliation Commission Report.

Addressing the final key finding from the 2014 External Review of the UBC Library, we are working with UBC IT to implement recommendations set forth in the IT Assessment Report. This commitment includes service level agreements (3) signed and renewed annually and a multi-year IT Plan to address the Library's current and future needs with a three-year outlook. This plan will be aligned with the Library's overall strategic direction and vision. We will also be working to improve the Library's website, and a Web Services Review Group has been struck whose work will include assessing staffing, content management, web technologies, and discovery applications.

Department of Emergency Medicine Faculty of Medicine

Summary of External Review: December 2014

Highlights and Key Findings:

- This is the first full external review of the Department of Emergency Medicine after its establishment in 2008. The leadership was found to be exemplary, and the Head has widespread support internally and externally. It is unfortunate that the Department was established at a major economic downturn, which has led to loss of external funding from the Ministry of Health Services. This has created a significant amount of anxiety for Department members, and was a major feature of this review.
- The Department has a sound strategic plan, and its focus on the Emergency Medicine Network needs to be encouraged, and the success of the network will ultimately allow the Department to improve its financial health.
- The Department should strive to continue to improve its already impressive scholarly output.
- The Department should continue to expand its ability to train more residents, in collaboration with the Department of Family Practice, in order to meet the needs of the province.

Key Recommendations and Unit Responses:

Recommendation: that the Department of Emergency Medicine be retained as a Department despite
the current fiscal concerns. Without a healthy and sustainable Department of Emergency Medicine,
and without supporting its academic mission, knowledge translation to better the health of British
Columbians will be difficult. The review team recommends that funding agreements be put in place
with the Health Authorities that stand to benefit the most from the Department, namely PHSA and
Northern Health Authority, in exchange for deliverables that related to knowledge translation and
improved population health.

Unit's Response: The Department fully agrees that devolution of the Department back to a division would reduce academic productivity without any financial benefit. We will renew efforts to work with the FOM to engage Health Authorities in the development of integrated compensation packages.

Recommendation: that the Department pursue the Emergency Medicine Network, provided that it is
well-funded by the partners that will benefit from it. These partners include the Health Authorities
and the Ministry of Health. The EM Network will make up for inadequate clinical resources in many
regions of the province and provide a road map for future improvements in care. Funding of the
network should also recognize, through direct or indirect allocation, the academic and administrative
infrastructure, provided by the Department.

Unit's Response: The Department and the Committee are aligned in their views that the EM Network is an innovative, highly cost-effective model to improve emergency care. We also agree that sustainability depends on a strong financial foundation for the Department through FOM support for

basic infrastructure and the broader Network through the MOH to enable the many clinical care and system improvements that can be realized.

• Recommendation: that the Department seek funding from the Specialist Services Committee to at least temporarily help support the Department while other sources of funding are being pursued.

Unit's Response: We have just completed the detailed plans required in Phase 2 of the application to the Specialist Services Committee and have launched a survey of all 97 Emergency Departments in the province for input on the priority of topics.

 Recommendation: Residents with research potential should be mentored and supported to seek training in research methodology such as a Masters degree in Clinical Epidemiology at UBC or elsewhere during their residency training.

Unit's Response: This recommendation will be forwarded to both the Residency Training Committee and the Research Advisory Committee who will be asked to review the current process for mentoring and supporting residents to seek training in research methodology and determine if improvements can be made. Any specific recommendations arising from this will be brought to the DEM Advisory Committee for ratification.

• Recommendation: The staff needs to be formally reassured that they are doing an excellent job and that their positions need to be maintained. The team did not see any redundancy or any waste.

Unit's Response: The Head will meet with each of the staff twice yearly as a minimum to share concerns and insights and to reassure them that funding for their jobs is not in jeopardy. We will need reassurance from the FOM that this is indeed the case.

Recommendation: Because of the close ties between the Department of Family Practice and the
Department, and because of the much larger size of the Department of Family Practice, services for
human resources support may be provided at no charge by the Department of Family Practice to
maintain the viability of the Department.

Unit's Response: We also appreciate this suggestion and will meet with the Head of Family Practice to explore cost-effective means for the Department of Family Practice to provide HR services to the Department.

Recommendation: that the Department consider enhancing its relationship with the hospital and
university fund-raising foundations in an attempt to establish research chairs. The foundations need
to assist the Department in establishing potential donors who have been happily served in their
respective Emergency Departments so that relationships can be fostered towards large donations.

Unit's Response: We will work diligently with the FOM Development Team to strengthen our relationship with foundations and facilitate the development of several endowed professorships.

Department of Family Practice Faculty of Medicine

Summary of External Review: October 2014

Highlights and Key Findings:

- Reviewers noted the many challenges facing the Department such as rapid expansion and distribution, the changing ways that family medicine is taught, and the new undergraduate curriculum, among other changes, which will require much greater participation from family physicians around the province. These changes are unprecedented in the history of Canadian medicine. "We were tremendously impressed with the commitment of the department and the faculty and we believe that they should be extremely proud of their efforts. However, although a remarkable job has been done to date in addressing the challenges, the strain is evident, and the immediate future must be managed carefully so that success can be maintained."
- Reviewers noted that despite the tsunami that has enveloped the department, it has made significant
 progress with all aspects of its mission. It should be justifiably proud of its accomplishments. "With
 attention to some of the suggestions we have made, we believe the department is poised for
 continued success in the coming years."

Key Recommendations and Unit's Responses:

- The Department should embark on a comprehensive and inclusive strategic planning process as soon as possible.
 - Unit's Response: This is underway, and the process has involved a retreat in 2014. Work is ongoing within the programs and the process is now bringing these together.
- As outlined in its recent planning process, the Department should continue to develop its communications strategy, in conjunction with the communications office of the Faculty of Medicine.
 - Unit's Response: The Department is aware and this is part of the Faculty Development Plan.
- Recommendation: A mentoring program for junior academic faculty should be developed under the
 auspices of the research office. In future, consideration should be given to developing a similar
 program for junior clinical faculty through the education office.
 - Unit's Response: The Department is aware and is working toward this goal (Faculty Development Plan)
- Recommendation: The Department should continue to pursue its plan to have an associate head linked with VIHA, and if this is successful, develop similar leadership positions with the other health authorities.
 - Unit's Response: The Department is aware and is working toward this goal.

• Recommendation: Once the new structure is developed, its leadership and administrative staff should meet regularly with the head to address the issues of the department.

Unit's Response: The Department is aware and is working toward this goal.

• Recommendation: The Department should engage with the Centre for Health Education Scholarship to facilitate the training of CHES scholars who could become future faculty and enhance the research program in medical education.

Unit's Response: The Department is aware and proceeding.

• Recommendation: The Department should continue plans to develop a chair in rural research.

Unit's Response: The Department agrees and is well on the way to achieving this goal.

Recommendation: The Department should partner with other departments and centres to raise
money to support research in areas of common interest including mental health, maternity care and
chronic disease management.

Unit's Response: This is part of the strategic planning process.

• Recommendation: The Department should ensure that the majority of new academic appointments in the near future should have family medicine as their primary discipline.

Unit's Response: This is acknowledged and is part of current plan. Most recent appointments are non-FM. Does not apply to midwifery.

• Recommendation: A comprehensive review of faculty development resources within and outside the department should be undertaken. Once the resources available are clear, an integrated plan for faculty development should be constructed and implemented.

Unit's Response: The Department is aware and is working toward this goal. (Faculty Development Strategic Plan)

- Recommendation: The midwifery program should become a department or at a minimum should have a seat at the table with department heads or faculty executive.
 Unit's Response: This was identified as a priority item in the Midwifery Strategy; the Department continues to work closely with FoM.
- Recommendation: Maternity research should be considered for inclusion as a research priority. This represents a tremendous opportunity for philanthropic support if correctly managed. *Unit's Response: We agree and have identified this as a strategic priority.*

Department of Obstetrics and Gynecology Faculty of Medicine

Summary of External Review: October 2014

Highlights and Key Findings:

- The administrative support team is strong. The Head has dealt definitively, expeditiously and transparently with recently discovered financial improprieties and the increased downloaded costs that affect all departments.
- The creation of a Division of Gynecologic Sub-Specialties and the move to empower Division Heads with authority, accountability and decision-making will serve to strengthen the Department.
- Undergraduate teaching is considered strong.
- The research program is consistent and reasonably strong with several notable highlights including ovarian cancer, pre-eclampsia with International Implementation, translational research in infections and cancer, the vaginal microbiome, reproductive medicine and Aboriginal people's reproductive health.
- The graduate studies program extends the research scope of the department and is unique among similar departments across Canada.
- The growth and development of endowments within the Department is commendable and demonstrates the potential for increased financial sustainability.

Key Recommendations and Unit's Responses:

- Recommendation: Develop and implement a strong communication plan that includes celebration of departmental and individual successes, recognizes achievements of all faculty and engages faculty in policy development and implementation.
 - Unit's Response: The Unit will conduct a needs assessment by surveying faculty and staff members on communication. Specifically, the Unit hopes to explore how they prefer to communicate with the Department, so that the Unit can tailor its efforts to best meet their needs.
- Recommendation: Support Division Heads to enable success for their expanded responsibilities of financial management and fund-raising. The Department should develop a formal strategy to provide opportunities for leadership development and fund-raising techniques for divisional leaders.
 - Unit's Response: Division Heads meet regularly with the Associate Director and Budget Manager of the Faculty Finance Cluster. Similarly, the Unit's Faculty Development Officer is providing support and advice to the Division Heads on how they can grow their current endowments.
- Recommendation: Build on the recent strategic plan as a first draft by engaging all faculty broadly in a
 collaborative process of appreciative inquiry. Identify opportunities and linkages to articulate specific
 implementation plans with measurable deliverables.

Unit's Response: The Unit is working to engage faculty members and staff in the implementation of the strategic plan and has identified sponsors for each commitment who will be responsible for moving the plan forward. Striking diverse working groups with appropriate expertise to work on the individual deliverables operationalizes this implementation plan.

 Recommendation: Develop and implement a strategy to recognize and appreciate the contributions of clinical faculty.

Unit's Response: The Department developed an Awards Committee in 2014. Whereas awards recommendations were previously ad hoc, the Department has developed a list of awards and can plan candidates well in advance of awards deadlines.

Recommendation: Formalize access to faculty mentoring and career planning for residents.

Unit's Response: The Department's Postgraduate Training Program is at work to develop effective faculty mentoring and career planning for residents. There is a formal mentoring process in place for Residents. The Department will work to make residents more aware of this resource and tailor it to their needs including career planning.

Recommendation: Assess the quality of obstetrical care across the province including in small
communities and including that delivered by family practitioners and midwives to identify potential
gaps in training and service that can be improved by an interdisciplinary approach.

Unit's Response: This is congruent with the Department's strategic plan and the Department has already begun planning with Midwifery around inter-professional education and research, and with Family Medicine regarding a joint program to train family physicians in cesarean section. The Department has also sought collaboration in developing performance indicators that can be used across maternity disciplines.

Recommendation: That the PHSA, VCHA and other Health Authorities work with UBC to explore a
more simplified leadership, management and accountability structure and clarify roles and
responsibilities (particularly across the Lower Mainland) for high risk maternity care.

Unit's Response: The Department agrees and this is yet another opportunity to extol the development of an AHSN that would facilitate such a solution. Until then, clinical and academic leadership in the lower mainland is split between three entities: BCWH, PHC, and VCH.

• Recommendation: That the Faculty of Medicine move as quickly as possible to structure a richer and more sustainable academic faculty funding plan based on an Academic Health Sciences Network. Unit's Response: The Department could not agree more, and this is yet another opportunity to extol the development of an AHSN that would facilitate such a solution. Until then, clinical and academic leadership in the lower mainland is split between three entities, BCWH, PHC, and VCH.

Department of Pathology and Laboratory Medicine Faculty of Medicine

Summary of External Review: December 2014

Highlights and Key Findings:

- The Department is one of the top academic departments of its kind in the world and plays a key role
 in educating one of the largest cohorts of undergraduate medical students in North America. Its
 BMLSc Program is responsible for producing graduates with a high caliber degree in the discipline of
 Medical Laboratory Science that expands career and educational opportunities of registered medical
 laboratory technologists and life science students, and also benefits the provincial laboratory service.
- To expand the scope of educational offerings, one option would be the introduction of an MSc degree program for Pathologists' Assistants to align with the human resource planning for healthcare in the Province. The Department's residency and fellowship programs achieve impressive outcomes, but fellows require more robust, stable support.
- The Department's focus on translational research integrates the activities of clinical and basic science researchers, several ranking among the most well funded and published researchers at UBC. It has the highest citation rate and impact relative to the subject area when benchmarked against similar departments in other leading academic institutions in North America.
- The graduate program is sustainable and very well managed from an administrative standpoint but needs to be resourced appropriately. The students are highly motivated and proud to be members of the department. However, there was a desire among research trainees for more information about and preparedness for career options beyond those in academia.

Key Recommendations and Department's Response:

- Recommendation: Design and implement a new Clinical Faculty appointment policy in order to remove the barriers of clinical faculty to apply for external grants support and their participation in graduate teaching and supervision. Remove the designation of "Clinical" appointment to enhance morale and improve academic motivation.
 - Unit's Response: The issues and concerns regarding the distinction between Full Time Faculty and Clinical Faculty are well-recognized and significant, although they are not unique to this Department. To achieve any changes will require involvement of the Faculty of Medicine, Central UBC, and possibly other parties. Successful implementation of the Academic Pathology Plan with its Goal Aligned Planning and Evaluation Program will help address issues related to morale and academic motivation.
- Recommendation: Provide graduate students with a greater exposure to career counseling and advice on career options other than academic research.
 - Unit's Response: The reviewers have identified a very important issue for graduate students.

 Resolution of the issues behind the recommendation is already underway. For career counselling and advice, four steps are being planned by the Department and include:

- (1) Host a series of student-led focus groups to more clearly define the needs and expectations;
- (2) Create and publicize a list of resources available to students through our website and in annual progress meetings with the Program Director;
- (3) Work with other programs to coordinate efforts and reduce duplication;
- (4) Development of networking opportunities for our graduate students, a process that will be facilitated by a recently initiated program to establish a self-regulated social/professional network of alumni from the program (we now have contact information on more than 90%) and current graduate students.
- Recommendation: Develop a 5-year human resource plan for the department together with a plan for stable support of clinical fellowships to ensure sustainability of clinical and academic programs.
 - Unit's Response: As part of our Academic Pathology Plan, we have recommended that the UBC Faculty of Medicine, the BC Ministries of Health and Advanced Education, the Health Authorities, and BC Association of Laboratory Physicians/Doctors of BC commit to developing a long-term human resource plan for Academic Pathology in British Columbia.
- Recommendation: Explore creation of an MSc degree program for training of Pathologists' Assistants in the context of human resource planning for healthcare in the Province.
 - Unit's Response: The Department has previously investigated the possibility of establishing such an education/training program on two occasions, one of them relatively recently; both were unsuccessful for different reasons. At least four issues must be addressed if the program is to move ahead.
 - (1) There must be evidence of the need for PAs and support for them within the pathologist community. This evidence can and will be obtained from the proposed human resource plan for pathology in the province;
 - (2) There must be sufficient resources to run the program, including support for infrastructure, personnel, and the Program Director;
 - (3) There must be a job market sufficient to lure applicants. Government and Health Authorities in collaboration with pathology departments will need to create and fund positions. Clarity around job classification within the pathology staffing system is also a necessity;
 - (4) An enthusiastic and knowledgeable "champion" (funded and given dedicated time for this purpose), plus a few like-minded individuals in each of the practicum training sites for the second year of the program. Involvement of the Faculty, government, health authorities, and professional groups in conjunction with the Department will be required to successfully address these issues.
- Recommendation: Make teaching a more prominent part of professional groups' responsibilities at distributed sites.
 - Unit's Response: This would greatly facilitate and support delivery of the Department's academic mission province wide. Successful implementation of the proposed Academic Pathology Plan would greatly assist in accomplishing this. To ensure its success, resource implications for the facilities required also needs to be recognized and addressed.

Department of Radiology Faculty of Medicine

Summary of External Review: September 2014

Highlights and Key Findings:

- Like most radiology departments in Canada, the bulk of the teaching at all levels, with the exception of graduate studies, is provided by clinical faculty, whose remuneration for this activity is significantly below what can be generated from clinical activity. Nonetheless, the educational programs were highly praised and residents and fellows largely satisfied with the educational leadership.
- Most academic radiology practices in Canada function in an environment dominated by fee-for-service remuneration. This leads to an inherent and unavoidable conflict between business interests, clinical service demand, and the academic mission of the Department. The Head of the Department has done an admirable job trying to balance these forces. It appears to the outside observer that some reliance on clinical fellows to support clinical services may be present and this could have a detrimental effect on staff radiologist recruitment.
- Many of the issues faced by the Department will not be solved without added financial resources and real support from both clinical and academic administration for scholarly pursuit by department staff.
 The hiring of a research nurse has successfully enabled the initiation of clinical research that may not have otherwise occurred.
- It is difficult for clinical faculty to engage in research and significant opportunities are being "left on the table." Opportunities exist for collaborative research.

Key Recommendations and Unit's Responses:

- Recommendation: The reviewers found evidence that the alignment of the goals of the individual clinical business groups and the tripartite mission of the overall department (clinical care, teaching, and research) are not always in sync. This is not an unusual situation in university practices but there needs to be a mechanism for the Department to attempt to mitigate it.
 - Unit's Response: The Department Head has sought input from the VGH MI Dept Head, the VGH Senior Medical Director and members of the FoM Executive Committee. A number of team-building exercises are underway, and progress will be monitored. The Head is also initiating steps to ensure a productive, respectful relationship between all business practices and the Clinical Departments.
- Recommendation: An academic neuroscience referral center such as VGH should have access to clinical 3T MRI. It is recommended that the Department work with its partners to acquire 3T MRI and forcefully advocate on behalf of British Columbians for access to this advanced imaging technology.
 - Unit's Response: The Department agrees that the lack of MR access in BC, which has the longest wait-times in Canada, and the lack of a clinical, publicly-funded 3T system is unacceptable. Again, this issue is largely a Regional/Provincial one. The Department Head met with Provincial Leadership Council (HA

CEO's and DM of Health) and presented a synopsis of the issues, and several potential solutions. There is hope that a decision to provide more funding for MRI will be made.

Recommendation: That the Department develop strategic partnerships to advance its research
mission. Radiologists have an opportunity to engage in collaborative research, and it is best to focus
on areas of organizational/institutional strength such as cardiovascular and neuroscience.

Unit's Response: More strategic alliances with other Depts would be beneficial in advancing collaborative research, a point which was highlighted in the Dept's Strategic Plan. The Head of Radiology and the Vice Chair of Research plan to convene meetings with Research Directors of other key Departments, and will also discuss collaboration with research institutes at VCH, PHC and PHSA.

Recommendation: To maintain teaching excellence and leadership in the undergraduate program
and continued innovation (imaging tables, anatomy partnership), it is recommended that support be
provided to the Director of Undergraduate Education.

Unit's Response: The Director of Undergraduate Education has recently formulated an Undergraduate Radiology Committee, which has been functioning effectively and has served to support his initiatives. However, as our commitment to these education endeavours increases, funding to support Faculty must increase. Consideration will be made towards the appointment of an Assistant Undergraduate Education Director.

Recommendation: To define the role of Radiology in teaching of undergraduate ultrasound.

Unit's Response: There is extensive ongoing work being undertaken to define the Department's role in the Anatomy Visualization and Undergrad Ultrasound projects, high priorities for the Faculty and Department.

Recommendation: A more formal structure for fellowship positions has been introduced, including a
clear recruitment process, educational objectives, on call expectations, and other components.
 However, additionally, standardization of payment, benefits and human resources support, such as
the wellness program for residents, should be made available to the fellows.

Unit's Response: This is recognized by the Post-graduate Dean, and the Head is on a Committee which was recently struck to provide a wholesale review of UBC Fellowships throughout the Faculty.

 Recommendation: Address critical and immediate recruitment needs: a pediatric radiology leader and staff positions, and an interventional neuro-radiologist for VGH site.

Unit's Response: The VGH group has recently hired a neuro-radiologist. A high priority is to site a diagnostic neuro-radiologist part-time at the Centre for Brain Research at the UBC campus. The Department Head will meet with the Head of Pediatrics and PHSA Administration to create a Leadership Team to investigate future steps.

UBC Department of Computer Science Faculty of Science

Summary of External Review: October 2014

Highlights and Key Findings of the External Review Committee:

- "The University of British Columbia has an excellent Computer Science (CS) department. It is clearly one
 of the top three CS departments in Canada and enjoys a strong national and international reputation.
 The department is healthy, vibrant, and collegial, with faculty and staff invested in the wellbeing of their
 colleagues and students."
- "The Department has a strong research program, and in several areas has established an excellent international reputation. Faculty members have done extremely well winning recognition for their research and producing highly cited works. The strength of their reputation has attracted new hires to the Department (despite the difficulties with housing) that have outstanding potential."
- "The Department has been impacted by the recent departures of several respected, midcareer colleagues, exploding undergraduate enrollments, and the difficulty of recruiting new faculty members due to relatively low salaries and very high housing costs in Vancouver."

Key Recommendations of the External Review Committee:

- Invest in the Department. "If the University of British Columbia wants to sustain and grow a world-class Department of Computer Science, they will have to address their ongoing structural deficit and invest in recruiting and retaining outstanding faculty members. This may involve a significant investment in faculty salaries or related retention packages. The additional funds might come from a variety of sources, including revenue from professional degree programs, philanthropy/advancement, corporate relations, and a differential fee for undergraduates."
- Strategic planning. Building on the self-study report, the incoming Department Chair should be required to produce a five-year strategic plan with verifiable metrics.
- Research. The Department has the research quality, but is lacking research quantity with some research areas having lost critical mass. The reviewers encourage the Department to increase its engagement with industry and the vibrant IT sector in Vancouver.
- Graduate programs. Increase financial support for graduate students and reduce times to completion.
- Manage high undergraduate enrolments. Possible strategies include hiring more faculty, course
 coordinators (for large courses), limiting enrolments in CS specializations or gateway courses, or
 leveraging even more undergraduate teaching assistants.

<u>Department's and Faculty's Response:</u>

• Investing in the Department:

All UBC departments share the common goal of recruiting and retaining excellent faculty, and success requires a sustained commitment by the Department, Faculty, and University. This goal is particularly challenging for Computer Science departments across North America where top CS faculty are commonly recruited by industry (established companies and start-up companies) as well as by competing

universities. In order to compete successfully with industry and top universities, we need to offer competitive salaries, which requires identifying new salary resources and working with our Faculty Association. We also need to address the high cost of housing in Vancouver, a challenge for all at UBC. In 2014-15, we successfully conducted three faculty searches. In 2015-16, we are conducting searches for five CS faculty members — a senior faculty member funded by the Cheriton Family Chair in Computer Systems, two assistant professors, and two instructors.

• Strategic planning:

The incoming Department Head will build on preliminary planning activities to produce a strategic plan that will guide the Department for the next five years. The Faculty of Science is exploring the possibility of decoupling the writing of a Department self-study (currently done in the last year of a Head's term) from the development of a strategic plan, which needs to be driven by the next Department Head.

Research:

The Department is currently undertaking an aggressive multi-year faculty renewal plan with priority hiring in human-computer interaction, machine learning, scientific computing, and computer systems. In response to demand from industry, the Department is developing two professional Masters programs, a Masters of Science in Data Science (joint with the Department of Statistics) to be launched in Fall 2016 and an Industrial Masters program, which includes an industry research internship. The Institute for Computing, Information, and Cognitive Systems (ICICS) is currently being reorganized with the goal of better alignment with different segments of the broad information and communications technology sector.

• Graduate programs:

Base funding levels for UBC Computer Science graduate students is comparable to other Canadian universities, but we lack the major graduate scholarships available in some other provinces and the cost of living in Vancouver is comparatively high. The Department is reexamining the course requirements needed to obtain an MSc, and is developing two professional graduate programs with shorter completion times.

• Managing high undergraduate enrolment:

Over the past four years, UBC students enrolled in Computer Science specializations have increased by 50% and course FTEs have increased by 74%. More students now enroll in Computer Science specializations than in Biology In June 2015, we made the difficult decision to cap enrolments in Computer Science specializations (years 2, 3, and 4) as we do for Life Science specializations. In addition to investing in new faculty (professors and instructors), the Department was provided with recurring funds to hire a course coordinator for large classes. We have discontinued direct admission into the BSc in Computer Science; entrance requirements for students applying to Computer Science are now the same as for the Faculty of Science.