FHS Library -

Our Department is located in the Health Sciences Centre, which is home to the University’s major medical/life sciences library. The Health Science Library houses an extensive collection of books and journals that are relevant to the students in our program. The HSC Library also subscribes to an extensive collection of online journals, which are fully accessible from campus and off-site using the E-Resources website. All students have access to the library’s online collection using their MacID, a unique authenticator that grants access to all of the web resources of the University.

Undergraduate teaching support Facilities –

We occupy (~6,000 square feet) teaching lab space with well-maintained and modern equipment to support instruction in biochemical and molecular biological techniques, and a newly renovated space that houses the x-ray source that supports structural biologists in the Department. Undergraduate students take advantage of this entire infrastructure during 3rd and 4th year courses on the process of - and techniques used in - drug discovery, as well as in their research-intensive 4th year thesis courses. Their hands-on access to modern scientific instrumentation gives them a coveted training advantage that is unique in Ontario, giving them unique skills and firsthand knowledge.

Laboratory Facilities -

Several major infrastructure grants have been secured by Biochemistry faculty over the past 10 years that have been used to enhance the equipment available to trainees at all levels in our program. These grants have allowed the procurement of cutting-edge equipment and build-outs of major research centers.

The Centre for Microbial Chemical Biology (CMCB)

(http://fhs.mcmaster.ca/cmcb/index.html) is a $20M facility built in 2009 that houses state-of-the-art infrastructure to support research at the interface of the disciplines of chemistry and biology. The CMCB is located in two 12,000 square foot multi-user labs on the second floor of MDCL and is professionally managed by seven full-time staff.

High-throughput screening laboratory

(located within the CMCB) celebrated as being among the first in Canadian Universities, a bioinformatics suite, natural products chemistry lab, and equipment for protein and biophysical experiments.

The MacBiophotonics laboratory is an imaging facility that provides access to the latest and best in microscopy, fluorimetry and high content screening, key to training students in modern cell biology. This 3,000 square foot facility is located on the fourth floor of the Health Sciences Centre in Department-managed space.

SCC-RI – Stem Cell and Cancer Research Institute

Established in 2006, the SCCRI represents a unique research facility in Canada. The Institute's vision and mandate is to explore the underlying cellular and molecular origins that initiate human cancer by employing human stem cells as a model system. Effective healthcare is dependent on the knowledge generated by biomedical research. At the SCC-RI, we are motivated to improve healthcare options for patients who currently have few or none. To realize this, we are working with human cells throughout the scientific process in our unique, state-of-the-art facilities.

IIDR – Institute for Infectious Disease Research

Infectious diseases continue to be leading health care problems across the globe. The emergence of new infections such as SARS and the return of ‘old’ diseases such as tuberculosis remind us of our susceptibility and vulnerability to pathogens. The possibility of epidemics of avian flu, bioterror agents and multidrug resistant bacteria are on the radar of health care professionals and the public alike. The phenomena of antibiotic resistance, urbanization, rapid intercontinental traffic, and climate change to name a few, exacerbate the problem.