Canadian Medical Student Research Competition

Summary

The Canadian Medical Student Research Competition will be an annual one-day event that will bring together up to 1 undergraduate medical student from each accredited Canadian Faculty of Medicine in each of two streams: 1) MD student and 2) Combined-Degree student (e.g. MD-PhD, MD-Master Degree, MD-Oral-maxillofacial surgery, etc.). Each school will internally review student abstracts and select one representative in each stream for the national competition. Selected students will deliver an oral presentation at the national competition and these will be scored by a panel of 3 independent judges. From each stream a winner will be selected based on the highest overall score.

Introduction and Mission

The role of Scholar remains a key component of the CANMEDS framework. To promote competency in this area, Canadian medical schools having increasingly introduced research training and research-intensive courses at the undergraduate medical level. Medical students across the country have been active in diverse areas of scholarly work from clinical research to basic science, medical education, humanities, quality improvement, and beyond. In an effort to highlight the incredible work of medical students across the country, the Canadian Medical Student Research Competition (CMSRC) seeks to bring together trainees from each Canadian Faculty of Medicine in a celebration of research excellence in undergraduate medical education.

Equity, Diversity, and Inclusivity

The CMSRC strives to promote research in undergraduate medical education, to advocate for equity and is committed to ensuring that the Canadian undergraduate medical trainee research community is diverse and inclusive in alignment with the Best Practices guide from the Canadian Institutes of Health Research (CIHR). We welcome students and judges from members of racialized minorities, women, Indigenous Peoples, persons with disabilities, persons of various sexual orientations and gender identities, and others with the skills and knowledge to productively engage with diverse communities and contribute to research success. The CMSRC seeks to maintain the commitment of institutions around the country to excellence and we recognize that increasing the diversity of researcher and ensuring an inclusive environment in the research supports this objective.

Student and Project Eligibility

All students enrolled in an undergraduate medical education program at a Canadian medical school are eligible to submit their research for consideration. Students in an MD (or MD,CM) program will be grouped into one stream, whereas students in an MD-combined program (e.g. MD-PhD, MD-Masters, MD-Oral Maxillofacial surgery, etc.) will be grouped into a separate stream.

In the case of a non-traditional education pathway (e.g. a break from medical school to pursue other academic work), the organizing committee will decide to which pathway a particular student's education background most aligns – students who have had protected time from their MD program to pursue research will generally be grouped into the combined program pathway.

Research projects eligible for submission can be from any field as long as the subject matter is deemed to be germane to physicianship and/or healthcare including, but not limited to: clinical research, basic science, medical education, quality improvement, in-vitro studies, animal models, Al/machine learning, health policy, humanities and others. All types of methodology are welcomed. Only projects which were initiated AFTER a student enrolled in their MD (or MD-combined) program will be considered (e.g. students cannot submit work that began before medical school).

Overview of the CMSRC Timeline

August – September 2023 – Rules and regulations of the CMSRC distributed to a representative at each school

September – November 2023 – Individual schools may finalize their internal selection process

December 2023 – January 2024 – Individual schools open submission process

February 2024 – Name(s) of student(s) chosen to participate in the CMSRC sent to the organizing committee

April 2024 – CMSRC takes place over one day as part of the CFMS AGM

Individual School Selection Process

Each medical school will have a faculty member serving as a local CMSRC representative. Each institution will accept submissions from enrolled medical students and will follow an internal selection process of abstract review, and select up to one student in the MD stream and one student in the MD-combined program stream for participation in the CMSRC.

While each institution may follow their own protocol and policies for selection, all CMSRC representatives will be expected to sign a statement acknowledging the impact of bias (both explicit and implicit) on candidate selection, and all representatives will agree to uphold the standards of integrity of their institutions and the CMSRC to ensure a fair selection process. The CMSRC strongly advises that all institutions consider blinding of applicants' names and other identifiers in their local selection process, and it is also advised that all members involved in selection complete the recommended activities for identifying, understanding, and reducing the impact of personal biases on candidate selection (see <u>Appendix 1</u>).

By February 1st, 2024^{*} each institution will forward the names and abstract submission for each of their selected candidates to the national competition organizing committee. An email correspondence will be sent to all selected candidates from all institutions to invite them to the CMSRC on May 4th-5th. In this email candidates will also receive instructions for the presentation, and will be given a copy of the scoring rubric that will be used. At least one week prior to the CMSRC students' will be provided a schedule with the order of presentations (generated at random).

Proposed Schedule for National Competition

The CMSRC will be a one-day event taking place on Zoom.

The CMSRC event will open with a welcoming and introduction by the organizing committee, followed by a short presentation by a keynote speaker (TBD) on the research and scholarship in medical training.

At the CMSRC, the symposium will be subdivided into a morning and afternoon session:

- 1. The morning will be dedicated to presentations from the MD-Combined program stream participants. Each student will have 7 minutes to present and will have 3 minutes of time to answer any questions from the judges.
- 2. The afternoon will be dedicated to presentations from the MD stream participants, who will similarly each present for 7 minutes with 3 minutes for questions.

Final Scoring

Three independent judges will have been pre-selected before the CMSRC. All judges will have signed a statement acknowledging the impact of bias (both explicit and implicit) on scoring and will have completed *required* activities for reducing the impact of personal biases on scoring.

Judges will be provided with a scoring tool to score abstract submissions and presentations. Students will be evaluated on the basis of the quality of the research, their presentation skills, and their degree of involvement in the project. At the end of all presentations judges will deliberate and compare scores for all candidates. In the case of significant discrepancies, internal discussion may take place between judges.

Winner

The candidate with the highest overall score in each stream (MD-combined and MD respectively) will be named as the winners of the CMSRC.