

PhD in Pharmacology

FACULTY OF MEDICINE | DÉPARTEMENT DE PHARMACOLOGIE

Overview and specifics


NUMBER 3-520-1-0


LEVEL Graduate


TYPE Philosophiae Doctor (Ph. D.)

CREDITS 90 credits

PROGRAM TYPE Dissertation or thesis track

 **Admission in fall, winter and summer**

 **Day course**

 **Offered at the Montréal**

 **Full-time**

Resource persons

PROGRAM INFORMATION

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Objectives

The general goal of the program is to train independent researchers who have excellent knowledge of the discipline and its various related fields. Graduates from this program should be able to pursue a research career in academia, industry or government. The research training in this program aims to help students develop in-depth knowledge of pharmacology and related sciences; learn to develop an original research hypothesis and describe the method used to experimentally validate the hypothesis; conduct an original research project; present their research findings at scientific symposia; and publish their findings in high-impact journals.

Career prospects

All pharmacology graduates quickly find employment within academic institutions, the pharmaceutical industry, or governmental or paragonovernmental agencies involved with health and medication.

Regulations

Studies in this program are governed by the educational regulations of the Faculty of Graduate and Postdoctoral Studies, and the following provisions:

1. Admission requirements

To be admitted as a regular student in the PhD (Pharmacology) program, candidates must:

- Meet the general admission requirements (section XI) of the "Règlement pédagogique de la Faculté des études supérieures et postdoctorales" (educational regulations of the Faculty of Graduate and Postdoctoral Studies).
- Have an MSc (Pharmacology) in the chosen option, if applicable, or have equivalent education.
- Have obtained a grade-point average at the graduate level of at least 3.3 out of 4.3 or the equivalent.
- Demonstrate good knowledge of French (learn more).
- Have satisfactory knowledge of English and show proof of proficiency before being accepted into the second year of the program.
- Demonstrate sufficient knowledge of any other language deemed necessary for their research.

Program structure (3-520-1-0)

The doctorate program consists of 90 credits.
It is offered as a Flexible Stream (70) or one of the following five options:

- Neuropharmacology (71)
- Pharmacogenomics (72)
- Clinical Pharmacology (73)
- Integrative Cardiovascular Pharmacology (74)
- Molecular Pharmacology (75)

Research must be done as a residency at either Université de Montréal or a research laboratory of an affiliated institute or hospital approved by the Advisory Board of the Faculty of Medicine.

Legend: CR: Credit, SC: Schedule, D: Day, E: Evening

SEGMENT 70 FLEXIBLE STREAM OPTION

All credits in this option are mandatory and are for research and a thesis.

Block 70A Research and thesis

Mandatory - 90 credits

COURSE	TITLE	CRSC	COURSE	TITLE	CRSC
PHL 7000	PhD Comprehensive Examination	0	PHL 7902	Thesis Seminar 2	1
PHL 7901	Thesis Seminar 1	1	PHL 7910	Thesis	88

SEGMENT 71 NEUROPHARMACOLOGY OPTION

All credits in this option are mandatory and are for research and a thesis.

Block 71A Research and thesis

Mandatory - 90 credits

COURSE	TITLE	CRSC	COURSE	TITLE	CRSC
PHL 7000	PhD Comprehensive Examination	0	PHL 7902	Thesis Seminar 2	1
PHL 7901	Thesis Seminar 1	1	PHL 7910	Thesis	88

SEGMENT 72 PHARMACOGENOMICS OPTION

All credits in this option are mandatory and are for research and a thesis.

Block 72A Research and thesis

Mandatory - 90 credits

COURSE	TITLE	CRSC	COURSE	TITLE	CRSC
PHL 7000	PhD Comprehensive Examination	0	PHL 7902	Thesis Seminar 2	1
PHL 7901	Thesis Seminar 1	1	PHL 7910	Thesis	88

SEGMENT 73 CLINICAL PHARMACOLOGY OPTION

All credits in this option are mandatory and are for research and a thesis.

Block 73A Research and thesis

Mandatory - 90 credits

COURSE	TITLE	CRSC	COURSE	TITLE	CRSC
PHL 7000	PhD Comprehensive Examination	0	PHL 7902	Thesis Seminar 2	1
PHL 7901	Thesis Seminar 1	1	PHL 7910	Thesis	88

SEGMENT 74 INTEGRATIVE CARDIOVASCULAR PHARMACOLOGY OPTION

All credits in this option are mandatory and are for research and a thesis.

Block 74A Research and thesis

Mandatory – 90 credits

COURSE	TITLE	CRSC	COURSE	TITLE	CRSC
PHL 7000	PhD Comprehensive Examination	0	PHL 7902	Thesis Seminar 2	1
PHL 7901	Thesis Seminar 1	1	PHL 7910	Thesis	88

SEGMENT 75 MOLECULAR PHARMACOLOGY OPTION

All credits in this option are mandatory and are for research and a thesis.

Block 75A Research and thesis

Mandatory – 90 credits

COURSE	TITLE	CRSC	COURSE	TITLE	CRSC
PHL 7000	PhD Comprehensive Examination	0	PHL 7902	Thesis Seminar 2	1
PHL 7901	Thesis Seminar 1	1	PHL 7910	Thesis	88

Programs to explore

Applicants interested in this program also applied to the following programs:

PROGRAMS	TYPE	CREDITS	NUMBER	PERIOD
Biochemistry	Doctorate	90 credits	3-465-1-0	Jour
Pharmacogenomics	Short Graduate Program (Master Level)	13 credits	2-520-6-0	Jour
Pharmacy	Undergraduate Doctorate	164 credits	1-675-1-1	Jour

Research expertise at a glance

RESEARCH AREAS

- Drug metabolism and biotransformation
- Immunopharmacology
- Neuropharmacology
- Pharmacokinetics
- Pharmacodynamics
- Pharmacovigilance
- Pharmacoepidemiology
- Pharmacoeconomics
- Pharmacogenetics
- Clinical pharmacology
- Molecular pharmacology
- Cardiovascular pharmacology
- Pharmacology of the digestive system
- Pharmacology of the renal system
- Pharmacology of metabolic diseases and diabetes
- Pharmacology of addiction
- Pharmacology of pain
- Cancer pharmacology
- Natural products
- Gene therapies
- Toxicology

RESEARCH GROUPS

- Groupe de recherche universitaire sur le médicament (GRUM) : <https://pharm.umontreal.ca/recherche/chaieres-centres-et-groupe-de-recherche/unite/ur/ur13794/sg/Groupe%20de%20recherche%20universitaire%20sur%20le%20m%C3%A9dicament%20/>
- Groupe de recherche sur le système nerveux central (GRSNC) : http://www.grsnc.umontreal.ca/index_e.html

Find out more : <http://www.pharmacologie.umontreal.ca/english.html>

Professors

Consult the list of the department's faculty members and their specializations.

Directory of theses and dissertations

Research news