Report to Senate External Reviews of Academic Units and Programs at UBC Okanagan 2018 – 2019

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External reviews were conducted on the following academic units and programs at UBC Okanagan between September 1, 2018 and August 31, 2019. Key findings and recommendations made by the reviewer teams, along with the relevant unit's response are summarized on the following pages and comprise the remainder of this report.

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UBC Okanagan Library

Reviewed February 13 – 15, 2019

Highlights and Key Findings:

- The UBCO Library is the heart of the campus physically and intellectually, and highly valued by the entire
 University. Extending its reach beyond campus, the Library has been emblematic of the University's
 mandate to be of service to the community, through outreach and partnerships in Kelowna and the greater
 mainland community.
- The UBCO Library has significant, essential and permanent dependencies on the UBC Library. This inherent
 reliance relates not only to UBC's extensive library collections and the ensuing technical services, but also to
 the catalogue, integrated library and discovery systems, data repositories, institutional repositories,
 technology infrastructure and related services that underpin an increasingly important portion of teaching,
 learning and research support in libraries.
- The Review Committee heard glowing testimony from satisfied graduate and undergraduate students, faculty members, Deans, and other UBCO administrators, all indicating that the Library is exceeding expectations and delivering a fulsome array of innovative and productive services.
- Of the eight areas considered in accordance with the Terms of Reference, the Review Committee spent the most time considering the governance structure and administration of the Library.
- The Review Committee did not uncover any serious issues; most concerns raised can be linked to rapid and
 impressive growth in enrolment and the attendant demands placed on an essential academic service such as
 the Library.

Key Recommendations and Unit's Response:

- Recommendation: UBCO Provost and UBC University Librarian and other senior leaders consider a solid line reporting structure for the UBCO Chief Librarian within the UBC Library, and a corresponding title change.
 - *Unit's response*: UBC Okanagan and its evolving relationship with the Vancouver Campus presents a unique challenge in terms of governance, and a variety of reporting relationships exist between positions on both campuses. I am in full agreement that clarity should be achieved regarding the nature of the reporting relationship between the Chief Librarian at UBC Okanagan and the University Librarian at UBC Vancouver.
- Recommendation: Consideration should be given for ways to index growth of UBCO Library librarian and staff complement to the growth of student enrolment and faculty size.
 - *Unit's response:* Agreed. The campus is currently crafting a faculty hiring plan; librarians should be included in those considerations.
- Recommendation: Intentional and meaningful bi-directional input and consultation in the strategic planning
 processes for the libraries at each campus is essential for the achievement of their academic missions.
 Developing structures and shared accountabilities in these areas will support these activities.
 - *Unit's response:* Both I and the University Librarian fully agree on the benefit of more formal planning to identify and pursue collaborative initiatives, and use these as opportunities to enhance working

relationships. We believe that the most appropriate approach would be to create a document that discusses areas of shared vision, and defines the nature of the relationship between the two campuses.

• Recommendation: Conducting user research to develop a vision and functional program for the Innovation Library would go a long ways to ground this entity for a vibrant future.

Unit's response: Agreed on recommendations. This work will be one of the first project areas for the new Associate Chief Librarian, Engagement & Access, a position which is currently posted, and is anticipated to be undertaken in close collaboration with partners at Okanagan Regional Library.

 Recommendation: To address critical areas of need, it is essential that the University Librarian and Chief Librarian collaborate on the development of sustainable set of best practices for services that utilize the talent and expertise at both campuses.

Unit's response: Agreed. Both I and the University Librarian appreciate the time and thoughtfulness with which the reviewers approached their task; this review has helped us to see the benefit of taking a step back and has added further motivation to the prospect of working collaboratively to define and maximize the relationship between the two campus libraries.

School of Health and Exercise Sciences (HES)

Reviewed June 10 - 12, 2019

Highlights and Key Findings:

- It is clear that the School of Health and Exercise Science is viewed as a positive place to work and study and that many positive outcomes have been achieved in teaching, research and community engagement in the relatively short time the School has existed. We heard consistency in the message that Health is a priority on the campus and that the School is at the centre of the priority item.
- One of the strongest assets within the School's research environment is the excellent supervisory and mentoring experiences provided by the members of the School.
- The review team was impressed with the activity and engagement of the faculty members, students and staff in the areas of research and scholarly activity.
- The quality, size, and equipment of the lab spaces are enviable. Also, given the size of the campus, and options for creating opportunities for collaboration through other methods, we would conclude that the physical facilities are overall excellent for their current purposes, and for most foreseeable future research uses.
- While the relatively unstructured operations of the School and the University have clearly facilitated the
 period of growth and development of the School, it is clear that more structure and governance is now
 needed to ensure clarity and focus of mission, equity of experiences for students, faculty and staff and
 effectiveness of communications.

Key Recommendations and Unit's Response:

- Recommendation: Create a School research strategic plan that includes the creation of specific structured opportunities for research engagement that might encourage collaborations.
 - *Unit's response:* We are now in a position to complete the strategic planning process which will be completed prior to the end of 2019. The development of targeted research collaboration across the School, across the Faculty and Institution and also with key external partners has already been identified as a key priority moving forward.
- Recommendation: Consider more specialized technical support for sophisticated equipment in labs.
 - *Unit's response:* As part of the review process, we identified that the current structure for technical/laboratory support was inappropriate. As such we have re-structured the laboratory coordinator position and are in the process of appointing a dedicated technician who will support both teaching laboratories and research facilities. We do acknowledge that it is unlikely that the School will independently appoint a specialized technician for research; however, if the specific research groupings raise this as a priority, the School will work with them to find an appropriate solution (e.g. co-funding between School and Research funding).

Recommendation: Increase the clarity of roles and responsibilities for both the College of Graduate Studies
and the School of Health and Exercise Sciences with respect to graduate students, supervisors and graduate
programs

Unit's response: With the recent transition to our own independent PhD program, it is inevitable that there is some confusion regarding roles and responsibilities of COGS vs. The School. However, as students are enrolled into the new system, we believe that this problem will dissipate. Notwithstanding, we will closely monitor the situation in collaboration with the graduate liaison committee to preempt and address any problems.

 Recommendation: Support the proposal for the establishment of the UBC-O Health and Exercise Centre and recommend the further development of the proposal to include a business plan (including market survey and operational cost analysis).

Unit's response: The development of such a Centre would set us apart in the Canadian system and has the potential to elevate all of our programs to the highest level. We will work with all stakeholders to realize this aspiration, specifically the Deans Office, the Development Office, and Campus Planning in order to develop an appropriate business plan that helps us move this from being simply an idea into reality.

• Recommendation: Further development and advancement of a strategic plan for enhanced relationships with Interior Health and with the Kelowna community, including the operation of a community based clinical exercise rehabilitation and wellness program in downtown Kelowna.

Unit's response: The School is eager to work with all partners to improve the current situation; however as an Institution we need to be able to collectively (e.g. School of Health and Exercise, Sciences, School of Nursing, School of Social Work, Faculty of Health and Social Development, Faculty of Medicine, Southern Medical Program) articulate our plans for health-related research in the region and to then broker effective relationships with Interior Health, Kelowna General Hospital, Physician Groups, and other allied health professionals. Our reviewers suggest "that assignment of responsibility for developing such external engagement should be given to a specific individual at a sufficiently high level of administration to have influence within such discussions and negotiations" and as a School we wholeheartedly concur with this recommendation.

Irvin K. Barber School of Arts and Sciences

Reviewed January 15 - 17, 2019

Highlights and Key Findings:

- We were impressed by the successes achieved by the School since its inception a period marked by rapid change and substantial enrollment growth. These successes include the ever-increasing excellence of the students attracted to the School, the quality of faculty members being recruited, and the high level of commitment to offering quality educational programs exhibited by faculty and staff.
- In many ways, the Barber School is the heart of UBC Okanagan (and not just because of the School's size). Key programs, initiatives, and opportunities that help define what UBC-O is, and should continue to strive to be, are grounded in the School. Examples include environmental programs and Indigenous Studies.

Key Recommendations and Faculty's Response:

- The most important recommendation from the External Review Team (ERT) is that UBC-O seize the
 opportunity of the appointment of a new Provost to develop an actionable Strategic Plan for the School. This
 plan needs to be forward thinking and strategic.
- The ERT recommends that special attention be paid to transparency. Members of the School perceive that transparency is lacking concerning actions taken by the Administration (Central, Dean's Office).
- The School has some exciting niche areas and new scholars that could attract graduate students, but needs
 to increase its funding commitments (both in terms of dollars and time) to an appropriate and competitive
 level.
- Develop long-range sustainability plans, including, but not limited to the evergreening of teaching and research equipment.
- Regardless of whether the School is divided into two Faculties, the Dean's office structure needs to be
 reviewed and re-organized. This includes updating the functions of Associate Deans and their staff, and
 reviewing the governance of the unit, particularly in transparency and communication of decision-making.
- Ensure that new professor hires in the School align with the mission of UBC-O as a smaller institution with an interdisciplinary focus.

Faculty's Response: Provided that the approved split of the Faculty of Arts and Sciences will be implemented in June 2020, this review and recommendations will be taken into consideration throughout that process.

Irvin K. Barber School of Arts and Sciences

Earth, Environmental and Geographic Sciences (EEGS)
Reviewed February 25, 26, 2019

Highlights and Key Findings:

- There is tremendous potential for EEGS to become a leading student centred teaching and research program in earth, environmental and geographic science.
- There is an excellent Head in place who clearly knows what needs to be done. There is a core set of faculty that see the direction forward and clearly have confidence in the Head to facilitate change.
- The future of EEGS is dependent on retaining the excellent young talent that has been recruited in recent
 years, empowering them by giving them the ability to design their future direction, and enabling them to
 recruit essential new faculty and staff to launch them towards that future.

Key Recommendations:

- Recommendation: EEGS should develop a clear vision and mission for the department and contained programs that aligns them with the vision and mission of UBCO.
- Recommendation: The research component of the strategic plan should determine the research themes that
 EEGS wishes to champion. These research themes should be a logical extension of the existing areas of
 concentration, but also should take into consideration opportunities to leverage the local natural
 environment and the social, economic and cultural setting that will contribute to an ever-increasing global
 research enterprise
- Recommendation: EEGS is offering far too many courses for the size of the department. This model will not be sustainable as EEGS moves towards greater research intensity.
- Recommendation: UBCO should provide space that can be identified as a home for EEGS.
 - Unit's Response has not been received by the Provost office.

Irvin K. School of Arts and Sciences

Computer Science, Mathematics, Physics, and Statistics (CMPS)
Reviewed March 7, 8, 2019

Highlights and Key Findings:

- The department has achieved a number of important successes: it has thriving research groups, great collaborative attitudes, many important research funding successes, a number of strong undergraduate programs and some great successes underway in graduate programming.
- The Mathematical Sciences program is a well-structured program that fulfills the stated objectives, and the combined Mathematics and Physics program is excellent.
- Data Science program's structure (of relatively short courses) is different from what other institutions would likely offer. This should be seen as innovative and worth pursuing as it seems to us to make course delivery more agile.
- There has been some commendable initiative to work with Indigenous students through a textbook being written by a faculty member with Indigenous values at its core.

Key Recommendations and Unit's Response:

• Recommendation: The university must act urgently to deal with an unacceptably low level of staff support for the department. A Departmental Manager, housed in CMPS, is a minimally required first step.

Unit's response: The department is in full agreement with this recommendation.

Recommendation: Given the shortage of physics faculty in the Department, and the potential impact that
this will have on the maintenance of what is an encouragingly strong undergraduate physics program and
the potential impact on the accredited graduate program, the university should (in addition to the second
Astrophysics appointment) make every attempt to recruit a medical physicist with expertise in imaging as
soon as possible.

Unit's answer: We have now hired a medical physicist with a specialty in MR imaging. She will arrive on July 1, 2019. In the intermediate term, we will be attempting to hire a fourth medical physicist.

Recommendation: The committee notes that there are major space problems and recommends that, at a
minimum, re-organization be undertaken to consolidate the department in order to build a stronger sense
of community.

Unit's response: We strongly agree with the principle behind this recommendation. We are engaged in conversations with other departments to start this process, but it will take some time to do this reorganization.

• Recommendation: The Department should consider a modified organizational structure to improve communication between the Department Head and the Faculty and Staff.

Unit's response: We agree. Associate Heads for Undergraduate and Graduate Studies will be appointed shortly. Modifying the staff structure is a high priority for the department.

• Recommendation: We recommend that the course requirements for the BA and BSc degrees in Math and the program in Mathematical Sciences be reviewed.

Unit's response: This will be undertaken in the intermediate term.

Irvin K. School of Arts and Sciences

Department of Chemistry Reviewed March 12, 13, 2019

Highlights and Key Findings:

- The Department's commitment to excellence in the undergraduate experience shone through during the visit. The Department of Chemistry faculty and staff work cohesively in providing a consistent learning environment throughout the entirety of all BSc programs.
- The Department is actively engaged in innovating in education, including designing a flipped classroom approach to teaching first year chemistry, a project management training initiative, initiatives to improve student skills in data generation, analysis, and communication.
- The students at UBCO are performing high quality research and publishing in top-tier peer-reviewed journals, which justifies support at the level consistent with the UBC system.
- Concurrently with the external review of the Department of Chemistry, the Canadian Society for Chemistry (CSC) is responding to the application for accreditation of the Chemistry Majors, Chemistry Honours and Environmental Chemistry programs at UBCO.

Key Recommendations and Unit's Response:

- Recommendation: UBCO should provide additional support for innovative teaching and learning initiatives, and should explore options for sustained or longer terms grants for educational innovations.
 - *Unit's response:* We agree with the review committee that UBC Okanagan should provide more institutional support for development of innovative teaching and learning. The department has put forward a request for funding for a program for exceptional 2nd year students.
- Recommendation: The Department/Faculty should provide appropriate and sufficient office space for graduate students, keeping graduate students together to the extent possible so they can interact, build professional relationships, and learn from each other.
 - *Unit's response*: Again, we agree, but there is currently no space available. Graduate students are scattered between 2 buildings. This may limit interaction amongst the grad students as a whole.
- Recommendation: The Department should review the principles for allocation and assignment of teaching
 responsibilities for faculty, and the teaching efficiency of the Department (minimize the number of courses
 offered by the Department, while maintaining the number of students serviced by the Department).
 - *Unit's response*: We feel we have a very lean and efficient program. This has resulted in keeping teaching loads lower for research intensive faculty. Teaching loads are determined by the amount of research activity that a professor participates in.
- Recommendation: The Department should consider engaging a central Outreach Coordinator associated with the Faculty/Institution

<i>Unit's response</i> : The chemistry department does extensive outreach. The coordinator in chemistry currently works with people from Biology and other departments to stage outreach activities. She also works with a UBCO outreach person