## **Admission Number**

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Master of Science Program in Pharmacology (International Program)

หลักสูตร วิทยาศาสตรมหาบัณฑิต สาขาวิชา เภสัชวิทยา (นานาชาติ) (ภาคปกติ)

Faculty of Medicine, Siriraj Hospital Department of Pharmacology

คณะแพทยศาสตร์ศิริราชพยาบาล ภาควิชา เภสัชวิทยา

There are 2 major concentrations

- 1. Medical Pharmacology
- 2. Systems Pharmacology

Expected number of Students to be accepted year round: 10 Students

#### **Admission Requirements**

#### A candidate must:

- 1. Students must hold a Bachelor degree or currently enrolled in the science (botany, biology, biochemistry, dentistry, medicine, pharmaceutical science %) or medical of science or veterinary medicine or Engineering Student should receive a cumulative GPA of at least 2.70
- 2. Submit a certificate of English proficiency with minimum admission score:
  - IELTS at least 3 or
  - TOEFL INTERNET BASED at least 32 or
  - TOEFL ITP (test arranged by Faculty of Graduate Study, Mahidol University) at least 400 or
  - MU GRAD TEST(COMPUTER BASED) at least 36

# Important Notes:

- English proficiency score must be taken within 2 years up to the admission date.
- Application without submitting a valid English certificate will NOT be considered.
- MU English Competence Standards: www.grad.mahidol.ac.th
- MU English proficiency tests, please contact the Language Center, Faculty of Graduate Studies, Tel. 0-2441-4125 ext. 221-222
- 3. Exemption from the above conditions may be granted by the Programme Committee under exceptional circumstances.

Subjects for examination	Time (Morning session)
1. Biochemistry	
2. Physiology	9.00 - 12.00 a.m.
3. Pharmacology	J

# **Examination Place**

Mahidol University, Salaya, Nakhonpathom more details: www.grad.mahidol.ac.th

Curriculum Structure	credit	
Core Course	3	
Required Course	14	
Elective Course no less than	7	
Thesis	12	
	credit	
Core Course		
SIID 501 Molecular and Cellular Basis of Biomedicine	3(2-2-5)	
Required Course Major : Medical Pharmacology		
SIPM 502 Seminar in Pharmacology	2(2-0-4)	
SIPM 506 Medical Pharmacology I	3(3-0-6)	
SIPM 507 Medical Pharmacology II	3(3-0-6)	
SIPM 606 Current Topics in Pharmacology	3(3-0-6)	
SIPM 605 Research Methodology in Pharmacology	3(2-2-5)	

# Major: Systems Pharmacology

SIPM 502 Seminar in Pharmacology	2(2-0-4)
SIPM 508 Principles in Systems Pharmacology	3(3-0-6)
SIPM 509 Quantitative techniques in Systems Pharmacology	3(3-0-6)
SIPM 606 Current Topics in Pharmacology	3(3-0-6)
SIPM 605 Research Methodology in Pharmacology	3(2-2-5)
Elective Course	
SIPM 510 Augmented course in cancer research advanced genomic methods (Anatomy)	1(1-0-2)
SIBC 604 Statistics in Medical Genetics	1(1-0-2)
SIMI 611 Molecular Techniques in Medical Microbiology	3(2-3-5)
SIIM 618 Molecular Biology Techniques	3(2-2-0)
ITCS 503 Design and Analysis of Algorithms	3(3-0-6)
ITCS 628 Data Mining and Knowledge Discovery	3(3-0-6)
ITCS 654 Parallel Computation	3(3-0-6)
EGBE 518 Engineering Mathematics for Research	3(3-0-6)
EGBE 551 Computational Methods for Biomedical Engineering	3(3-0-6)
EGBE 616 Optimization Methods	3(3-0-6)
EGBE 623 Pattern Recognition	3(3-0-6)
EGBE 631 Advanced Drug Delivery	3(3-0-6)
Thesis	
SIPM 698 Thesis	12(0-36-0)

<sup>\*</sup> These may be changed in case of curriculum revision

# Areas of study that a student may select for concentration:

- 1. Clinical pharmacology
- 2. Immuno pharmacology
- 3. Anti-inflammatory pharmacology
- 4. Molecular pharmacology
- 5. Oncopharmacology
- 6. Antioxidant Pharmacology
- 7. Safety/efficacy/identity of herbal components
- 8. Animal models in pharmacology
- 9. Systems pharmacology

## **Details of Scholarships**

- 1. The Siriraj Graduate Scholarships.
- 2. The Siriraj Graduate Thesis Scholarships.

#### Additional advantages of the programme

- 1. The research environment in the department provide an opportunity for graduate student to conduct corresponding basic and clinical research.
- 2. Student will be trained to understanding question physiology and pathologic condition of diseases.
- 3. The facilities of the Department of Pharmacology and the core facilities of the Faculty of Medicine provide state of the art research in students for biomedical science.
- 4. A recently implemented program in new drug development provides a huge resource of biomedicines with accompanying clinical training opportunity. This is a collaborating project with EU which will be the first program in Asean community.

#### **Application Process**

Application is only available via online application at www.grad.mahidol.ac.th

#### **Required Documents**

Applicants must upload all documents via online admission system. All documents must be in PDF format (maximum size 2 MB). Photograph must be in JPEG format.

- Recent photographs (1x1 inch in size)
- A copy of an applicant's degree certificate or a letter of graduation certification (for an applicant with a degree completion)
- A letter certifying that an applicant is currently in the final year prior to graduation (for an applicant seeking for a degree)
- A detailed transcript of a degree (for an applicant with a degree completion)
- A grade report with course names and grades received from the first to the current semester prior to graduation
- A copy of identification card
- A copy of house registration certification
- A copy of Certificate of English proficiency:
  IELTS / TOEFL INTERNET BASED / TOEFL ITP / MU GRAD TEST(COMPUTER BASED)
- A copy of proof of payment

## Job option after graduation

- 1.Researcher
- 2.Scientist

1. Assoc. Prof. Dr. Uraiwan Panich (E-mail: uraiwan.pan@mahidol.ac.th)

Room 1214 Srisavarinthira Building, Floor 12, Department of Pharmacology,

Faculty of Medicine Siriraj Hospital.

Tel: 0 2419 5254 Fax: 0 2411 5026

## **Program Coordinator**

Miss. Phattaraphorn Pumseenil (E-mail: phattaraphorn.pum@mahidol.ac.th)

Office Room Srisavarinthira Building, Floor 12, Department of Pharmacology, Faculty of Medicine Siriraj Hospital.

Tel: 0 2419 8736 Fax: 0 2411 5026

**Notes** 1. The programme requires students to study following prerequisite course:

- SIID 501 Molecular and Cellular Basis of Biomedicine 3 Credits

2. For more education information: http://www.grad.mahidol.ac.th

For more Information please contact The Student Admissions Section. Tel. 0 2441 4125 ext. 208-210, 0 2441 9129, E-mail: gradthai@mahidol.ac.th