



Education Programs

Message from the Vice Chair, Education

The 2020 – 2021 academic year was a challenging one. Both teachers and learners adapted quickly to public health restrictions during the COVID-19 pandemic. Some activities were curtailed while others changed in their mode of delivery. Remote learning became the standard. Assessment priorities were reviewed and adjusted for safety and feasibility. Throughout the whole year, we witnessed forbearance, patience, and kindness amongst our faculty, staff, and students as we delivered another year of education in the Department of Anesthesiology, Pharmacology and Therapeutics.

To all of you, thank you for your ongoing support of our education programs!

A handwritten signature in black ink, appearing to read 'Peter Choi'.

Peter Choi
Vice Chair, Education

Undergraduate Programs

BSc Pharmacology

Andrew Horne PhD & Jennifer Shabbits PhD

Faculty made significant changes to all courses offered in the 2020 Winter Term (2020W), which were delivered online via Canvas and Zoom, with computer simulators used for our online laboratory sessions. To minimize the weight of former high-stakes exams, instructors created other assignments and / or lower stakes quizzes to assess student learning. Exams were delivered online with or without Zoom invigilation, depending on the course. Course averages ranged from 84% to 91% (Table 1).

We look forward to the 2021 Winter Term, when we shall retain some of the successful curricular and assessment elements used in 2020W. Classes will return to an in-person format with face masks mandated by public health. We have contingency plans for student and instructor absences during the fourth wave of the pandemic.

Table 1. Summary of undergraduate pharmacology courses taught in 2020W term

Course	Enrolment	Course Average	Notable Curricular Changes
MIDW 125	19	84%	
Elective Courses			
PCTH 201	68	87%	New assignments, weekly online quizzes
PCTH 305	20	84%	New assignments, open-book exam
PCTH 325	320	90%	New assignments
Lab Courses			
PCTH 302	23	88%	Online labs via computer simulators
PCTH 402	5	91%	Online labs via computer simulators
Lecture Courses			
PCTH 300	23	85%	New assignments, open-book exams
PCTH 400	22	84%	Open-book exams
PCTH 404	16	89%	Modified assignment (video submission), open book exam

Vancouver Summer Program

Andrew Horne PhD

The Vancouver Summer Program (VSP) was cancelled for the 2020 and 2021 Summer Terms. Preparations are being made to resume in the 2022 Summer Term.

Our department offers one of the 18 VSP course packages in the Faculty of Medicine with an enrolment of 31 students in the 2019 Summer Term. Entitled *Pharmacology and Literature Analysis in Science and Medicine*, our course package consists of two courses: *Pharmacology Through Case Studies* led by Dr. Joanne Leung and *Primary Literature Analysis in Science and Medicine* led by Dr. Andrew Horne.

Anesthesiology / Pharmacology in the MD Undergraduate Program

Jennifer Shabbits PhD & Peter Choi MD MSc FRCPC

Student shadowing of clinicians and out-of-province electives were discontinued at the start of the pandemic. The Year 3 Anesthesiology Clerkship rotation was reduced from two weeks to one weeks in the VFMP and NMP distributed sites during the 2020 – 2021 academic year. Due to occupancy restrictions at hospital sites, most of the curriculum for the academic half-days

were delivered as pre-recorded lectures or Zoom sessions. In spite of the limitations, students performed at a similar level in the anesthesiology MCQ exam (class average 73%) when compared to students in previous years. The anesthesiology rotation and the Year 4 electives remain highly popular with wait lists for the latter. During the 2021 CaRMS match, anesthesiology was the third highest in the Canadian postgraduate programs chosen by UBC students.

Looking ahead, there will be more learning opportunities in the 2021 – 2022 academic year. Clerkship rotations will return to a two-week duration on 30 August 2021 across the province. Academic half-days will resume in person. Unfortunately, student shadowing and out-of-province electives are still prohibited at this time.

The pharmacotherapy content in the MD Undergraduate Program curriculum is undergoing revision. One of week in the first-year curriculum has been revised to further emphasize pharmacotherapy. In collaboration with the Therapeutics Initiative we are revising the UBC medical school formulary to reflect prescribing patterns in BC. In the third-year clerkship curriculum, we are developing new modules on pharmacology of drugs used in anesthesia as well as pharmacogenomics.

Graduate Programs

Ismail Laher PhD & John Kip Kramer PhD

In the MSc program, two students graduated during the 2020 – 2021 academic year and six students are currently enrolled. In the PhD program, four students passed their comprehensive exams out of the seven students currently enrolled.

The graduate program was reviewed externally by the Faculty of Graduate and Postdoctoral Studies and a number of recommendations were made in the report. An *ad hoc* committee has been struck to respond to and enact the recommendations. We have drafted new terms of reference for the Graduate Committee and are seeking a new graduate program director. The course requirements for our graduate students were updated this year to reflect the increasing diversity of research areas in our Department (*e.g.*, pain medicine, pharmacogenomics). These changes will enable students to complete their graduate studies within our graduate programs without taking courses that may have no bearing on their field of research.

Postgraduate Programs

Royal College Anesthesiology Residency Training Program

Laine Bosma MD FRCPC

Training Positions

As of December 2020, a total of 62 residents were registered in the 5-year Royal College Physicians & Surgeons program. This is a significant increase over the past 3 years. Eleven of these residents are scheduled to complete their residency during the 2020 – 2021 academic year and will be taking their RCPSC examinations in Anesthesiology in the spring of 2021. The number of CaRMS positions has been increased for the 2021 intake to 15. Fourteen residents joined the program in 2020. We continued to have a large applicant pool of over 100 well-qualified students with a large contingent of UBC students applying.

New Graduates

All of the PGY5 residents were successful in the 2020 Royal College specialty examinations in Anesthesiology, which were delayed until August due to COVID. Our Exam Seminar Series, led by Dr. Ron Ree and Dr. Jason Wilson, continues to be very successful and a model for Royal College exam preparation. With the upcoming splitting of the RCPSC exam in 2021, the Exam Seminar Series will undergo a revision to optimize education for the new timeline. The vast majority of 2020 cohort of graduates have faculty positions at UBC academic hospitals.

Competency by Design

2020 is the final year of the traditional program as the “new competency by design (CBD) curriculum” (competency-based medical education) becomes the dominant curriculum. The initial cohort (2017) worked through completing the core stage of CBD while planning for the final Transition to Practice stage began. The residents and the faculty remain committed to building and delivering a very high-quality educational product through this transition.

Accreditation

The UBC Anesthesiology Residency Program underwent accreditation in March 2020 and received full accreditation. This is a big accomplishment as the entire accreditation system and tools had been revised while simultaneously, the program is entirely new and growing. We commend the staff, faculty, and residents on this significant accomplishment. Our next accreditation will be in eight years' time.

Resident Selection Committee

A very robust and active sub-committee of the Residency Program Committee (RPC) reviewed all applicants. The Selection Committee was chaired by Dr. Sadiq Abdulla, with committee members representing all of the major BC teaching hospitals. Resident members are also well represented on the committee.

Resident Wellness

The peer mentorship program which was started in 2017 continues to grow and be refined. The initial feedback from residents is that this is a very valuable program and that it would be great to continue to expand the program through all of the years of training. Additionally, several resident wellness workshops have been included in the academic day schedule.

Academic Program

- *COVID* – The pandemic resulted in the cancellation of all elective surgery in April and May. In spite of this, our residents continued to work and learn full time being redistributed between the primary hospital anesthesia sites and the tertiary ICUs in the lower mainland. The residents demonstrated incredible resilience, determination, and courage during this trying time. Since June, with the return of elective surgery, COVID has not caused any interruption to the residents clinical learning.
- *Academic Day* – The full day academic program involving active participation from each of the teaching hospitals was very successful. Some sessions were cancelled at the end of the 2019 – 2020 academic year due to COVID, but the vast majority of sessions were transitioned to virtual. The 2020 – 2021 academic curriculum was revised to accommodate a majority of virtual sessions, with a handful of mandatory workshops (regional, POCUS, etc.) maintained in person with appropriate COVID safety planning. The feedback on our virtual academic sessions remained positive although the collegial interaction was significantly missed.
- The *Residency Program Committee* continues to support the autonomy of each participating UBC teaching hospital in delivering their contribution to the residents' educational program.
- *Simulation* – Led by Dr. John Veall, simulation continues to be a mainstay of our residency program. Of particular note, all of the PGY4s successfully completed the Royal College CanNASc scenarios as required by the new curriculum. This was an enormous undertaking and Dr. Veall and the entire simulation team are to be commended. Please refer to the simulation report for specific details
- *Journal Club* – An integral part of the academic program, meetings occur monthly at faculty members' homes or other venues. Dr. Terri Sun joined Dr. Anton Chau in the coordinator role and the sessions continued virtually. In spite of everything, these sessions continue to provide the residents with an excellent educational opportunity to learn about critical appraisal skills.

Clinical Program

The clinical program continues to be a strong element of the UBC Anesthesiology training program. Core training in both core anesthesiology as well as subspecialty anesthesiology is distributed between the primary teaching sites, as well as distributed to the secondary teaching sites. The program continues to work at recruiting new training experiences for residents, with Surrey Memorial Hospital and Kelowna General Hospital increasing their participation in the program. These expansions continue to be monitored closely.

Residency Program Committee (RPC)

This committee met five times in 2020 and as always was very effective in guiding the activities of the residency training program and negotiating the difficulties of COVID. Committee members include hospital program coordinators from each site, our Royal College Examiners, members-at-large, UBC APT Department Head, resident representation from all years, and the program director as chair.

Administration

At the end of 2020, Dr. Ken Ryan completed his position as Competency Based Medical Education director and Competency Committee chair. We thank Dr. Ryan for his enormous service to the program as we embarked on this major transition. A new associate program director position was established and after a search process, Dr. Sadiq Abdulla joined the program administration as the inaugural associate anesthesiology residency program director. Dr. Cynthia Yarnold started as the chair of the Competency Committee.

Ms. Jill Delane continued in her role as the program coordinator. Ms. Susan Van Bruggen continues to be an excellent program secretary. Ms. Jay Park started as project manager for accreditation and has continued on to help maintain and innovate the administrative support of the program. All have been invaluable in the administration of the program.

Summary

Overall, despite all of the adversity, this has been a successful year for the UBC Anesthesiology Residency Training Program. This is due to the many hours of hard work on the part of our clinical faculty working with our residents, taking part in the academic program, as well as helping senior residents prepare for the oral exam and to become skilled anesthesiology consultants. In addition, the engagement of the resident body in building and improving the program has been beyond expectation. The goodwill and high level of commitment to residency training is a credit to this department.

Family Practice Anesthesia (FPA) Residency Training Program

John McAlpine MD FRCPC

Three FPA residents successfully completed their training during the 2020 – 2021 academic year. A fourth FPA resident will complete their training in September 2021. As of July 2021, the program has expanded to five FPA residency positions from the previous four.

The implementation of a competency-based medical education (CBME) curriculum and its entrustable professional activities (EPAs) are underway and will likely be fully completed for July 2022.

Royal College Pain Medicine Residency Training Program

Michael Butterfield MD FRCPC

One resident successfully completed the pain medicine residency program in the 2020 – 2021 academic year and four residents are currently enrolled as of July 2021. We are actively involved in the development of entrustable professional activities for the new Competency By Design curriculum for our residency program. In addition, the curriculum is undergoing review. The number of academic half-day sessions and lecturers have expanded to include anatomy and emergency scenarios. Clinical rotations have been revised to improve learning by providing longitudinal experience in pediatric pain, addiction medicine, and psychiatry.

We held our 1st Annual Pain Medicine Graduation and Social in June 2021. The Dr. Brenda Lau Teaching Award was created this year and the inaugural winner was Dr. Kay Chawla.

At the Royal College of Physicians and Surgeons of Canada, Dr. Butterfield represents the program on the Pain Medicine Subspecialty Committee and the Pain Medicine Exam Development Committee.

Continuing Professional Development

Therapeutics Initiative (TI) Education Working Group

Colin Dormuth PhD

The Therapeutics Initiatives Education Working Group continued to be busy with many educational activities from March 2020 to March 2021:

Five major educational events

- Pharmacotherapy Virtual Grand Rounds – 6 May 2020 with 1 speaker and 48 attendees
- Meaningful Medication Assessments, Northern Health (virtual event) – 4 & 18 June, 9 July, & 6 August 2020 with 6 speakers and 12 to 97 attendees
- Bringing Best Evidence to Clinicians (4-h virtual event) – 17 October 2020 with 5 speakers and 237 attendees
- Practical Deprescribing & Meaningful Medication Assessments (1.5-h virtual event) – 28 October 2020 with 1 speaker and 25 attendees
- Critical Appraisal Workshop (2-h virtual event) – 10 March 2021 with 4 speakers and 103 attendees

10 webinars from 8 April 2020 to 17 March 2021 involving 12 speakers and 83 to 385 attendees

9 talks involving 4 speakers

7 lectures in the BSc pharmacology program

4 Twitter message decks

For a detailed list, please contact Dr. Colin Dormuth (colin.dormuth@ubca.ca).