COMBINED PROGRAM MD AND PHD (BIOCHEMISTRY 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. 5215
Email: medaca@uottawa.ca

Doctorate in Philosophy Biochemistry Specialization in Human and Molecular Genetics

The programs prepare candidates for a variety of careers in teaching and research both within and outside of academia.

Graduate students are actively involved in laboratory research, coursework, and presentation of research seminars. Thus, they acquire autonomy in conducting research and in preparing publications.

The programs create a stimulating and challenging environment which will allow students to achieve excellence in research.

Graduates of the programs must demonstrate research skills and credibility as professionals in their area of research.

The Faculty of Medicine offers a collaborative program in Human and Molecular Genetics at the master’s and doctoral levels. The primary graduate programs in Biochemistry (BCH), Cellular and Molecular Medicine (CMM) and Neuroscience (NSC) collaborate in offering the specialization. The degree awarded specifies the primary program and indicates "specialization in Human and Molecular Genetics."

Program Contact Information
Graduate Studies Office, Faculty of Medicine (https://med.uottawa.ca/graduate-postdoctoral/)
451 Smyth Road, Room 2016
Ottawa, ON, K1H 8N5
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/UCPznDlrjFEETyfMi0mle2HA/)
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
ELE 1900 Clinical Placement - Non Mandatory Elective - First Year
MED 1107 Community Week
MED 1200 Introduction Unit to the Profession
MED 1201 Foundations Unit
MED 1202 Unit I
MED 1302 Physician Skills Development (Part 1)

Compulsory courses at the 2000 level
CLI 2101 Transition to Clerkship Part 1
ELE 2900 Clinical Placement - Non Mandatory Elective - Second Year
MED 2109 Mandatory Clinical Week
MED 2201 Unit II
MED 2202 Unit III
MED 2203 Unit IV
MED 2302 Physician Skills Development (Part 2)

Compulsory courses at the 3000 level
CLI 3301 Transition to Clerkship Part 2
CLI 3102 Surgery
CLI 3103 Internal Medicine
CLI 3104 Mandatory Selectives
CLI 3106 Obstetrics and Gynecology
CLI 3107 Pediatrics
CLI 3108 Psychiatry
CLI 3109 Family Medicine
CLI 3110 Acute Care Medicine

### Minimum Requirements (Doctorate)

The passing grade in all courses is C+.

Students who fail 6 units, the thesis proposal, or the comprehensive exam or whose research progress is deemed unsatisfactory must withdraw from the program.

### Doctorate in Philosophy Biochemistry 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 (BCH):**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED 8166</td>
<td>Professionalism and Professional Skills</td>
<td>3</td>
</tr>
<tr>
<td>3 optional course units in biochemistry (BCH) at the 8000 level</td>
<td>3 Units</td>
<td></td>
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</tbody>
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**Compulsory Courses (HMG):**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>3 course units from:</td>
<td></td>
<td>3 Units</td>
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<tr>
<td>HMG 8103</td>
<td>Advanced Topics in the Molecular Biology of Human Diseases I</td>
<td></td>
</tr>
<tr>
<td>HMG 8105</td>
<td>Advanced Topics in the Molecular Biology of Human Diseases II</td>
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<tr>
<td>HMG 8600</td>
<td>Special Topics in Human and Molecular Genetics</td>
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**Seminar:**

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<thead>
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<th>Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BCH 8366</td>
<td>PhD Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

**Comprehensive Examination:**

<table>
<thead>
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<th>Code</th>
<th>Course Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>BCH 9998</td>
<td>Comprehensive-Examination (PhD)</td>
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</table>

**Thesis:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>THD 9999</td>
<td>Doctoral Thesis</td>
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</table>

**Note(s):**

1. The optional course units may be selected from other approved graduate courses in related disciplines approved by the Department.
2. Course selection is subject to the approval of the HMG program director.
3. This requirement involves the presentation of a seminar and regular attendance at the departmental seminars.
4. Successful presentation and defence of a thesis on a topic in human and molecular genetics based on original research 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/).