



December 6, 2022

To: UBC Vancouver Senate
c/o Amandeep Breen, Academic Governance Officer, Senate & Curriculum Services

From: Gage Averill, Provost and Vice-President Academic, UBC Vancouver



Re: Annual Report to Senate on External Reviews, 2021-22

For information:

I am pleased to attach a report summarizing the External Reviews of Academic Units at UBC Vancouver during the 2021-22 academic year.

Thirteen academic and administrative units were externally reviewed. Summaries of the external review reports and preliminary responses from the units are attached (with the exception of two that are deferred to the 2022-23 report). We are most grateful to the faculties and administrative units for their work in providing these summaries.

External Review Summaries:	Page:
• School of Nursing.....	3
• Department of Political Science	5
• Faculty of Dentistry	6
• Information Technology Services	8
• Learning Exchange.....	10
• Library.....	12
• Department of Anaesthesiology, Pharmacology & Therapeutics.....	14
• School of Audiology and Speech Sciences	16
• School of Biomedical Engineering.....	18
• Vancouver Coastal Health Research Institute.....	20
• Department of Microbiology and Immunology	22



Mid-Term Progress Reports on External Reviews:

The following units and program were reviewed in the 2018-2019 year, and thus are now at the approximate mid-point between reviews. They have submitted update reports to the Office of the Provost & VP Academic on the status of implementing the recommendations. Our thanks for their diligence in keeping us up to date on progress made.

- Master of Laws in Taxation
- Department of Chemical and Biological Engineering
- Department of Civil Engineering
- Department of Mining Engineering
- Department of Central, Eastern and Northern European Studies
- Department of Classical, Near Eastern and Religious Studies
- Faculty of Land and Food Systems
- Centre for Blood Research
- Sustainability Hub
- Vantage College

School of Nursing, Faculty of Applied Science

Summary of External Review: October 2022

Key Findings of the Review Committee:

- *There has been considerable growth in the School in the last five years.*
- *The school is on stronger financial footing.*
- *The School's leadership in anti-racism, cultural safety and humility is timely and critically important.*
- *A particular strength is the research and scholarship of faculty and the growth of the research chairs (CRCs, CIHR, MSFHR, practice).*
- *There is great support and admiration for the School within the University and externally in the professional community.*

Key Recommendations of the Review Committee:

- *The use of research areas of excellence could advance the School's contributions to high-value research that would be relevant to the public mission.*
- *Students may need further information about the processes to deal with specific complaints (e.g. bullying) and opportunities to engage with Faculty and the School in optimal ways.*
- *Recruitment of Indigenous Faculty needs to be a priority to meet goals emerging from the Cultural Safety and Humility plan.*
- *The Nurse Practitioner Program is a likely place to focus resources for team-based care learning as nurse practitioners are integral primary care providers across the province, particularly in rural and remote areas.*

School's Response:

- The department agrees that recognition of areas of research excellence are a strategy that can promote collaborations throughout UBC, but even more importantly, can support leadership of national and international collaborations in priority research areas.
- Through their Anti-Racism Committee and Indigenous Cultural Safety Committee, the School has been engaged in developing culturally safe and anti-racist approaches for addressing specific types of complaints, including various forms of bullying experienced in some clinical settings.
- The School fully agrees with the priority to recruit Indigenous faculty and is happy to report that three efforts, which were in process but not complete during the external review, have been achieved. First, they secured funding to hire a part time Indigenous Nurse Lead for the School to support student recruitment. Second, the School secured funding that will trigger President Academic Excellence Initiative funding for a Nursing Professorship; and third, the School will develop a recruitment support program for recruiting Indigenous nurses into graduate education and supporting their success.
- Team-based care is an important existing part of the NP curriculum, as a prominent part of the theory and practice content and we consistently include practice placements for NP students in the growing number of team-based primary care settings throughout the lower Mainland. However, the School also recognizes the priority that the BC Ministry of Health places on integrating RNs more widely into primary care settings as an integral part of team care. We are working with other health professions as part of UBC Health to develop team-based practice education opportunities, including for our BSN students. In terms of rural and remote practice, while we do incorporate some content around rural

and remote NP practice models, we feel that our program is better suited to provide theory and practice content focused on urban and suburban primary health care. However, we are in conversations with the other NP programs in BC about the potential for post-graduate continuing education offerings grounded in each of our specific areas of expertise, which could complement our main education for entry to practice as NPs in primary health care.

Department of Political Science, Faculty of Arts

Summary of External Review: March 2022

Key Findings of the Review Committee:

- *The Department has made substantial progress on its five core strategic goals:*
 - 1) *enhancing research excellence*
 - 2) *broadening transformative learning experiences*
 - 3) *expanding community engagement*
 - 4) *increasing Indigenous engagement*
 - 5) *enhancing diversity, equity and inclusion in all its undertakings*
- *As a result of these achievements, it has earned a high national and international research reputation.*
- *The Department's record of excellence in its core mission of teaching and research, has been facilitated by significant growth in the number of its undergraduate students, faculty, and staff.*

Key Recommendations of the Review Committee:

- *Faculty retention – Faculty and University support will be required for faculty retention packages.*
- *Graduate student funding – There needs to be a new funding formula to attract top graduate students.*
- *The Department needs to maintain a sense of collegiality and community that has historically been strong but recently challenged and greater transparency in workload.*
- *Continue diversification of the faculty, including of Indigenous, women, and faculty of colour.*

Department's Response:

- Retain faculty, especially “excellent recent hires” who add to the Department’s research, teaching and equity goals.
- Reinforce the Department’s tradition of collegiality and trust among faculty members through new faculty mentorship and by engaging a workplace mediation firm.
- Optimize PhD program and support efforts to reduce student time to completion.
- Amend annual report form to include space for faculty to talk about additional workload (including invisible labour).

Faculty's Response:

- The Department Head has already met with the Associate Dean of Equity, Innovation, and Strategy and the Associate Dean Academic to discuss ways of enhancing a culture of collegiality and trust especially among more recently hired faculty.
- The Department might work with the Associate Dean Equity, Innovation, and Strategy on the Indigenous Strategic Plan Implementation to address ways of further Indigenizing the curriculum and fostering a greater sense of equity overall (especially around workload).
- The Faculty can liaise with the Department and University to address issues of retention.
- The Faculty can work more closely with the Department around student advising and writing supports.

Faculty of Dentistry

Summary of External Review: January 2022

Key Findings of the Review Committee:

- *The Faculty, students, and staff are dedicated and have a sense of purpose, commitment, and pride in their roles.*
- *There is an excellent relationship with UBC's central administration and other Deans and Faculties.*
- *There have been excellent efforts by the Dean to keep the Faculty financially sustainable and there has been great success with fundraising.*
- *The FoD and the Dean have been attentive to a diversity in its workforce and student population, focusing on Indigenous student candidates for various academic programs.*
- *Measures and proactive initiatives to promote student well-being – particularly since the onset of COVID-19 – have been implemented.*
- *There are strategic changes to the DMD program including:*
 - *The creation of a simulation lab is aimed at improving pre-clinical education while concurrently opening up clinical space to enable increased clinical activity.*
 - *The international program with increased enrolment for the DMD class will diversify its student population while providing increased revenue which, in turn, will help sustain the FoD's financial viability. Furthermore, this will open up the possibility of other capital projects, such as external community clinics.*
- *The development of a dedicated Simulation and Digital Dentistry Lab is aimed at improving pre-clinical education while concurrently opening up clinical space to enable increased clinical activity.*
- *The Faculty has an exceptional history of research achievement and faculty members are seen as national and international experts in their fields.*
- *The specialty training programs are very successful.*
- *The FoD has a long history of strong and positive relations with the regulatory agencies and professional organizations. The Alumni office is extremely strong and effectively engages its alumni. Its Continuing Dental Education division is also very strong and actively engages its external community.*
- *The pandemic was a significant challenge for all dental schools worldwide – this was managed very well at the FoD enabling programs to continue under extremely challenging conditions.*
- *The Committee noted internal concerns with regard to the direction of the operational plan and lack of succession planning around retiring faculty.*
- *Lack of Associate Deans for Research and Academic may be hindering the Faculty's mission and its representation with the external community.*
- *The governance structure and reporting relationships are not always efficient concentrating tasks at the Dean level.*
- *The clinical faculty are seen as the major asset to the DMD program. There is an absence of clinical support staff, which is a problem found nationwide. The Committee heard that availability of clinical faculty and support staff may be insufficient to manage the increase in the DMD class size.*

Key Recommendations of the Review Committee:

- *Continue with plans for enrolment changes to the DMD program; however, as class size is increased, monitor the availability of clinical faculty, support staff and clinical supplies to ensure they are sufficient to provide an appropriate learning experience and patient care.*

- *Enhance communication between leadership and the FoD internal community so that the latter feel heard in order to facilitate engagement and to make the Faculty's vision a shared one, which will in turn enable the strategic plan's initiatives to be implemented successfully.*
- *Reconsider the governance structure by exploring opportunities to appoint the positions of Associate Dean Research and Associate Dean Academic, each of which would report directly to the Dean and be empowered to manage their own portfolios.*
- *Develop faculty recruitment priorities to indicate a succession plan to help clarify future directions in research and education.*

Faculty's Response:

- There is a shortage of clinical staff especially Certified Dental Assistants across Canada. We have been actively working closely with UBC's central HR exploring different avenues to advertise and attract possible candidates. We will continue to work with our clinical staff and central HR to find a creative way to overcome this shortage. One measure under consideration is the investigation of providing a Certified Dental Assistant Program in the Faculty.
- Through strategic planning, we are working to determine the needed number of full-time clinical faculty to better serve our academic program in a stable, reliable manner that is not so dependent on unsalaried sessional clinical faculty. For Fall 2022, we have hired nine new clinical faculty members focused in restorative dentistry and prosthodontics. We are excited about expanding our cadre of talented, dedicated clinical faculty members at this magnitude for the first time in decades.
- A critical priority is, and will continue to be, the improvement in the effectiveness and management of communication between senior leadership and our internal team members or "community" in order to continue to focus our vision as shared by faculty, staff and students. Focussed "State of the Faculty" sessions have been presented to departments, staff members, all DMD and dental hygiene classes, and graduate students since the external review. These sessions, as all Faculty general meeting, Faculty Council and Town Halls, were recorded and posted for those who could not attend.
- We have actively sought to fill the position of Director of Research internally for several years and had identified a candidate who has been representing the Faculty at UBC VP Research meetings; however, as the candidate will now be stepping into a CRC position focusing the majority of their time on their research, we are resuming the search. The Research Advisory Committee has continued to meet regularly and be active and complete key functions in a timely manner.
- Some faculty have been supportive of having an Associate Dean Academic position, and this will be investigated further in a broader context related to the various academic program needs, strategic plan implementation and objectives moving forward, as well as the Faculty's finances.
- We do have a new position of Executive Director Administration, Finance and Resources, sitting within the central UBC Comptroller's Office and replacing the Director of Finance, and the position's broader mandate has allowed for clarification of staffing reporting lines within our Faculty.
- We are actively addressing the awareness of succession planning for retiring research faculty based on academic program needs. Our Faculty is now using the needs of our academic program as a top priority in hiring; this concept also applies to identification of research intense faculty. Hiring plans for both departments are being more broadly distributed across the two departments so Faculty are better informed and can ask questions. In addition, presentations are provided to the faculty at our General Faculty Meetings by both Heads on the developing successional hiring plans. These presentations will also be extended to our staff and students for their information and comments.

UBC Information Technology
Summary of External Review: March 2022

Key Findings of the Review Committee:

- *Internal and external IT colleagues have great respect for the CIO and her leadership team. The Committee heard deep appreciation for the CIO's effectiveness in leading the portfolio, enthusiasm for collaboration, engagement with stakeholders, and unwavering commitment to building a strong IT leadership team.*
- *The Committee was impressed by the dedication and commitment of the staff of UBC IT, both Vancouver and Okanagan.*
- *UBC has made remarkable progress on its enterprise systems implementation; at the same time, more broadly the IRP and the pandemic have consumed significant human and fiscal resources, and the committee heard concerns about the capacity to take on major projects or programs. Real focus on technological advances in cybersecurity and infrastructure must be undertaken at a more rapid pace to achieve the UBC Digital Vision and Strategy once finalized.*
- *There was broad consensus among all interviews that the funding formulas for IT needed a comprehensive re-examination.*
- *The leadership and narrative surrounding UBC IT and UBC Digital Strategy and imperative must be elevated substantially.*

Key Recommendations of the Review Committee:

- *The CIO should be at the President's Executive table. The ambition and scope of the digital transformation initiative at UBC requires a clear and consistent voice at the executive leadership table.*
- *Undertake a review of IT funding across UBC including UBC IT, to help to clarify the current state and provide more support and awareness for a new funding model. Transparency in all aspects of IT funding and investment, including IT funding formulas, will be a key success factor going forward.*
- *The UBC IT Governance framework, in its entirety of processes, decision making and funding decisions, including how items are brought to governance, must be communicated to the campus community.*
- *Create an IT Student Advisory Council or similar with regular meetings and opportunities for the CIO and the UBC IT team to listen and engage students in strategic planning and execution.*
- *The CIO and UBC should develop an IT workforce strategy that outlines key skills and competencies required to deliver in the future, including learning and development opportunities for current IT personnel to develop those skills as part of the retention strategy to support the campus in the future.*

Unit's Response:

- *The optimal level and positioning of the CIO relative to the institutional organizational structure is part of a broader conversation. The key points raised in the review regarding the need to properly integrate and align the technology and University strategy, in addition to timely engagement and input on how best to enable strategic initiatives, are well received. The Vice-President Academic & Provost Vancouver and Deputy Vice Chancellor and Principal Okanagan have taken steps to ensure the CIO and the IT portfolio are integrated into institutional decision making within their portfolios.*

- Funding for existing IT services, as well as obtaining funding to sustain newly implemented systems and services, poses significant challenges. We are entering a time of inflationary pressures: supply chain issues, software and hardware agreements that are subject to significant price escalations, and attracting and retaining talent in the IT sector is putting pressure on salaries. UBC Finance has recognized these issues and has expressed support for the comprehensive review proposed in this recommendation, with planning underway for the review process.
- A communication planning and engagement exercise is underway to ensure the current IT governance process including policies and funding mechanisms are better understood. The Office of the CIO tracks and allocates the operating funding from the IT Small Capital Fund based on approvals under UBC Capital Policy FM11, while oversight is provided by an arm's length body – the IT Capital Planning Committee (ITCPC), comprising administrative and academic leaders from across UBC.
- Incorporating the student voice and perspective into IT planning and execution is critical, particularly with the onset of the Digital UBC Framework. Initial discussions on this topic indicates that this recommendation presents an opportunity to work collaboratively across both campuses, to use existing mechanisms where they exist, and bring together a single advisory body that includes the broader aspects of student experience.
- The recommendation to develop an IT workforce strategy is very timely. There is an existing strategic workforce strategy and framework in place. However, it has been on hold pending the update of the IT Strategic Framework. The current plan is to complete the digital framework by Spring 2023, with the UBC IT plan and roadmaps. This will form the basis for the next iteration of the IT workforce strategy that will allow for team-based career planning. We will also be focusing on individual teams that will be most impacted by the expected transition from the Student Information System (SIS) to Workday.

UBC Learning Exchange

Summary of External Review: December 2021

Key Findings of the Review Committee:

- *The Learning Exchange reflects and exemplifies the university's commitment to community engagement and contributes significantly to the UBC Strategic Plan. It is unique in the Canadian university context and is a strong model for place-based community engaged units that serves as an exemplar for post-secondary institutions to draw from.*
- *The Learning Exchange model is at a point where it would benefit from a re-envisioning and renewal, and we recommend a new strategic plan to replace the 2013-14 version.*
- *The budget has grown significantly since 2016-17 and a \$450K structural deficit has emerged, which, if not corrected, will result in elimination of 10 of the 20 staff and student staff positions.*
- *Staff have an extraordinarily high level of commitment to their work, each other, and the DTES community. Staff fill many roles beyond their formal positions. The committee expressed concerns about stress and mental health, and job stability.*
- *While the Learning Exchange already engages with several units, especially academic units, offering support for students, courses and research, there are some units that have less engagement than might be anticipated.*
- *Challenges associated with the LE's current space are well recognized. The university invested in renovations in 2019-20 and has supported the LE's quest for more suitable space. The need for new space is exacerbated by the threat that the LE will be evicted from its current site as the building is redeveloped.*

Key Recommendations of the Review Committee:

- *A renewed strategic plan for the Learning Exchange should be developed to identify priorities and explore new ways of meeting core needs of the community it serves.*
- *The university should confront the structural deficit and adequately support the LE's general purpose operating fund budget to accommodate current activities as well as plans for future growth.*
- *Develop a communications strategy with dedicated resources to amplify the stories and recognition of their work and impact in community engagement and the DTES.*
- *We recommend a review of current staffing, job descriptions and salary classifications with appropriate consideration of the unique character of the work. We also recommend that on-going positions be continuing, not subject to short-term renewals.*
- *We recommend that the Learning Exchange's connections across the university be reviewed with the intention of broadening and deepening collaboration with units across the university.*
- *We recommend the university resolve the current ambiguity related to the Learning Exchange's space and location.*
- *We recommend that UBC continue to support the LE and the DTES community based on its strong record of achievement and acknowledged reputation.*

Unit's Response:

- *We fully agree with the recommendation to develop a renewed Vision and Strategic Plan. We propose an 18-month timeline which will enable us to involve the new Academic Director as a priority activity during their first year. We will seek input from academic leadership and collaborators*

at UBC to determine how best to involve the wider university and DTES communities in the strategic planning process.

- We have received confirmation that \$350,000 of our \$450,000 structural deficit will be covered in 2022-23. However, this one-time funding does not adequately respond to the reviewers' recommendation for GPOF to address the ongoing structural deficit. Without this budgetary stability, our capacity to respond to all the other recommendations in the external review is limited. [Updated response: We've now received confirmation that \$450K will be handled somehow, but the source for \$350K has not been confirmed.]
- A communications strategy and dedicated resources are critical to our capacity to strengthen connections across UBC, facilitate strategic planning and support multiple institutional communications priorities. An in-house staff role is needed to understand the unit's context and sensitivities.
- A review of current staffing and a move from short-term to permanent positions is dependent on satisfactory resolution of the budget deficit. We continue to integrate tailored wellness supports into multiple aspects of team meetings, culture and one-on-one supervision and are exploring stronger connections to additional supports available for front-line workers in the DTES and community care settings. It is our intent to make positions ongoing as soon as we have certainty about our future GPOF budget.
- The Learning Exchange has substantial, long-standing connections across the university (over 200 individual faculty and staff from 18 Faculties and administrative units). Opportunities for the Learning Exchange to play a strategic and practical role in coordinating other UBC units / departments in the DTES would be identified as part of the strategic planning process. We offer support, coordination, and assistance with orientation to the DTES and advice, especially to new UBC members.
- The Property Committee of the UBC Board of Governors granted preliminary approval of the Learning Exchange Relocation: Space Purchase and Tenant Improvement Project. It is anticipated that full Board approval will be granted in December 2022 [Update: March 2023].

UBC Library

Summary of External Review: March 2022

Key Findings of the Review Committee:

- *“Overall, we saw a strong research library that is greatly appreciated by its academic and research communities. There are challenges, but from our perspectives the organization is on the right path to address them.”*
- *To be fully attuned to the academic directions and day-to-day academic activities of the University, the UL needs to be in the regular orbit of the Faculty Deans. The UL was included in a regular meeting of the Deans in the past, but the practice changed during the pandemic.*
- *Looking at organizational charts and asking questions in our discussions, it is unclear who has decision-making responsibility for different financial functions and many Library financial decisions are made by the Provost Office.*
- *If we were to choose a single word to summarize how UBC Library is seen by key stakeholders today, it would be “engaged”. Internal and external comments confirmed that the Library has a tone of openness and connection and engages in the community in meaningful ways.*
- *Positive and collaborative relationships exist within the Library Executive Team; however, this improvement has not yet permeated the organizational structure.*
- *Strategic EDI leadership will be included in the Deputy Librarian role, with the idea that everyone in the organization shares responsibility for EDI; but it also needs to be facilitated by a senior individual who can take responsibility for ensuring EDI is supported in policies, structures, and resources.*
- *The work of the Xwi7xwa Library sits within a campus that has numerous Indigenous faculty and courses with Indigenous content across disciplines, and a wide range of programming in the FNHL. It is a library branch but supports UBC as a whole.*
- *Under the leadership of the UL, the Library has engaged in developing a strategic framework that will serve the University well, and it should have an overarching strategic approach. Establishing leadership responsibility for planning and assessment, including the resources and tools to continually track progress ensures that the framework will be a living document.*

Key Recommendations of the Review Committee:

- *The University Librarian should be included in regular meetings of the Faculty Deans.*
- *Perform a 360 review of the finance function of UBC Library to better understand and address the perception of barriers and lack of trust and to clarify UBC’s financial structure and the budget responsibilities of the UL.*
- *Engage in a strategic organizational review to thoughtfully consider organizational structure and ensure the Library is optimally designed to support its strategic framework and ongoing operations.*
- *Assign leadership responsibility for strategic planning and assessment (and ongoing evaluation of progress) to a position within the Library Executive Team.*
- *Move forward with establishing a senior leadership role responsible for EDI strategy, and continue to focus on policies and processes to advance EDI in the Library’s workforce, collections, services, and spaces.*
- *In reviewing organizational design, consider the needs of the Xwi7xwa as a Library-wide unit facilitating engagement and support for Indigenous initiatives across the University.*

Unit's Response:

- In April 2022, the UL coordinated with the Provost and VP Academic pro tem to be included in regular, ongoing meetings with UBCV Faculty Deans.
- The UL will coordinate the process of a review of the Library's finance functions with the Provosts and VPs Academic.
- The Library has begun to reimagine the committee structure, transitioning to teams, working groups and communities of practice. The key goal is to create groups of people with the appropriate knowledge and skills to work together across the system, on both campuses, to best fulfill our strategic directions outlined in the Strategic Framework. The transition to a new centralized Technology, Discovery and User Experience Unit has already begun. The Library also plans to create a holistic, Library-wide approach to metadata, discovery, and the user experience. The recruitment process for a new Head of Collections Services is underway, a role that will be charged with identifying and prioritizing unmet information needs and balancing collection development needs and requests from across the Libray system with the capacity of the team.
- The Library plans to initiate an external search for a Deputy University Librarian as soon as possible, a position that will take on the responsibilities of coordinating and combining JEDIA strategy (Equity, Diversity and Inclusion along with Justice and Accessibility), sustainability, related strategic and fiscal planning, assessment and ongoing evaluation. This will allow the Library to gather data and report for inclusion on the Indigenous Strategic Plan, the Inclusion Action Plan and other reports. EDI teams have been created on both the Vancouver and Okanagan campuses as well as an Inclusion Action Plan Implementation Steering Team and Indigenous Strategic Plan Library Implementation Steering Team.
- The unique resources of the Xwi7xwa Library are valuable to the Library and the entire university in its pursuit of reconciliation. The Library's ISP Implementation Steering Team will work with the Xwi7xwa Library team to help integrate the ISP Action Plan into systemwide work, and to broadly recognize and support the work of the Xwi7xwa Library team in implementing the ISP at UBC.

Department of Anesthesiology, Pharmacology & Therapeutics - Faculty of Medicine

Summary of External Review: November 2022

Key Findings of the Review Committee:

- *The Department of Anesthesiology, Pharmacology & Therapeutics is a diverse Department with approximately 25 academic faculty and over 500 clinical faculty. The merger of Pharmacology and Therapeutics with Anesthesiology was voluntary but not without problems that led, at the time of the last Departmental review, to considerations of whether separation would be the best solution moving forward. The combination of faculty turnover and new governance structures, however, has led to a more positive environment and increased integration.*
- *A major concern is ensuring the academic sustainability of the Department. This includes finding ways to renew and expand upon the number of academic anesthesiologists. The current number of five does not provide sufficient "critical mass" to ensure a strong academic presence within the University. The Faculty of Medicine also has a major role to play in addressing this issue. This involves not only ensuring that positions that become available from Departmental retirements be used for new Departmental recruitments, but also seeking ways to obtain new full-time academic positions from the University for academic anesthesiologists. It is also critical to develop pathways by which clinical faculty who obtain competitive salary and operating funds and establish a research program can transition to permanent academic positions.*
- *A number of challenges face the clinical mission. The committee recommends that the Department be involved in any discussions regarding alternative payment plans, and that this should be done "department-wide" rather than at individual care sites. The committee believes that the proposal by the Ministry to train alternative anesthesia care providers (nurse anesthetists) represents an existential threat to the Department as an academic specialty and will negatively impact patient care.*

Key Recommendations of the Review Committee:

1. *The committee recommends that the Department of Anesthesiology, Pharmacology & Therapeutics remain as a single entity. The Committee believes that the Department has made significant strides in overcoming past issues and that changes in the Governance structure have permitted enhanced involvement from all academic groups. The committee does still see significant concerns in finding pathways to make clinical faculty feel greater partnership in the academic missions of the Department. As one step in this direction, the majority (but not all) of the committee believe that efforts should be made to appoint an anesthesiologist to be the next holder of the Patient Safety Chair when this becomes available.*
3. *The committee recommends development of plans to address issues of sustainability. This includes finding ways to recruit and secure funding for Clinician Scientists to examine potential pathways by which clinical faculty who obtain competitive salary and operating funds can transition to academic positions.*
4. *The committee recommends that the Department engage in discussions with the Vice Dean - Education about enlarging the undergraduate pharmacology program. The Program Director believes the program could almost double in size with some logistical and financial support from the Faculty of Medicine.*
6. *The Committee recommends that the University, FOM and Department further engage with the Ministry regarding its plan to train alternate anesthesia care providers. These proposed changes not only represent an existential threat to the Department of APT as an academic specialty but also will have negative impact on its ability to provide excellent anesthesia care to the population of BC.*

Department's Response to the Key Recommendations:

1. Department's response to recommendation 1:

- While some clinical faculty strongly feel that the specialty of anesthesiology is not served well by the merged department, the reality is that there are few academic anesthesiology positions available at present and the non-anesthesiology academic faculty provide a strong support system for faculty renewal applications, collaborative research opportunities and as such represent a benefit to the department. There is general agreement that the merged department is now cohesive and should continue.
- With respect to the Patient Safety Chair there are some major issues outlined below that will need to be discussed with the Dean's office and UBC that impact the ability to recruit anyone into the position when Dr. Maclure retires in 2024:
 - 3 million dollar endowment is insufficient to support a senior tenured faculty member.
 - The original TOR have some errors that should be corrected prior to the next search.

3. Department's response to recommendation 3:

- This recommendation is tied to Recommendations #1 and #5 and is foundational to the Department moving forward. Ideally the way forward is to forge an academic practice plan with interested clinical sites. This is the way that the other University Departments of anesthesiology in Canada have been successful in supporting academic activities, but it requires 'tithing' of clinical faculty in order to provide the budget needed to support academic anesthesia. To date, this idea has not been supported even minimally by clinical faculty.
- 'Transition to academic positions' is at the present time limited entirely by financial concerns. As the department currently holds budget for only a handful of clinician scientist positions (5), the options of grant tenure and partner positions need to be explored more although both of these provide risk to the faculty member.
- We need to double the number of academic anesthesiologist positions in order to create a sustainable pattern of research mentorship and productivity.

4. Department's response to recommendation 4:

- The Department would like to have its renovation request of the Medical C building basement where our teaching labs are housed reviewed by the Vice-Dean Education and ask that it be funded, as without renovation of the basement of Medical Block C we cannot expand the program. This renovation plan was recently unsuccessful in receiving funding from UBC Central (we were one of two requests put forward by Faculty of Medicine).
- The Department again noted how Medical Block C is one of the oldest buildings on campus and has received no substantial renovation to the Pharmacology/Therapeutics spaces in the last two decades.

6. Department's response to recommendation 6:

- The UBC Department is part of a provincial Anesthesia Council that has representatives from each Health Authority in BC, the provincial family practice anesthesia lead, and the BC Anesthesiology Society. This council was brought together on our initiative and has been meeting formally with the Ministry of Health since January 2021, to discuss how to improve anesthesia services supporting the MOH's surgical renewal plans. The council has provided a multi-pronged approach including moving forward on the regulation of Anesthesia Assistants, providing ongoing supported training for AAs, expanding the anesthesiology residency program (done as of July 2022), continuing with the BC Clinical Anesthesiology Fellowship program that is supported by MOH, and continuing to develop the Anesthesia Care Team model in BC.
- Clinical sites have already noted some late 'recruitment failures' from other provinces because of concerns over having nurse anesthetists working in BC. In addition, at the March 2022 Anesthesiology CaRMS interviews, multiple applicants asked about nurse anesthesia in BC, and expressed concern about training and working in a province with a model of care that includes nurse anesthesia.

School of Audiology & Speech Sciences, Faculty of Medicine

Summary of External Review: November 2022

Key Findings of the Review Committee:

- *SASS is a small academic unit within the Faculty of Medicine. It has a significant structural deficit. With 12 full-time academic faculty members (including only one full professor and 6 clinical faculty) and over 500 community clinical educators, it offers i) resource-intensive, experiential master's programs in Audiology and Speech-Language Pathology (SLP) with a MSc thesis option, as well as ii) a PhD program. Altogether, these degree programs attract modest tuition revenue. The feasibility of continuing the MSc thesis option in light of the total number of program options offered is unclear and should be examined.*
- *The prospect of a future distributed seat expansion affords SASS opportunities for additional growth as well as transformative innovations in interdisciplinary research, experiential and distance pedagogies, and Indigenous- and EDI-informed curriculum renewal. This opportunity builds well on SASS's national leadership in Indigenous curriculum. It is important that SASS be optimally prepared to leverage any seat-expansion opportunity which will undoubtedly tax its resources and practices in the short term. Longstanding concerns with low morale and problematic organizational and administrative processes will need to be addressed and strategic planning will be key. Such work will be challenging since the School does not have a practice of School-wide strategic planning and currently has no explicit strategic plan.*
- *There is a need to enhance the School's research program and output. Greater research impact could be achieved through stronger investments in PhD-level students and education and a clear focus on interdisciplinary collaborations with research institutes, cognate disciplines, and units within the Faculty of Medicine and across UBC.*

Key Recommendations of the Review Committee:

1. *SASS should support and promote strategic thinking and visioning among all its members and aspire to embed this perspective as a cultural cornerstone of the School. SASS should engage in expert-led, inclusive School-wide strategic planning. SASS strategic planning should align fully with UBC's and the Faculty of Medicine's Strategic Plans and should begin immediately. It should focus on goals, metrics of goal attainment and actionable plans for achieving these outcomes. Individuals with specific strategic-planning expertise from across UBC and/or the Faculty of Medicine should be identified to support and lead this process. Strategic planning should consider the following domains: a. Research; b. Education, curriculum and pedagogy; c. Financial and human-resource sustainability; d. Partnerships and collaborations; e. EDI and Indigenous engagement; internal governance, organization and administration.*
2. *SASS will benefit from increasing collaborative research and scholarship with research institutes, cognate disciplines and departments across the Faculty of Medicine and UBC. The School should actively seek opportunities to engage in and/or lead partnerships and joint initiatives including joint faculty positions, research chairs, PDFs, and graduate-student academic and clinical opportunities.*
3. *SASS should develop an organizational framework to conceptualize the promotion pathways of current and future junior, mid-career and senior academic faculty. It should develop new mentoring initiatives to equitably support academic faculty throughout the various stages of the career-long promotion process, taking advantage of resources with the Faculty of Medicine and across UBC, and encourage faculty to pursue full professor rank. SASS needs to develop a mentored research planning process within which all academic faculty set clear goals for increased research capacity and outcomes (research funding, research personnel, research time, and research publications) and develop plans to achieve those goals.*
4. *The School should prioritize its work in curriculum renewal, focusing on learning outcomes, competencies, EDI, foundational knowledge in the MSc, and elaborating/clearly articulating the PhD curriculum. Linking curriculum renewal with the distributed seat-expansion plan is seen as particularly important. The School*

should examine the costs and benefits of the MSc thesis program as currently designed and consider whether (i) resources should be shifted to the PhD training program or (ii) the MSc thesis program can be redesigned to more efficiently produce the desired research outcomes. A thorough examination of the appropriateness and viability of a stand-alone PhD program should be undertaken, particularly given concerns among SASS faculty about meeting the new annual PhD guaranteed funding level of \$22K.

School's Response to the Key Recommendations:

1. Many of the School's current activities and priorities align well with the FoM and UBC strategic plans, as noted in the self-study document and by the review committee throughout their report. This congruency with the FoM strategic plan reflects the School's longstanding commitment to carrying out its mission and its responsiveness to opportunities provided within and beyond the University. Nevertheless, the School does not have a history of engaging in a systematic, recurring, and comprehensive strategic planning process, and this lack of planning, prioritizing, and envisioning has led to many of the challenges and concerns raised in the report. To address this historical weakness in strategic planning, the School will immediately seek support from UBC's Strategy and Decision Support team (Office of the Provost) and the Faculty of Medicine, to obtain the training, resources, and expertise needed to prepare for and facilitate a comprehensive School-wide strategic planning process.
2. Our self-study provides substantial documentation of the School's ongoing collaborations and partnerships with both internal and external (to UBC) parties in the areas of research, education and clinical training, yet there is always room for growth, capitalizing on new opportunities and strategically improving awareness of these initiatives across campus. These relationships, and increasing our capacity for collaborative research and initiatives, will be evaluated and explored as part of the School's strategic planning process.
3. In the past, faculty have periodically engaged individually (e.g., annual Director's meeting) and collectively in conversations regarding different approaches and strategies to increase research productivity. Formalized research mentorship programming has been implemented by some individual faculty members. We agree that there is a need for more structured ongoing discussions of research expectations, managing workload, and prioritizing research goals and means to achieve them. In order to promote continuity, consistency, and accountability, we will build a research mentoring component into our strategic planning framework.
4. The SLP curriculum renewal is currently an important focus for the School. It is being facilitated by a UBC CTLT curriculum expert who is well-versed in such initiatives. The SLP curriculum renewal will be a main component of the School's strategic planning process, which will include considerations for a possible distributed SLP seat expansion. The balance of time and resources allocated to the MSc and PhD programs is worth reconsidering, particularly in light of the committee's observation that the School has seen greater research output via the doctoral program. As we consider the MSc thesis option, we will examine all suggestions: the feasibility of offering the thesis, the possibility of redesigning the thesis, and our approach to advising students regarding process and expectations. We will also examine the potential advantages of incorporating our PhD program into a larger interdisciplinary program such as the Rehabilitation Sciences PhD program, particularly if a partnership would help address internal constraints that limit our competitiveness and exacerbate our very limited supply of doctoral funding.

School of Biomedical Engineering, Faculty of Medicine / Faculty of Applied Science

Summary of External Review: November 2022

Key Findings of the Review Committee:

- *The School was founded 5 years ago and has undergone remarkable progress, punctuated by the recent accreditation of the UG engineering program, numerous new faculty recruitments in research and teaching streams, a strong and healthy organizational culture, academic, community and leadership program, and unabated ambition and aspiration. The SBME also benefits from strong support from the two founding Faculties, from a well-recognized leader supported by a dedicated team, and support and enthusiasm by the many diverse constituents. EDI activities have been highlighted as exemplary from many different sides.*
- *The undergraduate program shone as another accomplishment, with the COOP program providing a strong added value. A direct entry into BME and a program without streams is supported by the committee, but conditional on the possibility for other Applied Science students to join it in year 2 and on providing guidance and templates for students to choose their path within such a broad curriculum. The rapid growth of the program created significant strain on teaching and space resources which, although met, will necessitate additional resources to meet the growing demand. Involvement of faculty in clinical units that have engineering expertise might be a source of educators that could be explored.*
- *The SBME recruitment plan to expand in strategic new areas and strengthen mid-career faculty is sound, but faces practical challenges, including scarce supply, high living costs, and partnership constraints. While the SBME benefits from outstanding leadership, a plan for succession and mentoring and promotion of internal faculty to administrative leadership is needed for sustainability. An actionable strategy to overcome those challenges while preserving partnerships will benefit the SBME.*
- *The governance structure and leadership was considered to be strong. Challenges that were identified include administrative complication in faculty recruitment, difference in procedures and timelines for tenure, and cultural gaps between Medicine and Applied Science with regards to required teaching and research expectations. The hub function of SBME makes communication to such a diversity of stakeholders an intrinsic challenge. Town halls with key stakeholders in FoM, APSC and other Faculties (such as FoS), could help strengthen mutual understanding with academic and clinical leaders to exchange perspectives, gain cross-cultural understanding, and work to ensure full recognition of all activities of cross-appointed faculty, and to harmonize deadlines and procedures for merit and tenure. An adjustment of the administrative organization and procedures that require dual approval should be evaluated to afford SBME the appropriate agility and autonomy for recruitment activities and initiatives. As a new unit, SBME is encouraged to develop its relationship with university advancement and develop strategies for long term sustainable projects, build strong partnership within UBC at large, and with external stakeholders including industry. The new building for SBME, the first of its kind in Canada, will address the critically needed infrastructure, and bring diverse stakeholders under the same roof; it is poised to play a catalytic role in the rise and consolidation of SBME research, educational, and innovation programs.*

Key Recommendations of the Review Committee:

Main

1. *Recruit additional mid-career or experienced faculty, to support and distribute leadership responsibilities, but without neglecting recruitment and mentoring of junior faculty.*

Governance, resources, EDI

2. *Provide specific recommendations for staff/faculty/students on how to increase and address EDI beyond awareness.*

Industry partnership

3. *Broaden and deepen partnerships with biomedical and biotech companies.*

Educational collaboration

4. *Have more co-op opportunities in BME related areas since there are more students interested than space allows.*

Department's Response to the Key Recommendations:

Main

1. We agree and this is underway. More senior recruits require a lot more time and resources to get into place. Continued assistance from UBC and the Deans' offices to help get these into place may be needed. Particularly it is anticipated that senior recruits and changing demographics of the SBME will put increasing pressure on the SBME budget over the next 5-10 years. A key goal for the SBME over this time-frame will be to reduce the burden of the SBME new building mortgage on SBME operations, with additional contributions from UBC and philanthropic priorities, as possible.
2. SBME will develop and adopt a workload and teaching assignment policy document and seek support of that document from its faculty and the FoM and APSC Deans' offices.

Governance, resources, EDI

3. The SBME EDI committee is very active and is similarly committed to moving beyond awareness into action. For example, our 2022 high priority actions were identified at our recent REDI retreat and operationalized at our first REDI meeting of the new year. Briefly, these priorities include:
 - Have regular REDI Town Halls (first in Feb 2022)
 - Present REDI principles and accessibility around the design of SBME's new building
 - Develop "bite-size" REDI training kits & facilitation packages that can be used by SBME groups (labs, etc.
 - Explore and implement REDI-related reporting strategies by community members)
 - Enable audio recording capabilities of all in-person lectures
 - Facilitate the formation of SBME Postdoc & RA Society

Industry partnership

4. This is underway. A recent expansion of the partnerships portfolio will enable wider engagement with local, national and international industry. We will continue to engage regularly with current and prospective partners through our current partnership avenues (education, research & innovation, and governance) across the breadth of SBME's research and education specialization areas. In addition to establishing new relationships, particularly with promising emerging companies, a current priority is to proactively identify and leverage opportunities to grow current partnerships by diversifying the way partners engage with the SBME. As we have done over the past year, our Industry Advisory Committee will be made aware of key SBME initiatives and opportunities to partner.

Educational collaboration

5. One key aspect of diversifying how our current industry partners engage with the SBME involves increasing co-op opportunities for our students. We will continue to explore an expanded intake of SBME students with current co-op partners, and increase awareness of our co-op program and student excellence to partners engaged with the SBME through other means. We will expand our efforts to proactively engage with emerging BME companies, which would offer particularly beneficial experiences for our co-op students. We will continue to leverage our close collaboration with the Applied Science co-op office to facilitate introductions to our partners, and to advocate for a BME co-op program expansion that is proportional to the growth of our undergraduate program.

Vancouver Coastal Health Research Institute, Faculty of Medicine

Summary of External Review: November 2022

Key Findings of the Review Committee:

1. *The review committee is supportive of the work performed to date by Dr. David Granville in his role as incumbent Executive Director, VCHRI.*
2. *As research and innovation towards advancement of clinical care is a clear goal for VCH, the VCHRI should be more formally integrated and officially recognized within the overall VCH structure. Recognition of the strategic importance of VCHRI should be elevated to more public prominence through a multi-pronged approach.*
3. *VCHRI should strengthen the 'institute' through reducing complexity and providing more of a unified home to its constituents with a stronger collective identity.*
4. *The affiliation agreements between VCH/VCHRI and UBC should be reviewed and renewed to account for current gaps.*

Key Recommendations of the Review Committee:

2. *Recognition of the strategic importance of VCHRI should be elevated to more public prominence through a multi-pronged approach:*
 - *VCH needs to publicly articulate and communicate its ambition for research in its overall vision and identity, clearly emphasizing and celebrating the role of VCHRI in its Strategic Plan.*
 - *VCH and VCHRI should develop clarity and aligned strategies so that research supports the larger mission and vision of VCHRI. This works reasonably well with UBC but not with VCH.*
 - *Closer collaboration with, and better integration within, VCH would enable VCHRI to encompass IDE and Indigenous recognition to a greater extent.*
 - *VCH should elevate the VCHRI Executive Director to a Vice-President of Research and Innovation at VCH reporting to the CEO. The VPRI should be a member of the Executive Team.*
3. *VCHRI should strengthen the 'institute' through reducing complexity and providing more of a unified home to its constituents with a stronger collective identity.*
 - *There is a significant opportunity to build synergies across programs and centres through more information sharing, joint seminar series, core facilities, training programs, etc. This would also serve to enhance collaborations and synergies across the research spectrum from basic science, clinical and translational science to health systems and policy research.*
4. *The affiliation agreements between VCH/VCHRI and UBC should be reviewed and renewed to account for current gaps. Revised agreements should:*
 - *Create clear accountability and responsibility for the leadership of VCHRI.*
 - *Clarify responsibility for clinical data sharing and the use of data for innovation and external partnerships; this needs further clarification and integration with UBC IP office.*
 - *Agreements should also address a shared approach to creating paths and structures to support and incentivize clinician-scientists, emphasizing to government entities the fundamental necessity of embedding research and innovation in leading excellence in healthcare delivery.*

VCHRI's Response to the Key Recommendations:

- *Dr. David Granville is committed to implementing the five-year VCHRI strategic plan and ensuring its alignment with priorities of the University of British Columbia (UBC) Faculty of Medicine and Vancouver Coastal Health (VCH). His vision is to continue to expand on the innovative and collaborative approach we take at VCHRI, and improve integration and collaboration across disciplines.*

2. VCHRI's Responses to Recommendation #2

- VCHRI closely aligns with VCH and provincial government priorities to support health innovation in British Columbia. Funding allocation for VCHRI has been consistent at ~\$1M annually despite the significant growth in personnel (from 1300 to 2400 investigators, trainees and staff) and expansion in research space (from 350,000 to 470,000 square feet) over the past 10 years. One must also take into account inflation, salary increases, repairs on existing, aging research infrastructure, increased computing demands, and other peripheral costs.
- VCHRI is considered one of BC's foremost clinical research/trial institutions where people with the most difficult health challenges come from across the province to participate in ground-breaking research and clinical trials. It is also recognized that the link to UBC's international status and reputation for research excellence is what enables VCH to recruit the very best clinicians to British Columbia. We are committed to integrating clinical needs and research excellence in alignment with VCH's strategic priorities. Specifically, our five-year strategic plan aligns with the VCH strategic priority of "Innovation for Impact." The research culture at VCHRI fosters innovation that translates into improved patient outcomes and population health. Equipped with its five-year strategic plan, VCHRI is ready to realize and implement "Innovation for Impact" through collective leadership, dedication to mission and collaboration.
- We endeavour to promote awareness and sensitivity around issues of inclusion, diversity, equity and Indigenous recognition at VCHRI. We acknowledge that a diverse and equitable learning and working environment is critical for training our future research scientists and improving the health care of our population. We will need VCH support to assess the current climate to enable the development and evaluation of existing/future programs aimed at IDE. Expertise and resources from both UBC and VCH are crucial to help promote an equitable research environment at VCHRI as well as to devise strategies that create positive spaces for Indigenous and minority individuals.
- Enhancing research representation on the VCH executive team -- similar to that of other leading research hospitals in B.C., Canada and across North America -- will ensure VCH/VCHRI is well positioned to respond to new opportunities, mobilize resources and expand its leadership through interdisciplinary innovation in research, education, health of populations and people-centered care.
- Intellectual property and commercialization are not the primary focus of the hospital. VCHRI must accommodate the needs of both UBC and VCH with respect to intellectual property and commercialization. A thorough, non-biased understanding of both UBC and VCH policies is necessary to succeed.
- We will work with VCH to create a revenue-enhancing strategy to support our priorities and operations. We will not only maintain, but also increase our regular and timely communication with all VCH leads in legal, HR, finance and IT.

3. VCHRI's Responses to Recommendation #3

- We will continue to promote a more integrated vision across the broader landscape of our centres and programs to break down silos while fostering interdisciplinary collaborations at the local, national and international levels.
- We will engage and involve the VCHRI Council in developing collective strategic goals to better integrate and align resource allocation and process optimization across centres/programs and clinical departments.

4. VCHRI's Responses to Recommendation #4

- We take great pride in knowing that our five-year strategic plan has emerged from a thorough consultation process with participation from our researchers, clinician scientists, trainees, and administrative personnel. This strategic plan is the product of our collective wisdom and contains a comprehensive and integrated series of defined goals to integrate research innovation and health care.

Department of Microbiology & Immunology

Summary of External Review: April 2022

Key Findings/Highlights of the Review Committee:

- *The Department thrives as an excellent unit, in both its academic mission of teaching and training undergraduate and graduate students, and PDFs, and in its research enterprise.*
- *The Department has an outstanding undergraduate program, which provides meaningful research experiences.*
- *The Department has a vibrant graduate program that has demonstrated impressive resilience over the last two years.*
- *The Department has an increasingly diverse faculty complement, and outstanding support for new faculty members.*
- *The Department has strong extramurally-funded research programs.*

Key Recommendations of the Review Committee:

- *The review committee recommends increasing the budget for administrative and technical support to enable the Department to better manage the increase in administrative tasks as a result of Workday and the expansion of undergraduate programs.*
- *The committee recommends to further building links with faculty in the area of microbiology and immunology appointed in other units.*
- *The committee recommends finding solutions to ensure that graduate students are supported in as equitable way as possible, noting the impact of the high and increasing cost of living in Vancouver.*

Department's Response:

- In the summer of 2021, a technician was hired to support course-based research experiences. The technician has successfully provided technical support and ensured safety for fourth-year students in these courses. The addition of a technician has freed instructors to be more focused on academic aspects of the course and to teach other courses to increase the breadth of their teaching portfolios. The proposed expansion of the MBIM majors program includes a request for funding to add to the technical support for our experiential learning courses.
- The Department is open to offering associate membership to faculty from other units, typically in the Faculty of Medicine. Membership is usually associated with supervision of students in our graduate program along with a teaching or service commitment. These relationships have developed organically from shared interest. The contributions of associate members are valued and we will continue to maintain and enhance these relationships.
- The Department reviews the guaranteed minimum stipend for graduate students annually with a 2% increase being the default outcome. At the last review in April 2022, the base stipend for MSc and PhD students was increased by 5%. The increase was to mitigate the higher inflation in basic living expenses. In a recent survey, the current base stipend is the highest in the Faculty of Science for graduate students that are not required to serve as a TA for part of their stipend. The department is creating more TA opportunities for students that wish to augment the base stipend.