



**External Reviews of Academic Units
Annual Report to UBC Vancouver Senate
January 14, 2022**

The following Academic Units or Programs at UBC Vancouver were externally reviewed in 2020-21 or the previous academic year. A summary of each review is included in this report. We are most grateful to the Faculties and Departments for contributing these summaries.

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Progress Reports on External Reviews (2017-18):

The following units are now at the approximate mid-point between reviews and have submitted update reports to the Office of the Provost & VP Academic on status of implementing the recommendations.

- Department of Electrical & Computer Engineering, Faculty of Applied Science
- Department of Materials Engineering, Faculty of Applied Science
- Department of Philosophy, Faculty of Arts
- Teacher Education Office, Faculty of Education
- UBC Enrolment Services
- Faculty of Graduate & Postdoctoral Studies
- James Hogg Research Centre, Faculty of Medicine
- Faculty of Pharmaceutical Sciences
- Department of Mathematics, Faculty of Science
- Department of Physics & Astronomy, Faculty of Science
- Department of Zoology, Faculty of Science

**Department of Anthropology
Faculty of Arts**

Summary of External Review: February 2021

Key Findings of the Review Committee:

- *Prominent international reputation for the high quality of its faculty and the impact of its scholarship as well as its leadership in modeling ethical community-centered partnerships with Indigenous communities.*
- *Uneven mentoring and career/professional development experiences.*
- *Longstanding issues within the Department, creating a tense and at times toxic climate, and inequities in various departmental processes have led to further deterioration of morale.*
- *Department recognizes and seeks to remedy the lack of diversity among its faculty and students.*
- *Laboratory of Archaeology (LOA) unsustainable: underfunded, understaffed, and inappropriately positioned within the university.*

Key Recommendations of the Review Committee:

- *Mentoring should be incorporated into classes, research groups, and department-wide regular workshops.*
- *Develop greater clarity and transparency regarding departmental policies and practices and merit review/promotion and tenure process.*
- *Develop recommendations, and provide advocacy, resources for the Department's Indigenous member and additional funding for Indigenous, Black, and other graduate students of color.*
- *Recommend that LOA become an independent campus unit and undergo an external review.*

Department's Response:

- As of fall 2021 the Department's first year professional development seminar syllabus has been updated with additional information about alternate career paths, and the Department is working to expand alumni outreach efforts and create additional possibilities for students to consult with practitioners who are employed outside academia.
- Working on expanding transparency around cross-appointments and workloads and reviewing and possibly revising departmental merit guidelines.
- Latest hire of a CRC position in Indigenous Archaeology: we anticipate that our new faculty member will likely attract Indigenous and perhaps other racialized students.
- Within the next year, LOA will work with the Faculty of Arts to explore different models for how LOA may be reconfigured as an independent unit. An external review of LOA will follow after the internal review.

Faculty's Response:

- The external review highlights a need for additional support from the Dean's Office around issues of inequity and lack of transparency within the Department. The Department should seek support from

the Dean's Office in order to develop a plan for EDI within the Department, and are encouraged to seek the support of the Associate Dean Equity.

- The Department is encouraged to reduce the number of directed readings courses offered by faculty, and encouraged to work with the Associate Dean Academic and the Associate Dean Research to offer more graduate seminars. Department is encouraged to hire at least one Educational Leadership faculty in the next few years, with two as a future minimum.
- The Dean's Office has located a site in the Iona Building to host the Laboratory of Archeology for the next five years, and has agreed to fund two additional .5 staff positions this year, and will work with the University to fund these as full-time positions starting in the Fall of 2022. We are engaged in discussion as to how to best organize LOA and provide appropriate budget and governance.

Department of Geography
Faculty of Arts
Summary of External Review: October 2020

Key Findings of the Review Committee:

- *The Department functions highly with excellent leadership and a departmental staff. It is internationally renowned for its outstanding scholarship and teaching.*
- *Educational Leadership (EL) faculty have heavy course load each year; part of their appointment permits some research; workload might not be sustainable in the long run.*
- *Strong Graduate and Undergraduate programs; both have achieved gender parity and attract a high proportion of international students.*
- *Strong commitment to equity and diversity.*

Key Recommendations of the Review Committee:

- *The Department should develop bridge positions for retiring faculty.*
- *Increase mentorship and provide greater opportunities to enhance professional development for junior faculty and graduate students.*
- *Find a solution for the sustainable maintenance of labs/equipment in the short and long term.*
- *Strongly support departmental-level conversation around decolonizing the curriculum.*

Department's Response:

- Will propose two faculty member hires in the Academic Planning and Budget Process in October 2021, and another two the following year, and a further two the year after, with the intent of sequencing complementary hires over these years.
- Renovations for outdated GIS teaching lab will be completed in September 2021; working on long-term solutions for the Geographical Sciences Research Centre.
- Preparing to reinstate "brown-bag" professional development series around the preferred topics.
- Equity and Diversity committee is currently working on many of these issues and the Department has an ongoing commitment to continue to do so.

Faculty's Response:

- The Geography Department is typically in the top five of world rankings, renowned for its research and highly respected for its teaching and breadth of its programs.
- The Faculty supports the findings of the review committee, but with an acknowledgement of the financial constraints associated with reducing teaching for EL faculty.
- The responsibility to 'decolonize the curriculum' should not fall on the shoulders of a few. The Dean's Office encourages the Department to work with its faculty on the Indigenous Strategic Plan toolkit as a start, and engage with the Associate Dean Equity, Innovation and Strategy to foster a more equitable environment
- Geography should work closely with the Associate Dean Academic on the new 'place-based requirement' in Faculty of Arts' breadth requirements.

Department of History
Faculty of Arts
Summary of External Review: January 2020

Key Findings of the Review Committee:

- *The History Department is a dynamic, research-intensive unit that upholds excellence in undergraduate teaching and delivers a top graduate program.*
- *The Department has experienced significant faculty turnover including some episodes that exposed deeper issues and wider divisions.*
- *Undergraduate enrolment—especially attracting students—poses a challenge.*
- *The Department will soon need to address some long-term issues that may hamper the graduate program’s vitality and sustainability.*

Key Recommendations of the Review Committee:

- *High faculty turnover requires a clarification of policies and procedures that reflect and incorporate best practices in the Faculty and beyond.*
- *To address decreases in undergraduate enrolments, the Department must continue to develop courses that will attract more students both as electives and in programs.*
- *The Department and the Faculty should find more funding sources to support the graduate program, which will be increasingly at a disadvantage in competing with institutions offering five- and six-year packages, most often in cities with lower costs of living.*
- *The Department should re-establish the Equity, Diversity, and Inclusion Committee, with a clear mandate and financial resources. The mandate might include drafting a Department statement on equity, diversity, and inclusion.*

Department’s Response:

- A five-member EDI Committee has been established and will work on developing a department-specific plan for fulfilling the objectives of UBC’s Indigenous Strategic Plan (ISP) and Inclusion Action Plan (IAP).
- The EDI Committee will address part of that plan for the future but deliberations over the full range of topics to be covered by such a committee should be led by the next Head, who has a five-year term starting in January 2022.
- The Department began an Undergraduate Enrolment Initiative in 2016 which was followed up with a study titled History Majors Reform in 2019 and are still engaged in implementing these reforms.
- The Department has, over the past year, revitalized the PhD program to help the students cope with the current constraints on funding.

Faculty’s Response:

- Even while experiencing challenges to its collegiality, the Department has preserved a global reputation for research and teaching.

- The Department will continue to work with the Associate Dean Equity, Innovation and Strategy and Associate Dean Faculty on fostering an environment of collaboration, communication and on implementing the Indigenous Strategic Plan.
- The new Department Head should aim to work closely with the EDI committee and the Associate Dean Equity, Innovation and Strategy to address policies which foster best practices and procedures.
- The Dean's Office will engage with the Department to consider how best to amplify graduate and TA budgets, a challenge throughout the Faculty.
- We have hired an External Head with considerable administrative and scholarly depth to assist the Department in moving forward on all of these fronts.

Department of Linguistics
Faculty of Arts
Summary of External Review: March 2019

Key Findings of the Review Committee:

- *The Department has a strong reputation nationally and in North America, maintaining high teaching standards of excellence.*
- *Due to its strong research reputation and the innovative work conducted by Department members, the unit attracts stellar graduate students and postdoctoral fellows. The large number of graduate student applications enables the program to be selective.*
- *Students are pleased with their educational experience but need improvements in consistency of enforcement of policy. Graduate students requested additional support with professional development (writing abstracts, procedures for submitting to journals, interviewing for jobs, etc.).*
- *The Department has a strong reputation for work in Indigenous languages but the Department and the program in First Nations and Endangered Languages (and the Musqueam Language Program) have been administratively separated due to conflicts presented and noted in the last review.*
- *Concerns were expressed concerning graduate students' increasing time-to-completion and the current level of graduate student funding, given the high cost of living in the Vancouver area.*
- *The unit faces challenges with significant increases in undergraduate enrolment. In 2018, the Department experienced an increase of 700 students in the 100-level courses from across campus.*
- *The 20 minute-walk distance between the two locations of the Department is a significant impediment to department cohesion and integration within the campus community.*
- *Sustainability and rapid changes of personnel (faculty and staff), imbalanced workloads, climate, and diversity are ongoing concerns.*

Key Recommendations of the Review Committee:

- *Restructure information on the website into a graduate handbook that outlines transparent policies and procedures to ensure all faculty members provide consistent information to students.*
- *Consider increasing annual funding for graduate students and establish conference travel funds.*
- *Create a concrete plan for managing current and future growth.*
- *To help faculty maintain work-life balance not be overburdened, consider reducing the number of departmental committees. Some of the duties could be managed by staff.*
- *The Office of the Dean should secure a central location to house all Linguistics members in the same building, with improved lab space.*
- *Put on hold any new hires for at least a year to take stock of the current make-up*
- *Work with the Equity and Inclusion Office and the Dean's Office on interpersonal issues and organize external 'culture review' and targeted training or workshop in respectful dialogue.*

Department's Response:

- The Department removed continuous course enrolment requirements for graduate students effective May 2019 to lighten students' course load and reduce their financial burden.
- The minimal annual funding for graduate students has been increased to \$25,500 plus tuition.

- In addition to regular professional development advising, monthly brown bag sessions were launched in October 2019, where Ph.D. students and graduate advisors discuss opportunities for professional development issues related to careers inside and outside academia.
- Recent hires in 2019 and 2020 were two replacement positions. Since then, growth hires were put on hold and will resume in 2021W.
- The Department restructured and simplified committees and strategically distributed work to staff to reduce Chairs' and faculty members' workload.
- Linguistics asked the Dean's Office to re-open space discussions.
- The Department requests the Dean's Office to provide continued support to productively connect the Institute for Critical Indigenous Studies (CIS) and Linguistics and re-establish their relationship.
- To ensure an inclusive work environment, the Department's Equity and Inclusion Committee comprises diverse membership that includes faculty, staff, and graduate and undergraduate students.
- Following a recent culture review, a final report with recommendations for the Department's consideration and actions has been completed and fully integrated into the 5-year planning process.

Faculty's Response:

- The review is highly laudatory, highlighting both the strengths and the scope of the Department, describing it as academically strong and high-functioning.
- We supported the climate review of Department.
- The Department is encouraged to work with the Associate Dean, Research and the Assistant Dean, Finance to craft competitive funding packages for PhD students.
- A fully renovated space for Linguistics is considered to be ready by 2025.
- To build ties with CIS, the Faculty supports a potential joint hire in phonology of First Nations languages and Computational Linguistics in Endangered Languages with CIS when the Department resumes growth phase.
- The Dean's Office will monitor enrolments and research productivity, so as to consider future growth and planning together.

Department of Sociology

Faculty of Arts

Summary of External Review: November 2020

Key Findings of the Review Committee:

- *The Department has a strong reputation as one of the premier departments in Canada and North America.*
- *Concerns were expressed about graduate students' increasing time-to-completion and the current level of graduate student funding.*
- *Graduate students expressed dissatisfaction with the clarity of expectations around student/supervisor relationships. Concerns were also raised about unfair treatment of graduate students working as Research Assistants.*
- *Concerns over the failed search a few years ago suggest that a significant minority of faculty continue to call for initiatives to address both implicit and explicit bias as well as gendered and racialized standards around hiring.*

Key Recommendations of the Review Committee:

- *The Department should consider increasing annual funding for graduate students and establish travel funds to support conference travels.*
- *Share the Graduate and Postdoctoral Studies' Graduate/Supervisor Expectations document with students and supervisors and consider using it more actively in the unit's program.*
- *The Department should address issues regarding equity in hiring.*

Department's Response:

- The Department has a strong commitment to student funding (through the 4th year, being extended to the 5th year). We continue to develop a new program, begun last year, to support 5th year funding through competitive funding grants.
- The Department plans to develop a committee, including graduate and undergraduate students, to outline reasonable expectations.
- The Department completed the CRC 2 recruitment in the area of Race and Ethnicity, bringing Sabrina Strings to the department in July 2021.
- The Department organized a session for the May 2021 department retreat where EDI (Equity, Diversity & Inclusion) experts from within UBC helped develop strategies and procedures for effective and respectful debates.

Faculty's Response:

- The review indicates that the Department is highly functional and achieving at this stage.
- The Dean's Office supports the Department's actively working to ensure an inclusive work environment through their Equity and Inclusion Committee.
- The Department is encouraged to work with the Associate Dean, Research and the Assistant Dean, Finance to ensure that the increase in funding for PhD students is sustainable.
- The Dean's Office will monitor the review of course curriculum at the PhD student level and completion rates for these students.

**MSc in Craniofacial Science and Diploma in Pediatric Dentistry
Faculty of Dentistry**

Summary of External Review: December 2020

The main focus of the review was the Clinical Pediatric Dentistry component of the combined program. The reviewers met with Dean MacDougall, Dr. Jolanta Aleksejuniene, Director of Graduate and Post-Doctoral Studies, Dr. Joy Richman, the Program Director, Dr. Jennifer Park, the Clinical Director at BC Children's Hospital (BCCH), faculty, students and UBC alumni.

Key Findings of the Review Committee:

Strengths identified:

- *The program leadership appeared knowledgeable of student practices. Both the Program Director at UBC and Clinical Director at BCCH have been involved in the UBC Graduate Program for a number of years.*
- *Drs. Richman and Park work collaboratively to ensure for students that faculty at UBC and BCCH function as an educational team.*

Areas needing attention:

- *Communication problems between program leadership and pediatric dentistry students - feedback needed.*
- *Frequent schedule changes appear to place strain on faculty-student interactions. Every effort should be made to minimize schedule changes.*
- *The University grievance process appeared unclear.*
- *Student support services were not discussed in depth, including the availability of formal counselling services for any individual of the University community.*

Key Recommendations of the Review Committee:

- *That the clinical director at BCCH and the program director at UBC be provided with dedicated time to meet on a monthly basis regarding learner and programming issues.*
- *That the clinical director at BCCH and the program director at UBC be provided with dedicated time, and funding where appropriate, to access personal professional development as it relates to student education and administration.*
- *Communication problems could be addressed effectively by having a Student Manual for both the Hospital and University. "We believe these Student Manuals, thoroughly prepared and including the consistency of following the Okanagan Charter in all aspects of the program, can achieve a more easily understood program description and expectations."*
- *That the program leadership meet with the student cohort as a group on a regular basis for round-table discussions and support.*
- *That support services available to students be included as part of the orientation/on-boarding program, and reviewed yearly with all cohorts.*
- *That counseling and health services support be discussed with all members of the learning environment.*

Faculty's Response:

- The program director and clinical director at BCCH spend approximately 2 days per week to address learning issues, scheduling and assessment of students.
- Student access to their clinical evaluations (at UBC and BCCH) has been improved and they now have access to daily clinical instructor feedback via the online Dentistry systems.
- Program leadership including the Director of Graduate and Postdoctoral Studies and the Dean have been meeting regularly with students via Zoom for discussions and support. Moving forward meetings will be scheduled twice per year.
- A Student Handbook has been developed that combines several program documents (e.g., course syllabi, vacation rules) along with materials available to incoming students as part of the on-boarding process. The handbook will help to clarify student responsibilities and the process for addressing grievances, and it will be revised and updated annually. The handbook also includes information about wellness support available to UBC students. The handbook is available to students in each year of the program in the CANVAS course shell for DENT 780/781/782.
- As of July 1, 2021, a counsellor has been hired and embedded in Dentistry who is available to all undergraduate and graduate students.

Department of Wood Science
Faculty of Forestry
Summary of External Review: October 2020

Key Findings of the Review Committee:

- *Department of Wood Science (DWS) is one of the largest and most active departments in the wood science area worldwide, delivers outstanding learning and research programs, and takes a leading role in the global wood science and technology community due to an excellent research development strategy and demonstrating a vision of societal needs by developing and delivering efficiently relevant educational programs.*
- *The review team recognized the importance of the discipline of wood science to the world economy. It acknowledged the Department as a global leader in this domain, concluding that the DWS is a clear asset for the Faculty of Forestry and the University of British Columbia.*

Key Recommendations of the Review Committee:

1. *People and Places:*
 - a. *Increase the proportion of undergraduate students taking the co-op program option;*
 - b. *Increase sharing of laboratory space in the short term and an increase in laboratory space in the longer term if the situation does not improve over time;*
 - c. *Increase technical support, specifically on operation and maintenance of electronic equipment.*
2. *Research excellence:*
 - a. *Strategize to cover the entire value chain of wood, starting from resource provision, and advocate solutions for global issues of scarcity of many non-renewable resources and climate change effects, and bring UBC in the forefront to establish wood as the key resource for the transition to sustainable societies.*
 - b. *Establish a cluster in timber building construction. Timber buildings characterized by a large CO₂ binding capacity and the use of renewable resources will become a central part of modern urbanization. They will extensively contribute to the utmost required to transition to a more sustainable and resource-saving built environment.*
 - c. *Establish a cluster in wood modification and processing field as a driver of collaborative research; other hires to consider emerging areas with substantial impact on the wood industry (e.g., data mining, machine learning, modelling, and simulation).*
3. *Transformative learning:*
 - a. *Develop a common first-year curriculum giving students more time to select a major, thus aiding the recruitment or attraction of internal transfers.*
4. *Local and global engagement:*
 - a. *Involve graduate students with outside stakeholders and provide opportunities with industry to gain experience or develop course-based industry components. Engage postdoctoral fellows more with teaching.*

Department's Response (key points):

- **Laboratory and research space shortage:** investigating to create new space by re-designing underutilized space; further expansion dependent on funding.

- Looking into recruiting a skilled technician to assist with the repair and optimization of scientific equipment and manage existing staff so they provide essential support for research.
- Developing a one-year course-based Master's degree in Forestry Sector Analytics to address emerging education trends.
- Future hires (replacing retirements) to support cluster areas university-wide (analytics, climate, sustainability, tall timber, bioproducts, BEST program). The department is in the process of hiring new professors in strategic areas (e.g., biotechnology/biofuels). Three hires supported by the President's Academic Excellence Initiative in a sustainable timber-built environment are underway.

Centre for Health Education Scholarship
Faculty of Medicine
Summary of External Review: November 2020

Key Findings of the Review Committee:

- **Finances** – Funding must be secured and should not be reliant on soft money.
- **Reporting Metrics** – Qualitative data are needed to demonstrate the impact Centre for Health Education Scholarship (CHES) has made regarding educational innovations, committee participation, consultations, curricular and assessment strategies, among others.
- **Succession Planning** – CHES must have funding to identify and recruit new emerging leaders. Succession planning for CHES is key in the survival of the Centre.
- **Scope** – evaluating the broad scope of CHES in supporting scholarship and providing service on a provincial, national and international level.

Key Recommendations of the Review Committee:

- **CHES Director** - The committee unanimously and enthusiastically recommends Dr. Ian Scott be appointed as the director.
- **Scope & Funding** - Clarify identity and role as a Research Centre, with a focus on the balance of scholarly activity with service.
- **Finances and Succession Planning** - Funding is a major concern and CHES will go into a deficit in 4 years. Establish a plan and work with the Dean to establish secure financial support that will not be reliant on soft money so that CHES can continue to impact research, scholarship, service, and teaching, which is essential to the survival of the centre.
- **Reporting Metrics** - The recommendation is to align the strategic plan to highlight the service to the university that emerges from the scholarship and research that the core faculty and all the mentored faculty are producing and develop metrics to demonstrate the impact.

Centre's Response:

- **Identity and Scope:** While we appreciate the opinion that CHES is “overachieving” in its breadth of activities relative to our size and resources (see “Metrics” below) we are hesitant to focus purely on research activities as we believe our “service” is integral to ensuring our scholarship is timely, meaningful and relevant to practice.
- **Succession Planning:** Critical hires to replace current faculty:
 - ASAP: Recruit an early-career Scientist as replacement for already incurred loss of a senior Scientist and departure of our Scientist/Research Associate (both were funded from outside CHES budget so replacement will require additional resources – see “Sustainability” below).
 - September 2023: Recruit mid-career Scientist to replace imminently retiring senior Scientist.
- **Metrics:** We are developing additional metrics that effectively capture the accomplishments of CHES beyond typical academic metrics which we will report to the Vice-Dean Education in 6 months.
- **Sustainability & Funding:** funding to recognize and maintain CHES’s critical educational role in the Faculty of Medicine.

- Funding to buy out Dr. Scott's salary from the Department of Family Practice, to raise the FTE for the CHES Director role from 0.4 to 0.6
- Funding to hire an early-career tenure track Scientist within the next year
- Funding to expand the fellowship to allied health learners within the FoM (Occupational Therapy, Physical Therapy, Midwifery, and Speech-Language, etc.)

Centre for Hip Health and Mobility
Faculty of Medicine
Summary of External Review: September 2020

Key Findings of the Review Committee:

- *Overall, the Centre for Hip Health and Mobility (CHHM) is commended by the external peer review panel for its research and publication productivity, knowledge translation, research facilities and infrastructure, fiscal restraint, managing the transitions and the effectiveness of the team, particularly given the much lower budget.*
- *The three co-leads have done a good job in managing CHHM, demonstrating strong mutual respect and coordination within the leadership team and within the operations team.*
- *The environment for those who work within CHHM appears to be generally good, but there are some concerns around the scope and focus of the Centre, its leadership structure, and sustainability.*

Key Recommendations of the Review Committee:

1. Strategic Direction

- a) *The development and implementation of a clearly articulated and unifying five-year strategic plan.*
- b) *Consideration for rebranding the centre and changing the name.*

2. Space

- a) *Clearly justify space requirements consistent with the strategic plan – functional space data in the spirit of utility and parity within FOM or VCHRI.*
- b) *Devote greater attention to provisions for remote collaboration and learning.*

3. Sustainability of the Unit

- a) *Continue development and implementation of a sustainability plan as part of the strategic plan.*
- b) *Designing a coordinated approach to track high performers to specific leadership positions and the development a conceptual succession planning model.*
- c) *Develop a clear plan for revenue-generating programs and partnerships as part of the integrated research, scholarship and business planning process.*

4. Trainee Enrichment

- a) *Develop and implement innovative cross-disciplinary, cross-department trainee enrichment opportunities including cross lab stays.*
- b) *Consider a robust technology-based engagement space led by the Trainee Committee.*

Centre's Response:

1. Strategic Direction

- a) *The last strategic plan was developed in 2012 and we were directed to complete strategic planning in late 2019 by Dr. Rob McMaster, VCHRI. Due to the COVID-19 pandemic, further development of the strategic plan was put on hold as faculty members were reporting significant impacts. We plan to finalize the strategic plan with the faculty members in early 2021.*
- b) *The Centre's Directors and faculty strongly support this recommendation and highlight the Centre's core expertise and strengths align with "aging".*

2. Space

- a) A large portion of the 6th floor is used for administration and could serve as potential growth space for growing programs.
- b) We will seek the feedback of our faculty members to better understand unmet needs for remote collaboration and learning that can be reasonably addressed by the Centre.

3. Sustainability of the Unit

- a) The Centre will be inclusive, proactive, and transparent in succession planning by offering mentorship and leadership opportunities to promising individuals who are interested. The opportunity to rebrand with a focus on aging, offers opportunities with VCHRI, VGH-UBCH Foundations, Faculty of Medicine and UBC Advancement for larger scale funding to support the Centre.
- b) We endeavor to develop a succession model of inclusion, transparency, and delegation to identify and prepare future leader among CHHM members.
- c) We will continue to proactively identify revenue-generating programs, as we have done with the Engineers in Scrubs program and the Vancouver Summer Program.

4. Trainee Enrichment

- a) This will be discussed with the faculty members and a plan will be developed.
- b) We aim to support the diverse needs of trainees. We will task the Trainee Committee with defining the need for a technology-based engagement space and coming up with the specification for the space and associated equipment. CHHM will then come up with a plan to resource and develop this space.

Department of Pediatrics
Faculty of Medicine
Summary of External Review: April 2021

Key Findings of the Review Committee:

- *Dr. Eddy's excellent leadership and accomplishments were recognized through meetings and survey.*
- *The fundamental strengths of the Department include having a sufficient medical workforce at BCCH and in most locations across the province; breadth and depth of subspecialty services and faculty; and a generally strong sense of collegiality within the department and with other clinical, research and administrative groups.*
- *Initiatives related to equity, diversity and inclusion (EDI) are underway in the Department, within UBC and PHSA systems.*
- *Challenges related to the COVID-19 pandemic were acknowledged throughout the review, but were not a focus of the review.*
- *We note that we did not meet with any trainees, so any comments on education reflect only the perspectives of faculty and verbal statements regarding the perception of trainees.*

Key Recommendations of the Review Committee:

1. *Consider an external review of the Clinical Teaching Unit and Complex Care Program to assess clinical service organization and delivery, education and research opportunities.*
2. *Consider a review of dyad leadership, in the form of an organizational review, related to the clinical service areas of mutual responsibility.*
3. *Consider establishing a formal relationship between the Department Head and the BCCHF. This could be through including the Department Head as an ex officio member of the Board of Directors, or including the Department Head on relevant strategic and funding committees of the BCCHF.*
4. *Consider establishing a formal relationship between the Department Head and the BCCHRI.*
5. *In the absence of a comprehensive APP that would fully support clinical and academic faculty, UBC and the PHSA should work with the Department of Pediatrics to address the inefficiencies in appointments and inequities in faculty compensation.*
6. *Regarding Leadership Development and Succession Planning, there should an expansion of the number of Associate Chairs/Deputy Department Heads to four: one each for Clinical Affairs, Education, Research and Faculty Development.*
7. *Review outreach and onsite clinical and teaching services provided by members of the Department, based in urban community sites or regional centres across BC.*

Department's Response:

1. Agree that recommendation 1 (external review) is a high priority issue that needs to be addressed in order to improve patient care efficiency and experiences, and to improve the learning environment.
2. There is a commitment to the implementation of strong physician-operational leader dyads at BCCH from the current hospital executive.
3. Mr. Malcolm Berry assumed the role of the BCCHF President and CEO just a few months ago. He has just announced his plans to undertake strategic planning work. Department Head has met with the consultants and shared my recommendation.

4. An active UBC internal search is in progress for the next Senior Executive Director, BCCHR and Associate Dean, Research, BCCHR, FoM, UBC.
 5. Respectfully, the Department Head believes that continuous improvements to the faculty appointment processes have been implemented, but systemic issues outside the control of the Department place limits on what we can do. Continued focus is recommended in three areas.
 - a) Recognition that a subset of the full-time subspecialty clinical faculty who are paid by the Department's Alternate Payment Plan (APP) are involved in significant child health-related research and time to conduct research should be supported by the APP.
 - b) Equalize UBC compensation for physician academic tenure-track faculty. Our annual baseline General Purpose Operating Funds (GPOF) has not increased since the salary grids were first developed more than a decade ago, resulting in a lower initial annual compensation rate for academic time.
 - c) Compensation for full-time academic faculty (most are PhD scientists in Pediatrics).
- The Department Head fully agrees with recommendation 6 – especially the “buy-out” of time to be able to take the lead on several departmental initiatives.
 - Over the past five years the Department has focused more effort on relationships with our community-based faculty but there is so much more that we could and should do.

**Department of Computer Science
Faculty of Science**
Summary of External Review: November 2020

Key Findings of the Review Committee:

- *The Department's undergraduate teaching is exemplary, in large part due to the high quality of the educational leadership (EL) faculty and the overall culture of the Department which clearly values undergraduates. EL faculty are wonderfully integrated into the Department and have strong influence over their peers.*
- *Growth in undergraduate teaching demand is an overall challenge that the Department, Faculty of Science, and the university must address together.*
- *The Department's research standing is strong, but in danger of yielding to the undergraduate growth challenge.*
- *There is great demand for partnership both with the rest of the Faculty of Science, as well as the broader university. The Department and the University need to find partnerships that lead not only to advances in other disciplines, but that lead to strengths in CS.*

Key Recommendations of the Review Committee:

- *The University, Faculty of Science, and Department need a long-term strategy that reflects the growth and centrality of Computer Science if UBC is to remain a world-class university.*
- *The Department should formulate strategic goals around its next hires to reinvigorate the research program.*
- *The Department should consider high ambition approaches to broadening its impact in the university, either through institutes such as CAIDA, or through alternative structures. But these require thoughtful, strategic plans, and deep commitment from senior faculty.*

Department's Response:

- The Department is designing a strategic research vision that builds upon the strengths of the Department, the Faculty of Science, and UBC, and can be used to harness future internal and external funding opportunities for growth in our research capacity.
- The Department is reducing barriers and increasing incentives for graduate supervision, particularly PhD students, and supporting faculty members to find the funding to finance these students at suitable levels.
- We are improving the efficiency of our undergraduate teaching enterprise. We cannot expect student demand to decrease, but we can seek ways of focusing faculty effort on direct support of student learning and thereby rebalance our workload toward the research enterprise.
- We are engaging in collaboration with other departments to address the training needs of students, and carefully controlled growth of the major.

Department of Earth, Ocean & Atmospheric Sciences
Faculty of Science

Summary of External Review: April 2021

Key Findings of the Review Committee:

- *The Department of Earth, Ocean & Atmospheric Sciences (EOAS) is an excellent academic unit, characterized by global recognition for scholarship, a dedication to student learning, and a culture of collegiality. The work of the unit is of increasing relevance to society as we confront grand challenges of climate change and sustainability.*
- *EOAS is globally recognized for their excellence in research. EOAS research covers the earth's interior, near-surface, ocean and atmosphere, other planets and pedagogy.*
- *EOAS offers a diverse set of majors.*
- *The Department is recognized for their active learning, evidence-based teaching approach.*
- *The Department is committed to identifying diversity, equity and inclusion challenges and fostering inclusive teaching practices in its programs and increasing the representation of Indigenous perspectives within its curriculum.*

Key Recommendations of the Review Committee:

- *Our first and strongest recommendation is to continue to invest in EOAS and leverage the Department's exciting and relevant teaching, research, and outreach to contribute to UBC's reputation.*
- *Upgrade and renovate the undergraduate teaching infrastructure for EOAS.*
- *Proactively work towards diversifying the faculty, including the recruitment of underrepresented groups and seeking gender balance, using the full range of best practices that are emerging in higher education recruitment and mentoring.*

Department's Response:

- We are continuing to work closely with the Dean's office, seeking major funding opportunities to upgrade teaching and research spaces in EOAS-Main. We continue to compete successfully for small UBC grants to support incremental upgrades to our teaching classrooms and labs. We emphasize however, that high-level support from UBC is needed to properly address our urgent space deficiencies and respond to a key recommendation of the external review committee.
- We have already taken a number of steps to improve the efficiency of our graduate program administration. We recently recruited an outstanding new graduate program coordinator, and have also earmarked on-going core budget to fund partial administrative support to assist with program management.
- EOAS is a global leader in geology and geochemistry, and this work underpins much of our collaboration with the minerals exploration industry through the Minerals Deposits Research Unit (MDRU) and the Bradshaw Initiative for Minerals and Mining (BRIMM). Going forward, we will continue to support these areas as core components of our research, education and graduate training programs. We have recently hired two excellent Assistant Professors in Geology, and we

anticipate more hiring in this area in response to a significant number of retirements over the next 3 – 5 years.

- The department leadership has actively promoted efforts, spear-headed by an outstanding EDI committee, to evaluate barriers to equity and inclusion in our department, and to enhance the recruitment and support of under-represented groups at all levels of the department. We have fully embraced UBC / Faculty of Science best-practices to minimize the effect of unconscious bias in hiring, with mandatory training for all standing committee members during searches. We continue to make strides towards greater gender balance, but recognize that the ethnic / racial / cultural diversity of our faculty remains well below the representation of these groups in the general population. Significantly, we have recently hired an Indigenous scholar as an Assistant Professor of Teaching, who is now working to bring Indigenous perspectives and ontologies into our undergraduate programs, while creating pathways for deeper relationships with Indigenous students at UBC.

Institute for the Oceans and Fisheries
Faculty of Science
Summary of External Review: October 2020

Key Findings of the Review Committee:

- *The Institute for the Oceans and Fisheries (IOF) includes some of the most prolific and well-known fisheries and ocean scientists globally. Their individual records of productivity are simply spectacular, and matched by few to none.*
- *The 2009 external review of the former Fisheries Centre concluded that the Centre lacked a “common mission”. Eleven years later, this Review Committee observed little evidence of major progress.*
- *Interactions with other departments and institutes appear to be quite positive and mutually beneficial.*

Key Recommendations of the Review Committee:

- *The Institute, the Faculty of Science, and the higher administration at the University must urgently address hostile workplace issues by taking immediate and decisive actions.*
- *The Institute should leverage even further the high-powered research activities of the individuals through collaboration and development of multi-investigator teams.*
- *The Director should address the fiscal challenges of the current Institute model by developing financial plans and strategies. These should include identifying what fundraising would be required to create a stable financial picture in which the faculty could sustain their high levels of productivity, and the staff numbers required to support them.*

Department’s Response:

- IOF community members feel that the Institute has made enormous strides forward since its formation, particularly in terms of: improving the internal climate; investing strongly into the development and support of the IOF graduate program; and, moving ahead with the development of the IOF’s first strategic and implementation plan.
- Immediate steps were taken, including the formation of an Equity, Diversity and Inclusion committee. A number of workshops on these issues were undertaken and the IOF also actively engaged with UBC’s Equity & Inclusion Office to survey associated problems and identify best strategies to address them.
- We are committed to moving this process forward, and have now engaged the services of a professional mediation company.
- Multi-investigator, cross-unit collaboration teams are already a reality in the IOF. These units not only acquire joint research funding, they also produce joint publications. Inter-disciplinarity is strongly entrenched into the Institute and provisionally reflected in its three main research pillars: environment, sustainability, and solutions outlined, and shortly to be discussed during the strategic planning.

Department of Statistics
Faculty of Science
Summary of External Review: May 2021

Key Findings of the Review Committee:

- *The Department of Statistics at UBC is one of the top statistics departments in Canada and has an extremely strong reputation internationally.*
- *In terms of its teaching and research missions, the Department is a well-functioning and progressive unit with a healthy, outward-looking perspective.*
- *Based on its recent successes and strong leadership, the review committee has confidence that the Department will be able to continue to prioritize and successfully respond to opportunities as they present themselves.*
- *The Department is able to attract and retain faculty whose research contributions mark them out as researchers of international stature.*

Key Recommendations of the Review Committee:

- *The Department should be supported in its plans for growth in both research and education tenure streams, and crystallize the vision for achieving balance between them.*
- *The Department should continue to retain its disciplinary identity (in statistical theory and methodology), not least in undergraduate education.*
- *The Department should consider the size of its graduate program, particularly the size of the PhD cohort, which is currently modest in size relative to the size and research activity levels of the Department.*

Department's Response:

- The financial arrangements underpinning the launch of the Data Science Minor were predicated on adding faculty capacity in the EL stream, rather than the research stream. There may be opportunities to revisit the balance question above in future arrangements for new program launches and existing program expansions.
- Our recent focus has been on broadening what we teach, rather than simply balancing curriculum additions with deletions. Our recent design choices for undergraduate major course requirements typify this attitude. In adding STAT 201 as a required course while retaining STAT 200, we ensure students see both computational and conceptual gateways into our discipline. A parallel narrative applies to statistical modelling, with the addition of STAT 301 alongside the retention of STAT 306.
- There is a consensus that reviewing our graduate programs is a high priority within our post-pandemic strategic planning. The upward enrollment trend documented in the self-study continues, with the current snapshot being 29 M.Sc. students and 38 Ph.D. students. Even within the current system, however, we are already planning how to better gather data from faculty about their upcoming supervisory wishes and capacities, to better inform admission targets.