

SCHOOL OF MEDICINE

Foreword

Medical and biomedical education is a complex mixture of graduate and professional education. Students are expected to master basic principles and theories as well as to obtain sufficient knowledge and experience to practice in their fields. The education must convey the continually expanding body of medical and biomedical science and prepare students for working during a time of rapid change in technology and societal needs.

To meet these educational goals in the program leading to the M.D. degree, schools of medicine must be at once conservative and creative. They may often seem overly conservative, but this can be attributed to the physician's painfully acquired distrust of panaceas. There is a generally accepted need to preserve certain fundamental principles—the axiom, for example, that the rational practice of medicine rests on a firm understanding of the basic medical sciences. Yet the great advances in medicine, the need to reasonably limit the number of years of formal education, the increasing number and complexity of special fields, and the diversity of interests and talents among students all demand continual examination of our educational aims and process.

Old traditions and new methods are characteristics of the Johns Hopkins University School of Medicine, where medical student education to a large degree was founded in response to the highly variable standards of medical education at the time. Hopkins was the first medical school in the United States to require a college degree for admission to the M.D. program, quite a radical idea when the first class entered over one hundred years ago. A college degree is still required, and current admission policies encourage a broad undergraduate education and permit successful applicants to select from a number of options prior to matriculation. The relative flexibility of the original curriculum foreshadowed the even greater number of choices available today. The wide variety of elective courses in the current medical student curriculum allows students to extend their knowledge in special fields of interest and to schedule elective and required clinical courses in a flexible manner.

In addition to the four-year M.D. program, the School of Medicine provides a number of graduate programs in biomedical sciences and related fields that lead to a Ph.D. or Master's degree. Also, selected students are given the opportunity to work simultaneously towards both the M.D. and the Ph.D. degrees.

The diversity of these educational options is detailed in this catalogue.

Mission Statement

The mission of the Johns Hopkins School of Medicine is to prepare physicians to practice compassionate clinical medicine of the highest standard and to identify and solve fundamental questions in the mechanisms, prevention and treatment of disease, in health care delivery and in the basic sciences.

Medical Education Program Objectives

The aim of the predoctoral medical curriculum at the Johns Hopkins School of Medicine is to prepare a diverse group of physician-leaders to improve the health of a diverse population through patient-centered medical practice and by addressing fundamental questions related to human health and disease; health care delivery; the medical humanities;

and the basic sciences. As a measure of their competence, every graduate of the Johns Hopkins University School of Medicine will:

The Science and Practice of Medicine

- Apply scientific principles and a multidisciplinary body of scientific knowledge to the diagnosis, management, and prevention of clinical problems.
- Understand the variation in the expression of health and disease through critical evaluation of biomedical research.

Clinical Competence

- Obtain a sufficient level of medical knowledge to understand the basic facts, concepts, and principles essential to competent medical practice.
- Exhibit the highest level of effective and efficient performance in data gathering, organization, interpretation and clinical decision-making in the prevention, diagnosis, and management of disease.

The Social Context of Medicine

- Identify and respond equitably to the social, behavioral, economic and structural factors that influence health, disease, health care, and biomedical science.

Communication

- Demonstrate effective and compassionate interpersonal communication skill toward patients and families necessary to form and sustain effective medical care.
- Present information and ideas in an organized and clear manner to educate or inform patients, families, colleagues and community.

Professionalism

- Display the personal attributes of compassion, honesty and integrity in relationship with patients, families and the medical community.
- Adhere to the highest ethical standards of judgment and conduct as it applies to the health care milieu.
- Demonstrate a critical self-appraisal in their knowledge and practice of medicine, as well as receive and give constructive appraisal from/to patients, families, colleagues and other healthcare professionals.

Lifelong Learning

- Understand the limits of personal knowledge and experience and will demonstrate the intellectual curiosity to actively pursue the acquisition of new knowledge and skills necessary to refine and improve their medical practice and/or to contribute to the scientific body of medical knowledge.

Medical Student Promotions

Please go to Hopkins Policy Online (<https://hpo.johnshopkins.edu/som/?event=manual&manualid=886>) to view the Promotions Policy (MSPP015).

Special Students/Visiting Students

Under special circumstances a limited number of properly qualified persons may be admitted as special students to courses offered by the School of Medicine. Special students will not ordinarily be accepted for enrollment in the required courses leading to the M.D. degree. Exceptions to this policy require the approval of the Vice Dean for Education. Credit will not be given for such work toward the M.D. degree in this school.

Students enrolled in other medical schools who desire clinical clerkships in the School of Medicine are advised that the School reserves the right

to strictly evaluate the pre-clinical and clinical education provided by the applicant's own school. Moreover, since clerkship opportunities are necessarily limited, the School must give first consideration to placement of its own students. As a general rule, clerkships are limited to students in LCME-approved schools. Visiting students are also accepted for research opportunities. Enrollment of visiting students is usually limited to one four week period per academic year.

Information on application, fees, and health insurance requirements may be obtained from the Office of the Registrar.

Enrollment

The School of Medicine enrolls full time students for the M.D., Ph.D., and Masters' degrees. Part-time students are not accepted for the M.D. degree. Under special circumstances part-time students may be accepted for graduate study. Tuition is assessed in relation to period of enrollment as specified in the Tuition and Fees section of this circular.

Students may interrupt their course of study to enroll in a combined degree program. Leave of absence status may be requested if a student wishes to temporarily withdraw from the course of study.

Advanced studies program status is a category of full-time enrollment that recognizes the student who interrupts the usual sequence of study to do an additional year (or years) of research or clinical work at Johns Hopkins or another approved site. Students on Advanced studies program status are assessed a minimal registration fee. The Associate Dean for Medical Student Affairs must approve all requests for leave of absence and advanced studies program status.

Faculty Directory (<https://www.hopkinsmedicine.org/profiles/browse/a/>)

Interdivisional Studies

Regularly matriculated students throughout the University are eligible to register for credit courses offered by the basic science departments and selected courses in clinical departments providing prerequisites are met and space is available. Admission to the required courses of the medical curriculum require approval of the course director and the Associate Dean/Registrar.

A tutorial program designed for junior and senior undergraduates offers over 100 tutorials in clinical and basic science departments. Divisional registrars can provide additional information.

Johns Hopkins Bloomberg School of Public Health

Courses in the Johns Hopkins Bloomberg School of Public Health are open to students of the School of Medicine without payment of additional fees if consent is obtained from the course instructor and the administrative officers of the School of Medicine. Interdivisional registration forms must be used to enroll in Bloomberg School courses.

Medical students may elect to pursue the Master of Public Health (MPH) program in the Bloomberg School in conjunction with the medical curriculum. The program will consist of eleven months of required and elective courses in the Bloomberg School. This is exactly the same program followed by other individuals pursuing the MPH degree, as described in the catalogue of that School. The specific elective course

program will vary according to the special interests of the individual student.

Medical students integrate this special program into their medical curriculum by taking a year's leave of absence on completion of the second or third year. During that year the student is enrolled full-time in the MPH program in the Bloomberg School. Upon completion of the MPH degree program, the student will return to the School of Medicine. The MPH degree is awarded independently upon completion of all MPH degree requirements.

Tuition support for this program may be applied for through the Bloomberg School.

All applications are subject to the approval of the Admissions Committee of the MPH program in the Bloomberg School. School of Medicine approval for all programs must be obtained from the Associate Dean for Medical Student Affairs. Comparable study arrangements are possible also for medical students in other U.S. medical schools.

Opportunities are available for further training within the departments of the School and in numerous graduate degree programs. For those interested, information concerning these programs may be obtained from Admissions Services in the Bloomberg School.

Doctoral Programs

- Biochemistry, Cellular and Molecular Biology, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/biochemistry-cellular-molecular-biology-phd/>)
- Biological Chemistry, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/biological-chemistry-phd/>)
- Biomedical Engineering, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/biomedical-engineering-phd/>)
- Biophysics and Biophysical Chemistry, PhD/Molecular Biophysics, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/biophysics-molecular-biophysics-phd/>)
- Cellular and Molecular Medicine, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/cellular-molecular-medicine-phd/>)
- Cellular and Molecular Physiology, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/physiology-phd/>)
- Cross-Disciplinary Program in Biomedical Sciences, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/20cross-disciplinary-program-biomedical-sciences/>)
- Doctor of Medicine, MD (<https://e-catalogue.jhu.edu/medicine/medical-students/md/>)
- Functional Anatomy and Evolution, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/functional-anatomy-evolution-phd/>)
- Health Sciences Informatics, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/health-sciences-informatics-phd/>)
- History of Medicine, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/history-science-medicine-technology-phd/>)
- Human Genetics and Genomics, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/human-genetics-molecular-biology-phd/>)
- Immunology, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/immunology-phd/>)
- Neuroscience, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/neuroscience-phd/>)
- Pathobiology, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/pathobiology-phd/>)

- Pharmacology, PhD (<https://e-catalogue.jhu.edu/medicine/graduate-programs/pharmacology-phd/>)

Master's Programs

- Anatomy Education, MS (<https://e-catalogue.jhu.edu/medicine/graduate-programs/anatomy-education-ms/>)
- Applied Health Sciences Informatics, MS (<https://e-catalogue.jhu.edu/medicine/graduate-programs/applied-health-sciences-informatics-ms/>)
- Clinical Anaplastology, MS (<https://e-catalogue.jhu.edu/medicine/graduate-programs/clinical-anaplastology-ms/>)
- Health Sciences Informatics–Research, MS (<https://e-catalogue.jhu.edu/medicine/graduate-programs/health-sciences-informatics-research-ms/>)
- History of Medicine, MA (On-site) (<https://e-catalogue.jhu.edu/medicine/graduate-programs/history-medicine-ma-onsite/>)
- History of Medicine, MA (Online) (<https://e-catalogue.jhu.edu/medicine/graduate-programs/history-medicine-ma/>)
- Medical and Biological Illustration, MA (<https://e-catalogue.jhu.edu/medicine/graduate-programs/medical-biological-illustration-ma/>)
- Medical Physics, MS (<https://e-catalogue.jhu.edu/medicine/graduate-programs/medical-physics-ms/>)

Post-Baccalaureate Certificate Programs

- Clinical Informatics, Post-Baccalaureate Certificate (<https://e-catalogue.jhu.edu/medicine/graduate-programs/clinical-informatics-certificate/>)
- History of Medicine, Post-Baccalaureate Certificate (Online) (<https://e-catalogue.jhu.edu/medicine/graduate-programs/history-medicine-certificate/>)

Combined Degree Programs

- MD-PhD, Combined Degree (<https://e-catalogue.jhu.edu/medicine/medical-students/md-phd-combined-degree/>)

School of Medicine Deans

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Chief Executive Officer, Johns Hopkins Medicine

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Janet Record, M.D.

Assistant Dean for Undergraduate Medical Education

Barry Solomon, M.D.

Assistant Dean for Medical Student Affairs

Paul White

Assistant Dean for Medical Student Admissions

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University Distinguished Service Professor Emerita; Professor Emerita of Pediatrics; Professor of Health Policy and Management; Editor-in-Chief Emerita, JAMA

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