

RESEARCH

The graduating medical student will have developed effective learning strategies that include the capacity to engage in reflection and self-assessment, the ability to critically evaluate information and its sources (the literature), and the ability to contribute to the process of knowledge creation (research). As scholars, physicians demonstrate a lifelong commitment to reflective learning as well as the creation, dissemination, application and translation of medical knowledge.

The program objectives for the professional competency are as follows:

The competent medical graduate:

- Recognizes knowledge gaps and can ask focused questions which can address these gaps appropriately
- Retrieves medical information efficiently and effectively
- Critically evaluates the validity and applicability of medical procedures and therapeutics modalities to patient care using knowledge of research and statistical methodology
- Adopts rigorous research methodology and scientific inquiry procedures
- Prepares and disseminates new medical information
- Develops, monitors and adjusts learning

Extra-Curricular Research Opportunities

In addition to the research opportunities offered in continuation of the Critical Enquiry course, many Queen's medical students participate in extra-curricular research projects at Queen's and outside institutions. Participation in extra-curricular research provides students with self-directed opportunities to enrich their scholarly training and apply the skills they have learned through the formal curriculum. This may come in the form of a summer research project, projects completed in student's free time during the school year, or in the form of a research elective during clerkship. Interested students are encouraged to contact potential supervisors independently and follow the announcements page for project postings.

Summer Studentships

Summer studentships are funding opportunities to allow students to pursue an original research project during the summer after first or second year. Awards are granted by the Awards Committee on the basis of academic achievement and detail and development of the project. Students are

required to arrange a research project with a researcher and submit a proposal to be assessed by the committee. If students wish to pursue the research plan outlined in their Critical Enquiry project, summer studentships offer a funded opportunity to do so.

Scholarships and Awards

A variety of awards and scholarships are available to allow students to participate in scholarly activities such as conference attendance or research abroad.

Please see the official Awards website (<http://www.queensu.ca/studentawards/compleateawardslist/application/upperyear/med.html>) for more details.

Conferences

Queen's medical students are also encouraged to submit their research to local and international conferences in their field of enquiry. Funding is available to encourage such activities through the Dean's Office - Funding Information (<https://meds.queensu.ca/academics/undergraduate/current-students/awards-funding-conferences/>).

Additionally, Queen's School of Medicine hosts an Annual Medical Student Research Showcase. This event provides an opportunity for medical students engaged in summer research activities to showcase their work in the form of a poster presentation. Additionally, up to three exemplary projects are selected to deliver an oral plenary presentation, moderated by Dean Richard Reznick. Students selected for the oral plenary, along with the top student poster presenter, will jointly receive the *Albert Clark Award for Medical Student Research Excellence*.

Student Initiatives

The scholar competency student leads offer a number of initiatives to students in pre-clerkship to encourage extra-curricular participation in scholarly activity. This includes a bi-weekly **Journal Club** in which interested students select, critically appraise and present an article from the current medical literature. The Journal Club is frequently facilitated by faculty members and provides an opportunity to extend and apply the critical appraisal skills learned through the CARL course.

Students also host several sessions to interact with clinician scientists in both formal and informal settings. In the **Academic Medicine Information Session**, a panel of clinician scientists is assembled to talk about careers in academic medicine and field questions from students interested in pursuing research as a career. Additionally,



several Grad Club mixers are facilitated each year, allowing students to interact directly with clinician scientists.