

Department of Molecular and Cellular Biology
Graduate Seminar MCB*6500

Friday, February 9, 2024 @ 12:45 p.m.

presented by:

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"An Initiative to Continuously Improve Biology Education"

The dynamic nature of biology necessitates that educational institutions continuously align their curricula with workforce needs. The lack of an accreditation body to set standards for biology programs leads to varied curricula and uncertainties regarding the preparedness of graduates. Program Learning Outcomes (PLOs) offer a framework for aligning educational content with the discipline's advancements, detailing the knowledge, skills, and values students should achieve by graduation. However, the onus of developing and revising PLOs lies on already burdened institutions. Therefore, I propose the implementation of common PLOs across all Canadian BSc. biology programs to facilitate continuous improvement as a collective effort. These common PLOs aim to enhance the transparency, consistency, transferability, and efficiency of biology programs. Common PLOs promote transparency regarding the educational objectives of the program. Consistency among Canadian biology programs would ensure students graduate with the necessary concepts and competencies, independent of the institution they attend. Concerning transferability, common PLOs simplify this process, improving the accessibility of biology education. Lastly, common PLOs foster a collaborative environment for resource sharing, assessment standardization, and quality assurance, all of which are key elements for improving educational efficiency. This study aims to develop common PLOs and an accompanying implementation plan to walk institutions through enhancing their biology curricula, ensuring alignment with the current demands of the workforce. The project envisions a nationwide initiative to continuously assess and improve biology education to better prepare students to be successful, contributing members of society.