

## Program Portfolio Rationale

Is there a clear, evidence-based rationale for the current portfolio of programs offered entirely within the Faculty or in collaboration with others? What gaps in the portfolio should be addressed in the short, medium or long term, based on evidence relating to Dalhousie's Strategic Plan, and to programming and curricular needs that address diversity and inclusion?

### Dalhousie Faculty of Medicine

The Dalhousie Faculty of Medicine has four distinct, yet complementary, programs. Our Undergraduate Medical Education, Postgraduate Medical Education, and Continuing Professional Development programs are focused on clinical teaching and cover the continuum needed to prepare for, receive, and maintain a medical licence. Our Graduate Studies program provides education, research, and development opportunities in medical sciences. These basic science programs facilitate the education requirements of our clinical programs, while providing excellent education, training, and experience opportunities for our graduate and postdoctoral students.

In addition to these programs, the Faculty of Medicine also has a close partnership with the Faculty of Science through the development and delivery of the Medical Sciences Bachelor of Science program launched in 2014. The first of its kind in Atlantic Canada, the Medical Sciences program offers a BSc degree program focused on human physiology and medical applications.

Medicine and life sciences is continually expanding with new understanding, new diseases, and new treatment options. It is our responsibility further knowledge, skills, and techniques in both clinical and basic science education. Our four programs work together to achieve that goal.

#### *Undergraduate Medical Education*

Our undergraduate medical education program provides the required knowledge and skills to enter the Postgraduate Medical Education program. This four-year program delivers a basic foundation of anatomy and body systems, an understanding of professional practice, an opportunity to apply knowledge hands on, and develop clinical skills.

UGME undergoes constant review of the program and curriculum to ensure it meets all current requirements and provides the most up-to-date educational experience (See: Undergraduate Program Review Mechanisms). In addition, the program undergoes an accreditation review every eight years in which external reviewers evaluate the programs (See: Accreditation Reviews). This process ensures Dalhousie and the Faculty of Medicine has met all requirements needed to have an undergraduate medical education program and provide a Medical Degree. These requirements include such things as working with a resident (PGME) in a clinical setting, provides opportunities to participate in research and scholarly activities, ensures there are sufficient faculty to provide both clinical and basic science curriculum, and support is provided to continue to foster scholarship and professional development of faculty.

#### *Postgraduate Medical Education*

Postgraduate Medical Education (PGME) provides residency training for medical graduates to become excellent medical experts, professionals, communicators, collaborators, managers, health

advocates, and scholars. This training is required before residents can complete qualifying examinations and be granted a medical license.

Our residency programs are approved by the College of Family Physicians of Canada and the Royal College of Physicians and Surgeons of Canada, and are conducted in affiliated teaching hospitals and clinics across the Maritimes. Much like the UGME accreditation process, the accreditation process confirms requirements are met and supports are in place to deliver the program.

### *Continuing Professional Development*

Dalhousie Continuing Professional Development (CPD) hosts and sponsors online courses, workshops, seminars, and conferences for physicians in communities across the Maritimes every year. This supports the lifelong learning needs of physicians and contributes to meeting requirements for maintenance of certification for Fellowship in the Royal College of Physicians and Surgeons of Canada or the Canadian College of Family Physicians. Through regular needs assessments CPD provides a variety of supports and instruction needed by faculty and physicians.

Dalhousie Medical School and its departments provide faculty members in all specialty areas with opportunities to develop and refine their teaching skills. CPD's faculty development program also offers a variety of learning options for faculty to improve their teaching skills and stay up-to-date on advances in education and evaluation.

Our affiliated teaching hospitals must meet all Dalhousie University requirements for affiliation, which includes having an effective continuing professional development program in each department. Accreditation of our medical education programs also require professional development and remediation opportunities provided. The CPD office fulfills, and supports, both of these requirements.

### *Graduate Program*

Eight departments and programs within Dalhousie Medical School offer MSc and PhD programs (Biochemistry & Molecular Biology, Biomedical Engineering, Community Health & Epidemiology, Medical Neuroscience, Microbiology & Immunology, Pathology, Pharmacology, Physiology & Biophysics). These departments providing excellent training opportunities for medical students, residents, graduate students and fellows.

Our Graduate Program is vital to the advancements in our collaborative research community that's making an impact on the wellbeing of individuals and communities in the Maritimes and beyond. Graduate programs within the Faculty of Medicine are able to experience multi-disciplinary collaborative research. The position of these programs within the Faculty of Medicine not only allows them to take advantage of the supports and resources available, but also supports collaboration and knowledge translation with clinicians and clinical department, as well with members of the Faculties of Health, Science, and Engineering.

Graduate programs are a key component of the Faculty of Medicine. While the curriculum and research within these departments contribute to our further understanding of medicine and disease, the faculty and students also support and provide the required foundational concepts needed for clinical learning for our UGME and PGME programs.

### *BSc Medical Sciences*

The program offers a multi-faculty curriculum made up of core courses and selectives primarily derived from Science and Medicine, with contributions from the Faculty of Arts & Social Sciences, Faculty of Health, University of King's College, and as of December 2019, from the Faculty of Computer Science. It has been designed to provide training for students interested in medical school, pharmacy, dentistry, graduate school, or employment in related medical fields. While this is a program of the Faculty of Science, an Assistant Dean from the Faculty of Medicine oversees the program, interfacing with the Faculty of Medicine's academic leadership including Dean's Council and Education Council. The Faculty of Medicine delivers several core courses in the program, with additional contributions from basic science and clinical faculty in the delivery of the Medical Sciences Capstone course and supervision of undergraduate students in experiential learning and honours research projects.

The Medical Sciences Program demonstrated a 93% retention rate in 2016-2017, which surpasses other similar programs.

### *Strategic Plan*

Our current programs support the visions, missions and strategic areas of Dalhousie's Strategic Plan (see Institutional Alignment).

### Teaching and Learning

The opportunities and supports provided to our students and faculty has resulted in excellent retention rates and degree completion. This is due in part to recruitment and admissions strategies not only focused on identifying strong academic candidates, but seeking diversity and demonstrating skill in communication, collaboration, and leadership. Faculty and students receive continual support through our Resident & Student Affairs Office, the Research Development Office, Faculty Development, and the Faculty of Graduate Studies.

Through ongoing evaluation for quality improvement as well as curriculum review (see: Planning Processes, Undergraduate Program Review Mechanisms, and Graduate Program Review Mechanisms) all of our programs remain innovative using new knowledge and techniques when delivering curriculum. PGME is in the process of adopting a competency-based framework for instruction and resident assessment (<https://medicine.dal.ca/departments/core-units/postgraduate/cbme.html>).

### Research

The Faculty of Medicine has a strong research presence at the university. Our supports and resources contribute to our ability to attract outstanding faculty, students, residents, graduate students and fellows. This has resulted in a portfolio of research with impacts locally, nationally, and internationally.

Our UGME program supports undergraduate research through Research in Medicine (RIM) and other opportunities to participate in research. In fact, Dalhousie is the only Canadian medical school that ensures 100% of its graduates have had substantive research experience and this is accomplished through the RIM program. The PGME programs offers research electives and supports scholarly activity. CPD offers professional development for faculty and clinicians to improve their research and

evaluation skills, as well as supports education research. Our Graduate Programs provides training to develop research skills and is continually advancing knowledge and understanding through robust research.

#### Service

All Faculty of Medicine programs participate in the community. We also have a strong focus on experiential learning through clinical learning, research activity, scholarly activity and presentations, and community teaching and interaction. A strong focus of our programs is serving the Maritimes through research, education, practice, outreach, and skill development of future professionals to work in a variety of community settings.

#### Partnerships and Reputations

The Faculty of Medicine, and all our programs, rely on our strong partnerships and reputation. We have strong ties with government and the Health Authorities in the Maritimes. Strong scholarly activity in all programs strengthens our partnerships and recognition with other academic institutions. For more information see: Relationships and Collaborations

#### Infrastructure and Support

Our CPD programs provides excellent support for our faculty to develop and maintain skills. In addition, our Human Resource department supports faculty and staff of all programs (see: Academic Career Progression). As a faculty we have also adapted the multi-year integrated budget process (see: Faculty Budget).

#### *Diversity and Inclusion*

Diversity and inclusion are woven throughout the curriculum of all four programs (See: Equity, Diversity and Inclusion).