

## **A Message from the President of the Canadian College of Microbiologists**

As the President of the Canadian College of Microbiologists (CCM), I read with great interest the recent AMMI Newsletter article, 'What is the difference anyway – Microbiology, PhD or FRCPC', penned by Dr. Saxinger. I wish to applaud Dr. Saxinger's effort to initiate a national dialogue on a topic that has raised questions and spawned debate in some areas of the country. I certainly agree with her comment that the skill sets brought to the laboratory by both the Clinical and Medical Microbiologist very much overlap and are complementary. Most of us, as specialists, work very well together and learn from each other throughout our careers. From the College's perspective, a major challenge has been elevating the visibility of exactly what is involved in becoming a certified Clinical Microbiologist. The path to becoming board certified as a Clinical Microbiologist in Canada is through the CCM or by reciprocity through the American Board of Medical Microbiology (ABMM), both examination based certifications.

The CCM was not contacted to provide background for Dr. Saxinger's article, but the article draws on some information from our website which is unfortunately outdated, as our website is currently being rebuilt. We will soon be in a position to post our current terms of reference and examination process documents which should answer many of the concerns raised by Dr. Saxinger. I do apologize for the confusion this creates, but we are working diligently to improve this communication gap. That said, as President of the College, Dr. Saxinger has provided me with a wonderful opportunity to highlight the mission and role of the CCM.

### ***What is the CCM?***

The CCM was founded in 1978 by the Canadian Association for Clinical Microbiology and Infectious Diseases (CACMID) and the Canadian Society of Microbiologists (CSM) as a certification body for all disciplines in the field of Microbiology. Membership in the CCM is primarily exam-based. The College offers certification for its members as Registered Microbiologist (RM), Specialist Microbiologist (SCCM) in industrial, environmental and medical microbiology, Academic Microbiologist (ARM), and for the Clinical Microbiologist, Fellow of the Canadian College of Microbiologist (FCCM). Applications for each specialty exam are reviewed for eligibility and if approved, candidates must successfully complete the examination process.

To be considered a Clinical Microbiologist in Canada, a person must be certified as an FCCM. In fact, most if not all employment opportunities for Clinical Microbiologists now require certification or eligibility with the expectation that FCCM certification will be completed within two years of employment. A candidate is automatically eligible for examination if he or she has successfully completed a 2 to 3 year post-doctoral residency training program in clinical/medical microbiology from an accredited US or Canadian program. In Canada, there are currently 2 accredited programs, one in Winnipeg and one in Toronto. Both programs are modeled after programs accredited by the American College of Microbiology and are run in parallel with the FRCPC microbiology fellowships. The FCCM equivalent in the US is the ABMM and it is the only CLIA

recognized certification for Medical Microbiologists (MD or PhD). Furthermore, there is a reciprocity agreement between the CCM and the ABMM that recognizes both professional designations as equivalent. Candidates who have received foreign training or have gained director-level experience working in a clinical environment for a significant period of time may also be eligible for examination, but the application process is much more stringent and every application is reviewed by the FCCM examination committee.

The FCCM exam consists of a written and an oral exam, which tests the candidate's theoretical knowledge and experience using case-based questions. Candidates are tested in all areas of Clinical Microbiology: Diagnostic interpretation, Quality Control, Hospital Infection Control, Laboratory Management, Laboratory Safety, and Public Health and Epidemiology. The examination process is robust and is closely monitored and frequently reviewed and updated by the FCCM examination committee. Successful candidates are more than qualified to discharge the duties of a Clinical Microbiologist and to work in a Clinical or Public Health Laboratory. It is worth noting that although the majority of the Clinical Microbiologists certified through the College hold a PhD, we do have several MD, FRCPC Medical Microbiologists that have successfully undergone the FCCM certification process and are contributing members of the College. We have been told by a number of these members that they found the examination process both challenging and rewarding.

Once FCCM certified, Fellows are required to re-certify every three years and be in good standing with the College. Re-certification requests are reviewed by the FCCM committee and random audits are performed to ensure Fellows have maintained their level of competency. The College also offers accreditation of educational activities for Category One credits. The CCM accreditation process is similar to the one offered by the Royal College of Physician and Surgeons' and CCM accredited educational activities are recognized by the ABMM.

In the course of their graduate studies, PhD candidates do not merely design and run experiments and troubleshoot problems. The design and execution of these experiments also requires interpretation and critical thinking, modeling of the pathogenic process, forging collaborative relationships and writing and defending a thesis in front of a panel of their peers. The PhD degree is the highest degree a Canadian University can award a student and identifies individuals as experts in their field of knowledge. Through post-doctoral residency training, Clinical Microbiologists enhance their knowledge on disease processes, host pathogen interaction, microbial adaptive strategies and intervention in the infectious disease process. This knowledge and the management principles of a microbiology laboratory are the primary focus of the post-doctoral residency training programs in clinical AND medical microbiology. When consulted by attending physicians, a Clinical Microbiologist must be able to answer any diagnostic or bug-drug interaction question. The Clinical Microbiologist is well-versed in the area of diagnostics (development, verification and implementation), antimicrobial susceptibility testing, resistance mechanisms and interpretation of susceptibility patterns.

Dr. Saxinger raises the issue of the need to have established guidelines to detail the areas of responsibility of a Clinical Microbiologist. In 2011, the CCM developed a FCCM scope of activity document that has undergone legal review to ensure compliance with the Canada Health Act and insulate it from other potential liabilities. This standards document was released to the FCCM community last fall but has not yet entered the public forum due to the aforementioned website delays. However, in light of the debate and questions that have been raised, the College has agreed that it would be appropriate to publish the document on the CACMID website ([www.cacmid.ca](http://www.cacmid.ca)). As highlighted in the scope of activity document, Clinical Microbiologists are responsible for the decisions they make and advice they provide.

***Addressing the AMMI article's "big 'ol elephant in the room".***

Remuneration is indeed an important issue and it may benefit from an open discussion. However, the CCM is a certification and professional body, not a negotiator or a union. The College is not mandated to address salary concerns and has no official position on the matter. Salaries are primarily administered by the individual healthcare organizations.

***Conclusion***

We are all professionals and should act in a matter that is commensurate to the values established by our profession. We all have the same common goal and that is to provide the best health care service to the patients we serve. FCCM board-certified Clinical Microbiologists invest as much effort into making sure that we do the right thing for our patients as our physician colleagues. The best labs in this country are those that have both Clinical and Medical Microbiologist who work together not against each other. I am very fortunate to have been part of a group of Microbiologists (2 Clinical, 2 Medical Microbiologists) that complement each other's activities/skills. I hope this is the case for all labs across the country.

Marc Desjardins PhD, D(ABMM) FCCM  
President Canadian College of Microbiologist  
Clinical Microbiologist  
Eastern Ontario Regional Laboratory Association