The Faculty is extremely grateful to the members of the External Review Committee for their willing participation in the review process, for their wide engagement with faculty, staff, students, alumni and external stakeholders, and for their thorough and thoughtful report. This response is based on feedback received from the Senior Management Team, faculty, staff and students.

A. General Comments

The reviewers are to be congratulated on bringing forward a thorough report that captures many of the key issues the Faculty is currently engaged with, particularly given that the terms of reference of such reviews are extremely broad. The report contains many comments that are observational in nature, along with a small number of recommendations in 4 key areas. Many of the observations and recommendations have already been captured in the Faculty’s 2017-2022 Strategic Plan Catalyst for Change and an important priority for the Faculty in the coming years is the implementation of this plan. There are a few areas in the report where the reviewers appear to have received conflicting views during the extensive consultation process, or have misunderstood the feedback being provided to them, and we have attempted to highlight and clarify these. Our response focuses primarily on the recommendations, with reference to observations as appropriate.

The report highlights the major strengths of the Faculty and the achievements of the previous quinquennium, namely:

- The state-of-the-art Pharmaceutical Sciences Building
- Infrastructure for research and teaching
- Innovations in clinical practice, in particular the Pharmacists Clinic
- The new Entry-to-Practice PharmD Program
- Recruitment of, and support for, excellent early career faculty members
- Many excellent and dedicated faculty and staff
- High caliber students

In addition, the reviewers highlighted some areas where improvements can be made, including:

- A major overhaul of the Faculty’s Graduate Program is urgently required
- Inequities in workload exist, with some faculty significantly overburdened
- The timing of new program implementation could be refined
- Communication channels and governance
If there is one area where some further guidance from the reviewers would have been welcomed it is in relation to the Faculty’s research program. This is a major priority for UBC and the Faculty, and is undoubtedly the most important element influencing the international reputations of both, however it did not feature significantly in the report. Nonetheless, the Faculty is absolutely committed to building on existing research strengths within the focus areas delineated in Catalyst for Change. The Provost reinforced the necessity of developing the Faculty’s research base, and the University’s support for this, during his presentation to the Faculty Advisory Council on the external review.

B. Building and Infrastructure

Reviewers recognized that the physical environment within which the Faculty operates is outstanding, and in particular highlighted the quality of teaching facilities, research space, and the Pharmacists Clinic. There was also recognition of the high value of co-location with the Centre for Drug Research & Development (CDRD), tempered by the observation that the full benefits of this have yet to be realized. Recent leadership changes within CDRD have provided excellent opportunities for renewed dialog, and the Dean and other senior leadership in the Faculty are actively engaged in building on the existing relationship in areas that will be mutually beneficial.

**Recommendation:** Continue to provide the Faculty of Pharmaceutical Sciences with financial assistance related to the debt service on the new building and start-up packages.

One of the most significant challenges that the Faculty has faced is in servicing the outstanding debt on the building which, as a fraction of operating budget, has far exceeded the expectations set by Board of Governors. The Dean has made this a priority and significant additional support from the University has been forthcoming in recent years. The most recent developments (subsequent to the External Review Committee site visit) will see debt servicing immediately reduced to a more manageable level and reinforces the strong support of UBC for the Faculty.

C. Faculty and Staff

The reviewers correctly identified that there are wide variations in the workload of faculty members, particularly related to (but not restricted to) teaching activity. There are a number of reasons for this, some of which are historical. It should be recognized that implementation of the new Entry-to-Practice (E2P) PharmD program from September 2015 has been a formidable undertaking, which necessitated running both this program and the one it replaces – the BSc (Pharmacy) program – simultaneously until May 2018, when the last BSc class will graduate. This obviously required double teaching from a significant number of faculty members during this period. Furthermore, the E2P PharmD program comprises an integrated, systems-based curriculum that is much more labour intensive to teach, and is more clinically focused, than the BSc (Pharmacy) program leading to some research faculty losing teaching opportunities. We are examining ways of providing better support to new and existing faculty members in relation to their teaching activities through a more formalized faculty development program and, in this regard, a review of the future of the Faculty’s Office of Educational Support and Development is currently under way.

The role of Associate Dean Research is of particular importance to the Faculty, and an international search is currently underway to recruit an outstanding research leader to fill this role. The delineation of
four major research themes within the Faculty provides the opportunity to build critical mass (as has been very successful within the Health Outcomes theme) and promote interactions across themes and with other faculties at UBC (the Nanomedicine theme is an excellent example of this). In addition to providing support for grant applications, the Office of the Associate Dean Research, through the Special Projects & Research Manager, provides regular updates on internal and external funding opportunities through email communications and at meetings of research faculty.

**Recommendation:** Develop and enforce a comprehensive workload policy for faculty.

The Faculty has been working on the development of a workload model and policy for some time under the leadership of the Associate Dean Academic. The first component (covering teaching activity in our undergraduate programs) has been piloted with faculty members using data for the 2017-18 academic year. The additional elements covering graduate program teaching, research and scholarship (including mentoring of graduate students), service, and (where appropriate) clinical practice will be introduced into the model during 2018. The policy will also clarify expectations of different faculty groups (research and educational streams) and reporting arrangements in relation to the allocation of teaching (ultimate responsibility of the Dean, delegated to the Associate Dean Academic).

The reviewers suggest implementation of a divisional structure. Unlike most faculties at UBC the Faculty of Pharmaceutical Sciences does not have a formal departmental structure, and in fact dissolved a previous divisional structure in May 2010. There is currently no strong desire to revisit this (it was not an issue during the development of the Faculty’s new strategic plan), and indeed it is our feeling that this would serve only to reinforce some of the divide between teaching and research faculty that the reviewers observed and, in addition, would not be consistent with the integrated modular based E2P PharmD program. The current focus is to have research themes build their identities and infrastructure under the support and guidance of the Associate Dean Research and the Faculty Research Committee, whilst the Associate Dean Academic has developed and implemented a committee structure and clear lines of responsibility for the oversight of the Faculty’s academic programs, enabling functions, and the administration of the associated teaching activities. At some point in the future, particularly as it continues to grow in size, the Faculty may wish to revisit its organizational structure but, given the ambitious nature of *Catalyst for Change*, we feel this is not the appropriate time to do so.

**Recommendation:** Develop seed funding programs to encourage team science and interdisciplinary collaboration.

We agree that more could be done to stimulate team science and interdisciplinary research collaborations, and certainly a seed funding program is one important element in this. We have a number of initiatives in this area (e.g. an interdisciplinary PhD scholarship; an Interdisciplinary Collaborative Pilot Grant Program with the Faculty of Dentistry was introduced in 2016) but recognize that more could be done. This will be a priority for the incoming Associate Dean Research and will include budget allocations to support this goal. A research faculty retreat will take place in June 2018, and this is set to become an import annual event in the Faculty’s calendar.

**D. Educational Programs**

We appreciate the comments of the reviewers in relation to the quality of our undergraduate pharmacy programs and students, in particular the innovative nature of the E2P PharmD program which we
believe will prove to be competitive with the very best in the world. We have worked hard to improve the support infrastructure for students under the auspices of the Director of Student Services (who covers issues of wellbeing etc.) and the Executive Director Entry to Practice Education (supporting students with academic issues), so we were somewhat surprised by the comments relating to an identified contact for students. We will ensure that the details of our student support infrastructure, in addition to that provided through the office of UBC’s Vice President Students, are clearly highlighted at student induction meetings, program orientations, and at appropriate times throughout the academic year.

The reviewers correctly identified that the Faculty’s Graduate Program has fallen behind compared to our innovative undergraduate professional programs. Recognizing the importance of a vibrant graduate program, and the need for significant overhaul of the current program, the Faculty created the post of Associate Dean Graduate and Postdoctoral Studies. The Associate Dean has been charged with leading a fundamental review of the program, including elements relating to recruitment, curriculum, graduate stipends, and career development support. As noted in the Self-Assessment Report (page 30), several reasons contribute to the declining trend in the intake of new graduate students: 1) the continual decrease in the success rate for extramural research grant funding that is occurring across the country, and 2) a cohort of faculty members approaching retirement age who are no longer taking new students. Graduate student enrollment is expected to increase as we continue the process of research faculty renewal that is well underway. As for improving the quality, this issue is at the forefront of a campus-wide task force organized by the UBC Faculty of Graduate and Postdoctoral Studies, however we intend to significantly improve upon existing recruitment processes for graduate students, with a particular focus on direct entry at the PhD level.

In relation to stipends, in 2017 the UBC Faculty of Graduate and Postdoctoral Studies approved a minimum graduate student stipend ($18,000 per year) for all graduate students on campus. As stated in the Self-Assessment Report (page 36), in the Faculty of Pharmaceutical Sciences the minimum stipend for a domestic MSc or PhD student is approximately $21,000 per year, generally consisting of a teaching assistantship of $12,000, a research assistantship (from funds held by supervisors) of $7,000, and a Graduate Student Initiative Award ($2,000). The minimum stipend for an international MSc or PhD student is the same as described for a domestic student, except that an international student also received a tuition waiver of $3,200 per year, making it an approximately $24,200 package. Many of our students are successful at obtaining externally-funded scholarships which provide significantly higher stipends. To be competitive in attracting the best applicants to our program, we fully appreciate that the funding package (including minimum stipends) will need to be improved, and this is a high priority.

**Recommendation: Delay initiation of the Bachelor of Pharmaceutical Sciences (BPSc) degree program.**

We fully recognize that there are many major projects underway in the Faculty, as outlined in Catalyst for Change, that introduce significant stress on faculty and staff. Given the extent of the requirements for new program approval internally (Faculty, Senate) and externally (provincial government) it is clear the earliest realistic date for the first intake into the proposed Bachelor of Pharmaceutical Sciences (BPSc) program is September 2020. The curriculum in place for the first 18 months of the proposed program will involve students mostly taking courses in the Faculty of Science, so our Faculty’s major teaching commitments would not begin until January 2022. We believe this provides sufficient time to achieve many of the major goals set out in Catalyst for Change before embarking on this major new program, and will also provide the opportunity to complete the hiring of faculty and staff necessary to
support its implementation. We do, however, take issue with some of the other observations the reviewers made regarding this proposed program, and indeed significant additional work on market analysis and external engagement has been done since the External Review site visit. All of this work suggests there is a strong academic and economic rationale for developing the program, and that there is significant interest and support from relevant local, national and international industries.

**Recommendation:** Recruit more PharmD students into the PhD graduate program.

We agree that it would be desirable to attract more applicants from graduates of our undergraduate professional programs into our graduate program. The small number that have made that connection in recent years have performed extremely well. However, there are significant disincentives not the least of which are financial particularly with the significant uplift in the tuition costs of the E2P PharmD program. Improved recruitment strategies will be incorporated into the redesign of the Faculty’s Graduate Program; however, we believe that a more attractive solution may be to offer a combined PharmD/PhD program and this will be actively explored.

**Recommendation:** Develop a formalized plan for remediation in the E2P program.

We do have a number of initiatives in place that support students who require to repeat elements of the program, however we also recognize that a more formal remediation process needs to be in place. Given the complexity of the program, this is not as straightforward as it might appear, and it is something that the Executive Director Entry to Practice Education will work on with a view to introduction in the 2018/19 academic year.

### E. Dean and Administrative Structure

The report recognizes the inherent strengths within the Faculty’s senior leadership. They also identified some areas where improvement could made particularly around communication, transparency and inclusiveness. Many of the observations made in this section have been addressed elsewhere or have been implemented since the External Review site visit (e.g. development of strategic hiring plan, communication of merit review outcomes, etc.). Each Associate Dean (and other Dean’s office units) provides a written update of all activities occurring in their respective portfolios ahead of every Faculty Advisory Council meeting. The Faculty is currently exploring opportunities for joint appointments with other faculties.

**Recommendation:** Develop timelines, metrics, milestones, and responsible parties for every aspect of the Strategic Plan by April 2018.

We agree with the reviewers that implementation of the Strategic Plan is a high priority for the Faculty. As noted, a number of initiatives are already underway, but there is a clear need to establish a more formal framework for managing the implementation, although the April 2018 timeline is unrealistic. To that end we are in the process of appointing a senior staff member to support the implementation process (as well as preparation for our upcoming accreditation renewal in 2019) and the members of the Faculty who will be involved in various strategic projects.
Recommendation: Improve and expand opportunities for the broader faculty community to contribute to hiring priorities for the Faculty, serve on search committees, and provide input into the final selection of candidates.

We agree with this recommendation; however, it is clear that the reviewers were misinformed as to the Faculty’s processes for recruitment of excellent faculty members to join the Faculty. As noted, the Faculty has appointed a significant number of outstanding early career faculty members in the last 5 years, in areas that align with the strategic research direction outlined in Catalyst for Change. Annual hiring plans, including justification, are shared with faculty members who have the opportunity to discuss at Faculty Advisory Council meetings. In light of this recommendation, for the development of future hiring plans the Dean will consult formally with the Faculty’s Research and Academic Committees and subsequently seek input from the broader community.

Since August 2013 a total of 36 individual faculty (from a tenured/tenure track faculty complement of 43) and 2 staff members have served on search committees for the appointment of tenure stream faculty. Search committees for research faculty recruitment are usually chaired by one of the Associate Deans (non-voting) and normally comprise 7-9 members, including an external member from another faculty, a graduate student member, a faculty member from the educational leadership stream and research stream faculty at the levels of assistant, associate and full professor. Great care is taken to ensure that the University’s expectations in equity and diversity are met throughout the process. During the recruitment process all members of the Faculty have the opportunity to provide written feedback following candidate seminars (CVs and video-captured presentations are also shared), and members of the Faculty’s Research and Academic Committees meet with all candidates. Faculty members can request to meet individually with candidates. All feedback received is shared (in confidence and de-identified) with the search committee during the final deliberation. The committee chair makes a final recommendation (which can, and on occasion does, include a recommendation not to make an appointment) to the Dean, who can sit on committees as a non-voting member.

Recommendation: Establish an external advisory committee to the Dean and Faculty comprised of leaders from professional associations, health authorities, provincial affairs and health policy, pharmaceutical industry, and alumni.

We agree very much with this recommendation, and the implementation phase of the Faculty’s strategic plan is an opportune time to establish it. The Faculty has approved the terms of reference for a Dean’s External Advisory Council, and the Dean, in consultation with members of the Faculty, has drawn up a list of potential members. The Council will therefore be established during 2018.

Recommendation: Expand the senior administrative leadership team to include more pharmacists.

The Faculty’s Senior Management Team is extremely collaborative and, in my view, very effective. We do accept that improvements to communication and engagement with members of the Faculty can be made, and that is a high priority for the group. We do not, however, believe that being a practicing pharmacist should be the principal criterion for membership of the Senior Management Team. It is a fact that all members of that group are highly experienced in the clinical academic setting. The Associate Dean Practice Innovation is one of the leading practicing hospital pharmacists in the country, the Associate Dean Graduate and Postdoctoral Studies has practiced as a pharmacist at the early stage of his career, and both the Dean and Associate Dean Academic have extensive academic experience in medical schools. Furthermore, the key areas of the Faculty’s activity that require oversight by qualified and
experienced clinical pharmacists are already led by such individuals – the Associate Dean Practice Innovation (Pharmacists Clinic etc.) and the Directors of our clinical academic programs who have the opportunity to contribute to decision making in the Academic portfolio through the Academic Committee and Programs Committee.

F. Concluding Remarks

Overall the external review process has been very valuable for the Faculty, and the report is fair and constructive. Out of necessity it is somewhat selective in nature (for example the lack of focus on research), since the committee had a huge amount of information to digest and a large number of people to meet in a short period of time. This is a crucial and exciting time in the development of the Faculty of Pharmaceutical Sciences, as we seek to meet the ambitious goals that we have set ourselves and strive to fulfill our potential; the sage advice that the members of the External Review Committee have provided will be most helpful in this regard.

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