

CUMMING SCHOOL OF MEDICINE UNIT REVIEW

Summary Report

The Site Visit of the Unit Review Team for the Cumming School of Medicine took place from April 10-11, 2017. The Unit Review Team consisted of:

Gavin Stuart, University of British Columbia
Catherine Whiteside, University of Toronto
Tom Marrie, Dalhousie University
Shelley Raffin Bouchal, University of Calgary

Following the Site Visit, the Unit Review Team prepared a written report containing comments and recommendations. The Cumming School of Medicine subsequently provided responses to the recommendations. General comments and the recommendations and responses follow.

General Comments of the Unit Review Team

This is a Unit that is performing at a very high level. Within the past 4 years the School has undergone successful accreditation reviews of the Undergraduate Medical Education (UME) Program (2016), the Postgraduate Medical Education Programs (2015) and the Continuing Medical Education Program (2013). To have achieved a status of full accreditation in all of these programs is indeed a major accomplishment for which the School is to be complimented.

The research metrics reflect a School that is performing at a very high level. By all parameters, the School has created a profile and scholarship that is commendable. The level of tri-council funding for the School and across all 7 research institutes is significant and consistent. Biomedical and health research funding remains competitive with other Canadian faculties of medicine.

The environment in which the School functions is one of deep philanthropic commitment. The gift from Mr. Geoffrey Cumming to name the School stands to be transformational. In addition, there are many other leaders in the community willing to substantially support the School and its many programs. Beyond this ethos of philanthropy, there is a confluence of opportunities before the Cumming School of Medicine that can position the School to achieve the next echelon of academic success. These opportunities include but are not limited to; the recent gift of Mr. Cumming, the appointment of a leading academic in Alberta to the role of CEO of Alberta Health Services (AHS), the defined strategy and vision of the University of Calgary, the clarity of the Dean of the CSM in articulating the future and finally the federal environment with the recent release of the report from *Canada's Fundamental Science Review 2017* lead by Dr. David Naylor. These opportunities create an environment for the School to leverage even greater success in the near future.

The observations noted in this review and the resultant recommendations are outlined in three headings: Cumming School of Medicine, Education and External Relationships.

Reviewer Recommendations and Unit Response Follow-up

Area of Recommendations: Cumming School of Medicine

Strategy

Reviewers Recommendation 1:

That Dean Meddings and the University of Calgary assume leadership in developing a plan implementing Precision Health for Alberta, using as a template the Prospectus that was carefully designed for the Alberta Academic Health Network.

School Response:

This decision is not the University's to make. Nonetheless, Dr Meddings is one of three leads in the Alberta Health Network in directing the Precision Health Plan for Alberta and works closely with Dr Richard Fedorak, Dean, University of Alberta and Dr Francois Belanger, Chief Medical Officer, Alberta Health Services in this initiative. They have recently appointed Dr Francois Bernier (Calgary) and Dr Oksana Suchowersky (Alberta) as the leads for Precision Health under AHN.

Reviewers Recommendation 2:

That the term "Precision Health for Alberta" be adopted.

School Response:

The term, Precision Health, has been adopted by the AHN in its work. Within CSM, it is more appropriate to maintain the terms Precision Medicine and Precision Public Health as that better connotes the work of the CSM. However, at a campus-wide level involving nursing, social work and other groups, the term Precision Health would be a better term.

Reviewers Recommendation 3:

That an expert consultant team be engaged to give advice on the microbiome component of the Precision Health for Alberta strategy.

School Response:

CSM may consider in the future appointing a Strategic Advisory Board for the Microbiome component but at the present time we have expert advice on this topic. The International Advisory Board for the Cumming Medical Research Fund includes one of the leading microbiome experts in the world. Dr. F Shanahan, ISAC board member, has regularly reviewed the plans and progress of the CWMC, along with other international leaders in health science, including for example, Dr. A Bernstein at CIFAR. While the Microbiome Center is a major endeavor of the School it is also a broad one. Within this there are areas of concentration that with expert advice we have already elected to concentrate on. These include:

1. Inflammatory Bowel and Liver Disease
2. Chronic Disease of the CNS (MS, dementia and mental health issues)
3. Chronic disease of the lungs (Asthma)
4. Arthritis

5. Cancer (Colon Cancer and some other specific areas)

Reviewers Recommendation 4:

That action on the informatics component start as soon as possible.

School Response:

Strengthening the health informatics and bioinformatics capacity of the CSM is a key priority and work is well underway. Potential recruits have been identified to lead certain aspects of the work. An infrastructure review has been completed, which outlines current and future hardware and software needs. A strategic plan has also been completed to consolidate faculty from across campus in one location. At the present time the major impediment is the lack of available space and this will become available once Vet Med finishes their renovations.

Structure

Reviewers Recommendation 5:

That the existing organizational matrix model of Departments and Institutes continue while ensuring that cross-cutting functions such as strategic recruitment are retained in the matrix.

School Response:

We agree. This is critical for us. All recruitment is aligned to the Strategic Plan of the School and this is decided upon by the Planning and Priorities Committee (PPC). Whenever a recruitment request is brought to PPC the decision for approval rests upon whether it is aligned with the Strategic Plan. Furthermore, all recruitments must be supported by both a Department Head and an Institute Director. The only exception for this is in the purely clinical arena.

Reviewers Recommendation 6:

That a rigorous process to ensure that mentorship is provided to all faculty members within all Departments and Institutes

School Response:

We agree, mentorship is critical. Expectations are set centrally. It is a key responsibility of department heads as noted in the TOR for department heads: Department Heads are responsible for overseeing mentoring programs to assess and encourage the academic growth, career development and research productivity of members of their Department. The mentoring program may vary both between and within departments. However, special attention should be paid to research productivity, for which relevant Institutes should also provide formal advice and guidance. Mentoring is particularly important during the establishment of an academic career. The mentoring program should include frequent and substantive mentoring sessions. Previous attempts to implement a CSM-wide mentoring program were not successful and much thought went into the decision to have the departments as key units for mentoring, in partnership with appropriate institutes and holding department heads accountable for this. In other places, with different organizational structures, a centralized system might work better.

It is important to recognize that having a well-functioning mentorship program is a departmental responsibility and is part of the performance metrics for our Department Heads.

Reviewers Recommendation 7:

That the communication strategy ensures that all faculty members in all Departments and Institutes are aware of the vision of the School.

School Response:

There has been dissemination of the vision through various mechanisms including the Leadership Forum, Faculty Council, departmental/institute/education committees, public sessions and the All-Med News Digest. We recognize that for 500 full-time and 2500 clinical faculty who are located across AB to become fully familiar with a strategy is a long-term process. We continue to send updates on the plan with targeted stories and we are disseminating the KPIs from the plan. We will continue to discuss the Precision Medicine vision where there are opportunities and encourage the Department Heads, Institute Directors, and Education leads to keep it on their agendas. It is our desire to have this become a ground up desire where all see their place in the Precision Medicine agenda, and we are well on our way to having this become a reality.

Budget

Reviewers Recommendation 8:

Recognizing the limitation of the University-base funding being tied to enrollment targets, the CSM should be encouraged to seek new revenue streams to support existing and new research initiatives.

School Response:

CSM has a number of sources of revenue through AHS, government grants, research grants, contract work, and philanthropy. CSM will continue to seek out new opportunities, including philanthropic funding.

Space

Reviewers Recommendation 9:

That a Master Plan for space/facilities in the CSM be established.

School Response:

A Master Plan for the Foothills Campus space was developed in December 2013. Within CSM, there is a space committee that meets regularly to discuss space needs, reallocation and development. Space has been allocated based on need and to ensure greater efficiency. A comprehensive look at space vis a vis productivity (grants/publications) is well underway and will guide decisions for better utilization and addressing need. All institutes have been asked to provide 5 and 10 year projections related to space needs that will reflect current vacant space, recruitments, retirements and expansion. It is projected that a Precision Medicine building will be required in the next decade. This is already being contemplated as part of a response to significant Code issues. In fact it is important to have this integrated with the overall University of Calgary Space Plan, which it is. Currently the #2 priority in the UC Capital Plan is the issue of Code compliance and additional space on the Foothills Campus.

Reviewers Recommendation 10:

That an effective professional management support for this Plan be embedded within the CSM in addition to the academic leadership.

School Response:

The space committee is led by Guy Levy, Chief Executive Officer in conjunction with Cello Tonelli, Paul Schnetkamp, Jocelyn Lockyer, and Ron Bridges ensuring that the key areas of research, education, clinical work and administration are considered in development and utilization of space. The Space Committee will work with Campus Planning to update the Faculty Master Space Plan.

Reviewers Recommendation 11:

That CSM ensure that the basement floor of the HSC is aligned with current safety codes.

School Response:

The space committee is aware of safety code issues. There is collaboration with Campus Architecture and Planning to ensure that a long term plan is in place to meet codes, which is conditional on funding and being able to decant people and operations. As noted in #9 these issues are front and center for the University and occupy a prominent place in the Capital Plan.

Diversity

Reviewers Recommendation 12:

That a recruitment plan for senior leadership at the Department Head and Institute Director level and across the continuum of professor ranks be established to improve diversity including gender and visible minorities.

School Response:

This is an area of current discussion and action. This was discussed by all members of leadership (Associate Deans, Department Heads, and Institute Leaders) November 2016. Dr de Groot, Associate Dean, Professionalism, Equity and Diversity, has been developing a Diversity in Action Plan which will be presented to Leadership in June. Dr Bev Adams will assume the role of Associate Dean, Professionalism, Equity and Diversity in July and has already engaged in discussions related to a plan for diversity which is required to meet the standards of accreditation set by the Committee on Accreditation for Canadian Medical Schools. Attention is being paid to ensuring that candidates for all leadership positions include both men and women.

Reviewers Recommendation 13:

That performance metrics be developed for improving diversity at all levels within the CSM with particular attention to improving the recruitment and retention of students, faculty and staff from under-represented groups

School Response:

Performance metrics are being developed for CSM in conjunction with metrics followed by AFMC. The University of Calgary will also shortly be releasing metrics on this and we will align

ours with the larger University ones. Currently our metrics related to female faculty members are comparable with other Canadian Medical Schools.

Reviewers Recommendation 14:

That appropriate support for Indigenous students be established before recruitment into the UME program.

School Response:

We have created a unit, Strategic Partnerships and Community Engagement (SPaCE), as an overarching portfolio that seeks to design, integrate and lead strategic initiatives within CSM to ensure we are responsive, accountable and engaged with our communities locally and globally. There is an Indigenous Strategy within that unit which:

- Partners with the Undergraduate Medical Education Office to support indigenous students in the MD program.
- Created and administers the Pathways Program an initiative that identifies and supports selected students from indigenous communities, rural and lower socio economic status through a baccalaureate program with mentorship, bursaries and funding for tutoring for MCAT and other academic work to ensure their eligibility for successful completion of the MD program.

Work in the SPaCE program is being evaluated on an annual basis through the CSM strategic plan.

In addition, the Aboriginal Health Program under the direction of Dr. Lindsay Crowshoe, was created to address the underrepresentation of Aboriginal people within the profession of medicine. Objectives include supporting the development of a pool of qualified Aboriginal applicants for medical training, and to support Aboriginal applicants during their admission process. Initiatives include school visits, mini-medical school, pre-admissions workshop, and career fairs specifically for this group.

Communications

Reviewers Recommendation 15:

That an effective plan be implemented to inform all faculty, staff, students and public of the vision of the CSM, including the opportunity for face-to-face discussion.

School Response:

Jordanna Heller, Director, Communications and Media and team will continue to implement a plan for communication of the Precision Medicine vision. The PM vision is already being shared with all faculty, staff, students and the public through communications platforms including Leadership Forum, Faculty Council, departmental/ institute/education committees, public sessions, the All-Med News Digest, social media, and at public facing events such as the Dean's Talk through speaking notes and talk subject matter. Additional effort will be made to create opportunities for face-to-face discussions and the development of PM collateral to share with various audiences. We intend to renew a previous initiative of 'Breakfast with the Dean' that worked very well over previous years.

Reviewers Recommendation 16:

That the case for support for the strategic plan be developed with advancement with a value proposition statement and promise that resonates with both the members of the CSM and the public.

School Response:

KPIs for the strategic plan (and its funding) have been identified and data are being collected on an annual basis. This information will be provided to members of CSM and the public.

Area of Recommendations: Education

Community Rehabilitation and Disability Programs

Reviewers Recommendation 17:

That the current review of the Community Rehabilitation and Disability Programs considers the tremendous societal value and impact and the importance of improved integration within the CSM.

School Response:

The value of the CRDS program will be considered within the three reviews related to the CRDS programs. There is one at the level of Graduate Studies Education of which the graduate programs in Community Health Sciences are being examined. There are separate reviews of the Graduate programs in CRDS (course and thesis based Masters program and PhD) and the BCR program (4 year admission from high school; 2 year face/face post diploma from a community college and 2 year on-line post diploma from a community college). During the past year, all courses offered by CRDS faculty along with faculty workloads have been examined along with office structures to support the program. This has resulted in many changes to support the program, clarify the courses, degree requirements, calendar and faculty workload with the intention of better integration within the Department of CHS and CSM. Additionally, the Director of the undergraduate programs is a full member of the Directors group of undergraduate health and science education programs. Additional support in the form of IT coaches, student bursaries and administrative tasks is planned or underway.

Clerkship

Reviewers Recommendation 18:

That the UME Curriculum Committee review the number of weeks of elective opportunities as well as the strategic timing of this to optimally support students in their CaRMS applications.

School Response:

There is a curriculum renewal process underway in UME under the direction of Dr Nancy Brager, Professor, Psychiatry that includes students, faculty, and staff. One of the key mandates for this taskforce is to lengthen the existing clerkship and provide more elective opportunities. Recent changes have been made to the timetable to better accommodate CaRMS application processes. We recognize the inherently stressful paradigm of medical education (and practice) and will work to reduce this as much as possible in our students.

Clinician-Scientist Training

Reviewers Recommendation 19:

That the CSM re-assess its strategy for development of Clinician-Scientist career paths in all Clinical Departments, including enhanced support for the Clinician Investigator Program, to fulfill the vision of leadership in Precision Health.

School Response:

Currently, career tracks for clinician-scientists include both the Leaders in Medicine (LIM, UME) and the Clinical Investigator Programs (CIP, PGME). Dr Beattie, Associate Dean, Graduate Science Education is currently working with the Associate Deans, PGME and UME to develop a strategy to better support and expand these programs. This includes providing additional administrative support, and strategies to allow the Associate Dean GSE increased time for this work. We will be reviewing and renewing committees and leadership roles related to both LIM and CIP.

Graduate Education

Reviewers Recommendation 20:

That thesis-based Master's and Doctoral students in the Dept of Community Health Sciences be provided with the same access to stipends and financial support as other graduate students within the CSM.

School Response:

We have already engaged in meetings and discussions with CHS, the GSE office and FGS to develop and implement a policy to offer a minimum level of support for all PhD students. CHS has access to the same funds as the other programs in CSM from the FGS, however historically the majority of stipends in other programs are paid through supervisors' operating grants, a practice that has not yet been readily adopted by CHS (in part as these grants are substantially less than those in other health research pillars). We are working to change that culture as well as centralizing some of the current funding and processes to allocate TA positions to ensure student funding. With these approaches, the program will have a guaranteed minimum level of support for PhD students.

Reviewers Recommendation 21:

That graduate students in CSM be allowed to access GAT opportunities for teaching experience that will better position them best for career opportunities.

School Response:

There are relatively few GAT positions available in CSM. The numbers of undergraduate courses is limited compared to other Faculties, and we only have a few TA opportunities at the graduate level. However, in collaboration with the BHSc program and the GSE office, we will be improving procedures for the allocation of TA positions which will make them more equitably accessible across CSM.

Reviewers Recommendation 22:

That for those programs without a clearly designated Department Head or Institute Director, an academic graduate head be appointed to whom the graduate coordinator reports and to whom faculty members are accountable for supervisor performance.

School Response:

The structure of the graduate science program (as with all educational programs in CSM) is through an Associate Dean to whom the program director is accountable. GSE, like all of the CSM programs, operates in a matrix structure in which the program director works with department heads and/or institutes in order to ensure student success.

We believe this comment relates primarily to students in the Medical Science program which encompasses a number of smaller specializations including cancer biology, critical care medicine, joint injury and arthritis research, medical imaging, molecular and medical genetics, and mountain medicine and high altitude physiology, each of which has a dedicated specialization coordinator. These programs have been grouped together for administrative reasons under a program director and GSE administrator with resources comparable to other programs. With respect to supervision, the newly created supervisory renewal process through FGS takes this issue into account with the Associate Dean GSE (in collaboration with the program directors) and formally assess supervisory performance of faculty members every five years. Ultimately, within CSM, it is the department head, working with other members of leadership, who manages work assignments and performance. The current review of GSE will be helpful in examining this issue.

Reviewers Recommendation 23:

Given the advantage in integrating theory and application in other areas, the program of medical education in the Department of Community Health Sciences should ensure integration of medical education scholarship and practice.

School Response:

The Office of Health and Medical Education scholarship is working with educators across the continuum to support practical and theoretical studies that will advance best evidence medical education within curriculum development and assessment.

Area of Recommendations: External Partnerships

Relationship with AHS

Reviewers Recommendation 24:

That the two co-leads of the Department of Family Medicine representing the clinical and academic components of Family Practice be empowered to jointly attend all AHS and CSM meetings.

School Response:

CSM recognizes, and strongly supports, the importance of good communication with AHS. CSM is amenable to having the AHS Head of Family Medicine attend monthly leadership meetings. However, it must be recognized that the agendas for some meetings include confidential information and

decisions which preclude the creation of a general procedure related to participation on all committees. Although we are closely aligned it must be recognized that UC and AHS are separate organizations and there are some meetings at which only employees should attend.

Reviewers Recommendation 25:

That the AHS Board be encouraged to seek advice on how much of its budget could be devoted to research.

School Response:

There are ongoing discussions with AHS pertaining to research and educational matters. These are inordinately complicated and sensitive.

Reviewers Recommendation 26:

That all student proposals be fast-tracked for the AHS impact assessment to not interfere with their educational program.

School Response:

We recognize that there were problems in the past with delays in approving student proposals that requested patient data or impacted on workflow within AHS. Since January 2017, AHS has been working closely with UofC to streamline procedures and have them work in parallel with CHREB approval systems. The changes were initiated by us and are being monitored.

Relationship with Cognate Faculties

Reviewers Recommendation 27:

That the CSM work with the Faculty of Veterinary Medicine to jointly develop a curriculum for One Health.

School Response:

The UME program has just completed a very successful accreditation cycle which did not identify problems with curriculum. Nonetheless, CSM is undertaking a thorough review of curriculum and One Health will be discussed.

It is unlikely that there will be room for One Health in the UME curriculum. However, there are clear advantages to having contiguous location of a medical and veterinary school. We have already accommodated many of the Vet Med researchers within our Institute structure for research to the benefit of both faculties. On the education front there is room for a One Health curriculum directed towards the intersection of animal, human and environmental health. These opportunities will be explored and could be incorporated in other programs such as those in Vet Med or perhaps in the BHSc program.

Reviewers Recommendation 28:

That there is a written documentation of terms and conditions of employment including teaching and research responsibilities for all shared recruitment of scientists across Faculties.

School Response:

Meetings will be set up to discuss this with other Deans.

Reviewers Recommendation 29:

That the CSM in implementing its Precision Health strategy engage with other appropriate Faculties to support the overall vision for the University of Calgary.

School Response:

Meetings will be set up to discuss this further with other Deans, as a first step. The intent is that this should become a University strategy, embedded in the Academic and Research Plan. It would be developed in a ground up way and led from the VPR office in a manner analogous to the very successful development of the Energy strategy.

Academic Alternative Relationship Plans (AARP)

Reviewers Recommendation 30:

That there is a transparent and equitable accountability framework for all clinicians and Departments benefiting from an AARP.

School Response:

Accountability is a cornerstone of the Academic Medicine Framework (AMF). Beginning in 2017 assessment of financial, clinical and academic performance measures are assessed at the individual and department level on an annual basis. The information will be reviewed and acted on by the AMF South Sector Steering Committee that includes all CSM Clinical Department Heads.

Review Summary

The University of Calgary, Cumming School of Medicine, has a long-standing reputation for quality and excellence in their academic programs. Their research metrics across 7 research institutes perform at a very high level breaking new ground in research and knowledge translation consistently. The philanthropic culture with the gift of Mr. Geoffrey Cumming and others has been transformational, leading to the vision of “Precision Health” where the school has the opportunity to lead and actualize Precision Health in Alberta. Several suggestions have been offered related to the CSM, space, and communication. In relation to the educational programs, the external committee has made recommendations that will enhance an already successful reputation. Finally, recommendations are made in relation to external relationships with others (AHS, other Faculties) that are positive and in collaboration have the potential to help the CSM to accomplish their vision and goals.

Follow-up

The Review Team recommendations will be revisited mid-way through the cycle. At that point, the Cumming School of Medicine will be required to report on its status in acting on the

recommendations, providing explanations and timelines for those which have not been met. This interim report should be submitted to the Provost in October 2019, with the next full review scheduled in 2021-2022.