

# D'YOUVILLE UNIVERSITY

**Policy Title:** Research Policy

**Responsible Unit:** DYU-COM Leadership, Faculty

**Adoption Date:** April 17, 2023

**Last Review Date:** April 17, 2023

**Next Review Date:** April 17, 2027

## GOALS AND VISION

Student participation in research and scholarly activity at the proposed DYU-COM seeking accreditation and DYU will be strongly encouraged. For the student doctor, this will be beneficial for their career enhancement while providing a clearer understanding of foundational knowledge and clinical skills. Participation in research and scholarly activity would help the student doctor appreciate and retain what they will learn in the classroom and clinical skills labs. The opportunity to participate in academic activities would improve skills in critical thinking, analysis of data, and eventually better patient care. On completion of medical school, they would be able to answer questions from patients regarding the latest advancements and technology in diagnosis and management, especially regarding complex and multisystem diseases. They will be able to effectively analyze and answer questions in their board exams as well. Given current trends, these students may be more competitive for admission to residency programs, both in specialty medicine and in primary care.

## FACULTY-MENTORED RESEARCH

Students will learn research methodologies and perform research work under the guidance and supervision of faculty mentors. Students interested in research will have some protected time, typically Friday afternoons, to work on their projects. However, since research is an ongoing process, and may require work on a more frequent basis, every effort will be made to accommodate such a timeline. All steps of student participation in research will be supervised by their faculty mentor.

Research will be both clinical, with an emphasis on OMM, as well as bench research using cellular and molecular biology techniques. Projects in collaboration with departments and faculty with established projects in D'Youville University will be favored because of convenience and access. Areas that students could work in are research in the Biomedical sciences, clinical research including participation in clinical trials, osteopathic medicine, public health and medical education. Projects could address Anatomical variation; exploration and improvement of OMM techniques; common medical conditions like diabetes, cardiovascular disease and stroke. In bench research, some of the methodology that may be used are cell culture, animal studies, molecular biology including mutagenesis, genotyping, PCR and RT-PCR, to name a few.

Surveys among students and in the community, generating review articles, and follow-up of outcomes in patients after interventions will be offered to students interested in clinical projects.

Projects must include faculty mentors who are experts in that subject/ field, whether at D'Youville University or affiliated centers and labs. Student doctors, if interested, could participate in interdisciplinary projects with other Health Professions like Nursing, Physician Assistant, Occupational Therapy, Physical Therapy, Dietetics and nutrition, and Health Care Administration, and in the Natural Sciences departments.

Resources will be available in the proposed DYU-COM library, the DYU library, and online. Students will have access to national resources like Pubmed.gov and Science Direct. There will be a travel budget for posters and presentations at regional and national meetings and conventions.

D'Youville University has a mission to serve underrepresented and underserved communities, and our focus will be on health disparities and ways to improve health delivery to our minority and immigrant populations.

## **OUTCOMES**

Following their research, students will be expected to collect and analyze data, discuss the results and write an article with minimal help. This article typically should include a Title, names and affiliations of all authors, an Abstract, Introduction, Hypotheses, Methods, Results, Discussion and Conclusion. Figures, pictures and tables should be utilized extensively. There should be a comprehensive glossary of their references at the end. For review and library research articles, there should be accurate citations for every journal article referred to.

Students will be encouraged to submit posters and presentations at meetings and conventions. Some of these meetings and conferences include those of the New York State Osteopathic Medical Society, American Osteopathic Association, American Academy of Osteopaths and the National Osteopathic Medical Association. They may present at universities in the region like SUNY Buffalo and UPMC. Students may also present at regional Biomedical Sciences conventions if that is their area of research. The proposed COM will organize an annual research event like a Research Day, where student doctors can display their posters and discuss presentations. At the end of their training, students will be required to present all the work they did in research and scholarly activities, which may be counted towards their coursework and add to their resume. Following significant work, students will be encouraged to write abstracts and participate in publishing their work in reputed journals with the help of their faculty mentors. Student doctors should obtain the necessary permissions and follow protocol if they are presenting or publishing outside D'Youville University.

Cheating, falsification, plagiarism and any unethical behavior at any step of their research activity will be subject to strict disciplinary action.

## **STEPS AND PROCEDURES**

Student doctors will need to submit their proposal to the Research Committee, which will have to be approved before a student can start their research or scholarly activity.

The steps that need to be completed by the student, in conjunction with their faculty mentor, in order to start a project, are as follows:

-Letter of intent: provide details of the qualifications and eligibility of personnel involved, including the student doctors themselves, and other participants like lab technicians and graduate students; identification of faculty mentor/s; proposed title of the study; research question and hypotheses; rationale and need for the study; space where this research will be conducted; overview of methods to be utilized; whether expected to be funded by intramural and seed grants or by external funding.

-Full proposal: Once the Letter of intent is approved, a full proposal will have to be submitted by the student. This must be signed off by the faculty mentor before submission to the Research Committee. The full proposal should include details about the rationale and how the project would enhance osteopathic medicine and science; methodology; expected timeline; expected budget and expenses.

-If the work involves human subjects, an IRB approval will need to be obtained prior to final approval.

The Research Committee will review the proposal and determine feasibility using a grading system. The proposal can be accepted, sent back for modification, or rejected.

There will be an annual review for all projects longer than a year. A final report will have to be submitted irrespective of results and outcomes.

If accepted, the student will have to undergo CITI training before starting their project.

Opportunities available for students will be published and updated in the Office of Research website. An attempt will be made to provide information and links about opportunities across the area, whether in clinical practice, or bench research, that are available in regional and national universities and research centers/labs.

## **TRAINING REQUIREMENTS**

All Student Doctors interested in participating in research will have to undergo training in the standards of research, ethics, compliance and safety. This will be provided by the Collaborative Institutional Training Initiative (CITI) program.

<https://about.citiprogram.org/>

This will include successfully completing modules in various protocols like the HIPAA, Biomedical Research Refresher courses and Biohazard Safety, to name a few. Research with animals will require IACUC training as well.

Student doctors named on a Human Subjects Research proposal must complete the following training modules, as determined by the Research Committee, if their proposal is approved and prior to beginning their project:

- Biomedical Responsible Conduct of Research (RCR) OR Social and Behavioral RCR whichever is more appropriate for the individual research project,

AND one of the following

-Biomedical Research OR Social & Behavioral Research OR Biomedical Data or Specimens Only Research

Student doctors requesting access to research laboratories must complete training modules, as applicable, before security card reader access is granted. They must keep current on all training to ensure ongoing access.

- Biomedical Research
- Biomedical RCR
- Initial biosafety training
- NIH Recombinant DNA guidelines
- OSHA Bloodborne Pathogens
- Hazard communication
- Lab Chemical and Radiation Safety
- Institutional Biosafety Plan
- Institutional Chemical Hygiene Plan
- Institutional Laboratory Safety Agreement and Access Policy

Student participation in research and scholarly activity will lead to an enhancement of knowledge in osteopathic medicine and the biomedical sciences. It would help generate stronger, more empathetic and holistic osteopathic physicians who are prepared for patients and health issues of today and tomorrow. We will be able to train life-long learners who continuously advance the art and science of osteopathic medicine. We hope to inculcate a strong foundation in scientific and evidence-based medicine, and nurture curiosity and intellect. Research and scholarly activity during their medical training will eventually help build a stronger community, and a more reputed and coveted institute of learning.