COMBINED PROGRAM MD AND PHD (NEUROSCIENCE WITH SPECIALIZATION IN HUMAN AND MOLECULAR GENETICS OPTION)

Undergraduate Medical Education (MD Program)

The program leading to the Doctor of Medicine degree includes 147 weeks of instruction (72 weeks of which are devoted to clinical work) scheduled over four calendar years.

Preclerkship is devoted to the teaching and learning of biomedical sciences, whereas Clerkship is devoted to clinical work. During medical studies, students should demonstrate the intelligence, the integrity, and the personal and emotional characteristics deemed necessary for competent physicians. Their behaviour must be consistent with an acceptable code of professional ethics, such as stated in the Faculty’s Standards of Ethical and Professional Behaviour.

This program is offered in English and in French.

Program Contact Information

Undergraduate Medical Education (https://med.uottawa.ca/undergraduate/)

451 Smyth Road, Room 2046
Ottawa, ON K1H 8M5
Tel.: 613-562-5800 ext. 8551
Toll free: 1-877-868-8292 ext. 8551
Email: medaca@uottawa.ca

Doctorate in Philosophy Neuroscience Specialization in Human and Molecular Genetics

The Department of Cellular and Molecular Medicine is located in the Faculty of Medicine and offers graduate programs leading to the degrees of Master of Science (MSc) and Doctor of Philosophy (PhD) in Neuroscience.

The programs help students develop their theoretical knowledge as well as their capacity for critical analysis. This is achieved through reading and critiquing the scientific literature, conducting experiments in the laboratory, analyzing the data and results generated, and presenting their results in the form of research seminars or posters. The programs prepare candidates for a variety of careers in teaching and research both within and outside of academia.

Graduates of the program will acquire autonomy in conducting research and in preparing scholarly publications and grant applications. A comprehensive set of courses, state-of-the-art research facilities and outstanding research opportunities ensure a career in neuroscience.

The Department is a participating unit in the collaborative program in Human and Molecular Genetics and in Pathology and Experimental Medicine at the master's and doctoral levels.

Program Contact Information

Graduate Studies Office, Faculty of Medicine (https://med.uottawa.ca/graduate-postdoctoral/)

451 Smyth Road, Room 2016
Ottawa, ON, K1N 6N5
Tel.: 613-562-5215
Toll free: 1-877-868-8292 ext. 5215
Email: grad.med@uottawa.ca

Twitter | Faculty of Medicine (https://twitter.com/uOttawaMed/)

Youtube | Faculty of Medicine (https://www.youtube.com/channel/UCP2nDljFEetyfMiOmlle2HA/)

Flickr | Faculty of Medicine (https://www.flickr.com/photos/uottawamed/)

Program Requirements

Requirements for this program have been modified. Please consult the 2019-2020 calendars (http://catalogue.uottawa.ca/en/archives/) for the previous requirements.

Undergraduate Medical Education (MD Program)

Compulsory courses at the 1000 level

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ELE 1900</td>
<td>Clinical Placement - Non Mandatory Elective - First Year</td>
</tr>
<tr>
<td>MED 1107</td>
<td>Community Week</td>
</tr>
<tr>
<td>MED 1200</td>
<td>Introduction Unit to the Profession</td>
</tr>
<tr>
<td>MED 1201</td>
<td>Foundations Unit</td>
</tr>
<tr>
<td>MED 1202</td>
<td>Unit I</td>
</tr>
<tr>
<td>MED 1302</td>
<td>Physician Skills Development (Part 1)</td>
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</tbody>
</table>

Compulsory courses at the 2000 level

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>CLI 2101</td>
<td>Transition to Clerkship Part 1</td>
</tr>
<tr>
<td>ELE 2900</td>
<td>Clinical Placement - Non Mandatory Elective - Second Year</td>
</tr>
<tr>
<td>MED 2109</td>
<td>Mandatory Clinical Week</td>
</tr>
<tr>
<td>MED 2201</td>
<td>Unit II</td>
</tr>
<tr>
<td>MED 2202</td>
<td>Unit III</td>
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<tr>
<td>MED 2203</td>
<td>Unit IV</td>
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<tr>
<td>MED 2302</td>
<td>Physician Skills Development (Part 2)</td>
</tr>
</tbody>
</table>

Compulsory courses at the 3000 level

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>CLI 3301</td>
<td>Transition to Clerkship Part 2</td>
</tr>
<tr>
<td>CLI 3102</td>
<td>Surgery</td>
</tr>
<tr>
<td>CLI 3103</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>CLI 3104</td>
<td>Mandatory Selectives</td>
</tr>
<tr>
<td>CLI 3106</td>
<td>Obstetrics and Gynecology</td>
</tr>
<tr>
<td>CLI 3107</td>
<td>Pediatrics</td>
</tr>
<tr>
<td>CLI 3108</td>
<td>Psychiatry</td>
</tr>
</tbody>
</table>

Doctorate in Philosophy Neuroscience Specialization in Human and Molecular Genetics

The Department may require students to take additional courses, depending on their backgrounds.

Students must meet the following requirements for the doctorate with collaborative specialization:

**Compulsory Courses (NSC):**

- MED 8166 Professionalism and Professional Skills
- 3 course units from:
  - NSC 5102 Cellular and Molecular Neuroscience
  - NSC 5104 Systems Neuroscience

**Compulsory Courses (HMG):**

- 3 course units from:
  - HMG 8103 Advanced Topics in the Molecular Biology of Human Diseases I
  - HMG 8105 Advanced Topics in the Molecular Biology of Human Diseases II
  - HMG 8600 Special Topics in Human and Molecular Genetics

**Seminar:**

- NSC 8325S Seminar for PhD Students

**Comprehensive Examination:**

- NSC 9998 Comprehensive Examination (Ph.D.)

**Thesis:**

- THD 9999 Doctoral Thesis

**Note(s):**

1. Course selection is subject to the approval of the HMG program director.
2. The seminar course involves the presentation of a seminar and regular attendance at the departmental seminars.
3. Successful completion of a comprehensive examination in the form of a research proposal on their own thesis project.
4. Presentation and successful defence of a thesis on a topic in Human and Molecular Genetics. The thesis must be based on original research and must be carried out under the direct supervision of a member of the collaborative program.
5. Students are responsible for ensuring they have met all of the thesis requirements (http://www.uottawa.ca/graduate-studies/students/theses/).

Minimum Requirements (Doctorate)

The passing grade in all courses is C+.

Students who fail two courses (equivalent to 6 units), the thesis proposal, or the comprehensive exam or whose research progress is deemed unsatisfactory are required to withdraw.