

DYOUVILLE UNIVERSITY

STRATEGIC PLAN FOR RESEARCH AND SCHOLARLY ACTIVITY

OVERVIEW

The strategic plan will guide research and scholarly activity at DYU-COM and encourage student and faculty participation in these activities. This will help inculcate a better understanding of the principles and practice of osteopathic medicine and the foundational sciences. Our goal is for our students to contribute to osteopathic medicine and science, and develop life-long learners, empathic and well-rounded physicians and leaders of the community.

MISSION AND VISION

The proposed DYU-COM will develop into an Osteopathic Center of Excellence. An important aspect of this achievement is Research and Scholarly activity. In keeping with the mission of D'Youville University to cater to the underserved in the surrounding community and the Western New York region, DYU-COM will promote research and scholarly activity that directly and indirectly benefits this community.

To achieve this purpose, we will establish an 'Office of Research' which will provide guidance to students and faculty and will be the center for initiating research proposals, IRB approvals if needed, oversee training, and provide assessment and feedback. The Office of Research will supervise and support all funding and grants, both intramural and extramural. We already have leadership for this office, and the leadership and faculty of DYU-COM will be active participants.

As this is a new osteopathic medical school, we will incrementally enhance research activity over 10 years, starting with the years prior to arrival of students, continuing through 4 years of medical education, and reviewing and implementing change over the subsequent years till excellence in research and scholarly activity is achieved.

GOALS AND OBJECTIVES

The primary goals are

- Achieving research and scholarly activity to contribute to improvement of health in the community of Buffalo and Western New York
- Create enthusiasm and competence among medical students in DYU-COM in conducting research; create life-long learners and participants in advancing osteopathic medicine
- Contribute to osteopathic medicine, medicine and science locally, nationally and internationally
- Provide a center for faculty to excel in their research projects and contribution to scholarly activity, including guiding osteopathic medical students

- Secure funding and grants and encourage students to learn the due process
- Focus on health disparities and include students and faculty of diverse backgrounds having opportunities for research
- Develop a culture among our students to responsibly and safely conduct research
- Interprofessional and multidisciplinary participation

RESEARCH PRIORITIES

- Osteopathic Principles and Practice/Osteopathic Manipulative Medicine
- Community Health including health disparities, ethnic and racial factors and resource utilization
- Improvements in Clinical Medicine
- Biomedical and Foundational Sciences

INFRASTRUCTURE AND RESOURCES

There are several facilities throughout the university where students and faculty can conduct wet and dry bench research. There are cell culture rooms and hoods with HEPA filters in the DAC and ALT buildings. There will be appropriate handwashing stations. Equipment safety will be strictly maintained. There are future spaces which will be developed. There are Patient Rooms for potential clinical trials and patient observation and interview, as well as collaborative lounges for multidisciplinary discussion. Some of these spaces have small-group discussion areas and tables where Diversity, Equity and Inclusion would be promoted.

D'Youville University has a prominent Center for Doctoral Studies and Research (CDSR) where our students can participate with faculty already conducting research. Some of the significant ongoing research projects in the university are biomechanics, social and community aspects, and interprofessional research.

FACULTY PARTICIPATION

Both pre-Clinical and Clinical faculty will actively participate in research and scholarly activity involving students. They will be faculty mentors, guiding students in every step, starting with instruction in research methodology, planning projects with students which are both short-term and long-term, guiding them in submission of the research plan, ensuring compliance with IRB protocols and CITI training. Once the project starts, they will have responsibility of supervision and ensuring that safety and ethical requirements are maintained, and the research plan followed. Eventually they will assess and help students with the results and outcomes, and if appropriate, guide them in poster presentations and publications.

Faculty, selected by the Dean, along with the Associate Deans of DYU-COM, will be part of the 'Research Committee' that will supervise, process, approve and remediate all research proposals by students and faculty. They will be responsible for assessment and feedback.

Faculty are encouraged to work with additional research projects to enhance the research culture at DYU-COM, and collaborate with significant affiliates like Catholic Health, the University at Buffalo, and the Roswell Cancer Institute.

STUDENT GOALS AND OUTCOMES AND INSTITUTIONAL TIMELINE

Year-by-Year Plan for Research: Student Goals

Year	Goals	Outcomes
OMS 1	Introduction to Research Methodology, Biostatistics, and Epidemiology	Good understanding of the scientific methods, and ethical conduct; development of plan for research and scholarly activity during all four years of medical school
OMS 2	Systems-based knowledge of foundational and clinical osteopathic medicine Introduction to faculty mentors, research projects of priority, and funding opportunities CITI training as required	Identify faculty mentor(s) and discuss plan for research Submit letter of intent and research proposal May start their project at this stage
OMS 3	All students participate in research project either longitudinally or during a mandatory 4-week block Identify and troubleshoot problems	Complete Research Project in OMM/ OPP/ Biomedical Sciences/ Clinical aspects
OMS 4	Summarize and present all research and scholarly activity in the four years of medical school, individually or in groups Presentation of research findings on Research Day in the form of Poster and discussion With the help of Faculty mentors, develop articles for publication	Take ownership and pride in achievements in all scholarly activities Students who are further interested can continue research at DYU/affiliated centers Become well-rounded clinicians and scholars

Institutional Goals for Research and Scholarly Activity

Timeline	Objectives
Prior to arrival of students	Faculty hiring particularly of those with experience and interest in research Develop an ‘Office of Research’ and Research Committee In conjunction with CDSR and active research faculty at D’Youville University, develop projects and funding relevant to students Work on and secure intramural funding as well as funding from external constituents
OMS I-IV	Instruct students in Research Methodology Mentor and guide students in participation and completion of research projects Faculty planning and participation in Research and Scholarly activity to develop DYU-COM as an Osteopathic Center of Excellence Collaborate with other DYU departments and research centers
Years 1 to 10	Develop strong research activities and resources contributing to an Osteopathic Center of Excellence Review annually and implement improvement plans Receive feedback from students, faculty, and funding constituents and apply them to the Office of Research

FUNDING, GRANTS AND COLLABORATION

Funding may be:

Intramural: D’Youville University has budgeted for seed grants and additional funding for student and faculty research projects

External sources of funding like American Heart Association, American Diabetes Association, Susan Komen foundation, Office of Minority Health, NASA, and US Department of Defense will be pursued for more involved and long-term projects in the most important disease domains, the biomedical sciences and community health. For Osteopathic Manipulative Medicine and osteopathic medical education studies, support may be requested from American Osteopathic Association and AACOM. For more advanced research projects, funding will be applied for at the National Institutes of Health and National Cancer Institute.

D’Youville University has a dedicated Grants office (Office of Institutional Advancements) with professionals with great expertise in helping with and securing grants, and this office will be

extended to support DYU-COM. D'Youville has a history of obtaining substantial grants for the Health Professions, most recently a \$3.2 million grant from the Health Resources and Service Administration.

DYU-COM will collaborate not only with research faculty and departments committed to research within D'Youville University, but will partner with other institutions like Roswell Cancer Institute, University of Buffalo, Stony Brook University in securing and promoting student participation in both biomedical sciences and clinical medicine. Conversations with these institutes regarding potential opportunities and collaborations are already in progress and are expected to strengthen exponentially as the time for arrival of students approaches.

ASSESSMENT, REPORTING AND COMMUNICATION

The Office of Research and the Research Committee will be responsible for assessment and feedback. This will take place at least annually and at the end of each project, if smaller. Both students and faculty mentors will be given feedback.

Reporting will be done to the Office of the Dean and in-house publications like D'Youville Research Review. Publications in major indexed journals and websites and poster presentations locally and in national conferences by students and faculty will be an outlet for the community to see what we are achieving. We will discuss with community partners and funding resources continuously to improve our research strategy

CONCLUSION

With great effort by the COM leadership and faculty and the Office of Research, we hope to guide our students in substantial research and scholarly activity. This will be an ongoing process with continuous feedback and improvement plans. We hope to achieve a strong reputation for research and scholarly activity by the end of the first graduating class, which will attract interested faculty and students and help build an Osteopathic Center of Excellence.