MS in Medical Pharmacology and Physiology

Degree Requirements

The master's program is two years. The first year consists of required coursework, teaching assistantships and laboratory experiences. By the end of the first semester, students are expected to have selected a laboratory and mentor for either the thesis or non-thesis track and to form their thesis advisory committee. The second year consists of a continuation of coursework, ongoing thesis work and the defense of the thesis project. To satisfy requirements for the MS degree, a student must complete the professional plan of study with an average grade of B or better and pass an oral examination over an acceptable master's thesis. Candidates also must comply with other regulations governing master's degrees. MS degree students should normally complete their studies and thesis project within 2-3 years of admission to the degree program.

Required Coursework

- MPP 8411 Mammalian Pharmacology and Physiology 5
- MPP 7424 Pharmacology and Translational Medicine 5
- MPP 8420 Skills in Biomedical Research 2
- MPP 9422 Medical Pharmacology and Physiology Journal Club 1
- MPP 8412 Seminar in Medical Pharmacology and Physiology 1
- MPP 8415 Responsible Conduct of Research thru Engagement, Enactment and Empowerment NIH and other Federal Age 2
- STAT 7070 Statistical Methods for Research 3
  or STAT 7530 Analysis of Variance
  or STAT 7510 Applied Statistical Models I

Electives

Two upper-level MPP electives must be taken by non-thesis students. Suggestions include:

- MPP 9426 Transmembrane Signaling 4
- MPP 9430 Cardiovascular Physiology 3
- MPP 9431 Control of Energy Metabolism 3
- MPP 9432 Mammalian Membrane Physiology 1-3
- MPP 9434 Microvascular Circulatory Function 4
- MPP 9435 Molecular Exercise Biology 1-3
- MPP 9437 Neural Cardiorespiratory Control 3

Application Deadlines

Fall deadline: January 7
Spring deadline: September 15

Admission Criteria

- Minimum TOEFL scores:
  - Internet-based test (IBT) 61 Effective July 1, 2015 must have score of 80
  - Paper-based test (PBT) 500 Effective July 1, 2015 must have score of 550
  - Minimum IELTS overall academic score: 5.5
  - Minimum GPA: 3.0 in the last 60 hours
  - Bachelor's degree in chemistry, biology, pharmacy or related areas from an accredited college
  - Background in biology and chemistry and an understanding of mathematics and physics
  - Course work in biochemistry and physiology is highly recommended
  - Previous lab or research experience preferred

Students are usually admitted to begin their program in the Fall semester, but applications for admission in other semesters will be considered on a space-available basis. Women and minorities are encouraged to apply. Students with an appropriate educational background are encouraged to apply for entrance into the PhD program. A master's degree is not a prerequisite for admission to the doctoral program. The department will consider applications for the MS degree programs from U.S. citizens but PhD degree students will be given priority consideration for financial support. Deficiencies in course work may be remedied during the first years of the graduate program.

Required Application Materials

To the Graduate School:

- All required Graduate School documents

To the Medical Pharmacology & Physiology Program:

- Departmental application
- Personal statement
- Transcripts
- 3 letters of recommendation (use form provided). The letters should be written by individuals knowledgeable of the student's academic capability.
- Official GRE & TOEFL scores

Admission Contact Information

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