PhD in Cellular and Molecular Pharmacology

Admission Requirements
Applicants are considered on an individual basis. In addition to the Graduate College minimum requirements, applicants must meet the following program requirements:

Master of Science and Doctor of Philosophy
• **Baccalaureate Field** No restrictions. Prior academic work should include chemistry, biology, physics, and math. Biochemistry, cell biology, molecular biology, and physiology are also helpful.
• **Other Requirements** At least 2.75/4.00 (3.00 or better preferred) for the final 60 semester hours (90 quarter hours) of undergraduate study.
• **Tests Required** GRE General. Preference is given to applicants with percentile rankings above 65% on the verbal, quantitative, and analytical writing sections of the GRE.
• **Minimum English Competency Test Score**
  - TOEFL The TOEFL score cannot be more than two years old. UIC’s Institutional Code is 1851. 550 (paper-based); 80, with subscores of Reading 19, Listening 17, Speaking 20, and Writing 21 (iBT Internet-based), OR,
  - IELTS 6.5, with subscores of 6.0 for all four subscores, OR,
  - PTE-Academic 54, with subscores of Reading 51, Listening 47, Speaking 53, and Writing 56.
• **Letters of Recommendation** Required.
• **Personal Statement** Required. One page summarizing past academic and research experience (if any) and motivation for pursuing a PhD in Cellular and Molecular Pharmacology.
• **Nondegree Applicants** Nondegree applicants must show adequate preparation to enroll in desired courses and must obtain the permission of the director of graduate studies.
• **Master of Science Applicants** The department does not admit students to a master’s program. A student in the PhD program may be awarded a terminal master’s degree if he or she decides not to complete the PhD, provided enough research has been accomplished to write and defend a thesis.

Degree Requirements

Master of Science
• **Minimum Semester Hours Required** 32.
• **Course Work**

Required Core

Students must take or show proficiency in three out of the four core GEMS courses.

- GEMS 500 Physiology
- GEMS 501 Biochemistry
- GEMS 502 Molecular Biology
- GEMS 503 Cell Biology

Students must also take or show proficiency in:

- GEMS 504 Research Methods I
- GCLS 505

Electives

At least 2 semester hours must be in 500-level didactic courses in the department.

Doctor of Philosophy
• **Minimum Semester Hours Required** 96 from the baccalaureate.
• **Course Work**

Required Core

Students must take or show proficiency in three out of the four core GEMS courses.

- GEMS 500 Physiology
- GEMS 501 Biochemistry
- GEMS 502 Molecular Biology
- GEMS 503 Cell Biology

Students must also take or show proficiency in:

- GEMS 504 Research Methods I
- GCLS 505
- GEMS 506 GEMS Research Rotation

Electives

At least 2 semester hours must be in 500-level didactic courses in the department.

- Course selections will be made in consultation with the director of graduate studies based on the student’s background and interests.
- Students in their second year and beyond must also register for PCOL 595 and PCOL 598 each semester.

- **Comprehensive Examination** None.
- **Thesis, Project, or Course-Work-Only Options** Thesis required. No other options are available.
- **Other Requirements** Students may be called upon to assist in aspects of teaching and research activities of the department. Students are expected to attend special seminars sponsored by the department.

GEMS 506  GEMS Research Rotation

Additional Courses
- GCLS 515
- PCOL 560 Graduate Pharmacology
- PCOL 595 Pharmacology Seminar b
- PCOL 598 M.S. Thesis Research b

Electives

At least 2 semester hours must be in 500-level didactic courses in the department.

- Course selections will be made in consultation with the director of graduate studies based on the student’s background and interests.
- Students in their second year and beyond must also register for PCOL 595 and PCOL 598 each semester.

- **Preliminary Examination** Required.
- **Dissertation** Required.
- **Other Requirements** Students may be called upon to assist in aspects of the teaching and research activities of the department.
Students are expected to attend special seminars sponsored by the department.

Medical Scientist Training Program

Students with an MD degree earned in the United States or who are working toward one at UIC may use medical science courses to fulfill most of the 500-level course requirements. Such students must take 3 credits of GEMS 504, GCLS 515, and 2 semester hours of an elective 500-level didactic course in the department. Students must also register for PCOL 595 and PCOL 599 each semester. Other courses may be required as determined by the advisor and the graduate committee based on the student’s area of interest.