# The Physician Scientist Training Program (M.D./Ph.D. Program)

The M.D./Ph.D. Program combines a rigorous science graduate curriculum with outstanding clinical training, and special integrated M.D./Ph.D. activities that qualify students for careers in academic medicine, biomedical and clinical research, as well as clinical practice. This Program requires the student to dedicate 7-8 years to complete a challenging combination of training. Matriculants to the M.D./Ph.D. Program must maintain all requirements necessary to be commissioned into the United States military throughout the Ph.D. portion of his/her training.

#### Financial Support and Military Service

Students admitted to the M.D./Ph.D. Program will receive a graduate stipend for the first three years. In most cases, students are commissioned as military officers (grade O-1), at the end of the third year in the program. Commissioning will mark the beginning of the student's military service.

#### **Application and Admission Procedures**

Applicants apply through AMCAS as well as submitting a USU Ph.D. Program application. The M.D. Admissions Office will review the AMCAS application in consideration for an interview invitation. The Admissions Committee of the appropriate Graduate Program will review the graduate application for consideration for the Ph.D. Program. These reviews are done independently by both Committees.

#### The Curriculum

The curriculum combines and integrates the requirements for both the M.D. and the Ph.D. degrees. It consists of three phases to be completed in seven to eight years. The first phase will generally be 18 months (Pre-clerkship). After taking NBLE Step 1, the student will enter the Ph.D. training period. The first three years will be completed as a civilian, under the guidance of the Graduate Program Associate Dean, thesis advisor, and M.D./Ph.D. Advisory Committee. Advanced Ph.D. courses and the qualifying examination for advancement to candidacy will be taken usually during the summer after 3rd year and a doctoral thesis proposal subsequently submitted to the thesis advisory committee. In addition, s/he will be commissioned and will attend Officer Basic Training. As a uniformed officer, the student will complete the remaining requirements of the Medical School curriculum and will also continue to spend significant time on thesis research, submit and then defend his/ her doctoral dissertation. S/he will be awarded the Ph.D. after his/her private and oral defenses. The final phase of the Program begins with the Clerkships. The student will return to full participation in the Medical School curriculum. After satisfactory completion of all requirements, the student will be awarded the M.D. degree.

#### Contacts:

Office of Medical School Admissions 1-800-772-1743 or admissions@usuhs.edu

Office of Graduate Education 1-800-772-1747 or graduateprogram@usuhs.edu

# School of Medicine Graduate Programs

Are you planning to obtain an advanced degree in biomedical science or public health? The intellectual stimulation, a desire to expand your skills and knowledge, and the potential for career advancement, may make this option attractive for you. The Uniformed Services University of the Health Sciences (USU), School of Medicine Graduate Programs may be just the place for you to receive a challenging course of study leading to a doctoral or master's degree in an environment of service and interest in contributing to the health and research needs of the nation. The available degree programs are:

- Interdisciplinary Ph.D. Programs
  - Emerging Infectious Diseases
  - Molecular and Cell Biology
  - Neuroscience
- Departmentally-based Ph.D. Programs
  - Medical and Clinical Psychology
  - Environmental Health Sciences \*
  - Medical Zoology \*
- Master of Science Programs\*
  - Public Health
  - Molecular and Cell Biology
- Master of Public Health (M.P.H.)
- Master of Tropical Medicine and Hygiene (MTM&H)
- Master of Healthcare Administration and Policy (MHAP)
- Masters/PhD in Health Professions Education

The SOM USU Graduate Programs are offered to both civilian & military students and are an essential and critical element of the academic environment at the University. The USU campus is located in Bethesda, Maryland, (a suburb of Washington, DC), on the grounds of the Walter Reed National Military Medical Center.

Large numbers of both basic science and clinical science faculty members are involved in the didactic and research training of USU graduate students. An excellent faculty to student ratio is provided by more than 150 biomedical science faculty who teach graduate students courses and mentor students during-

<sup>\*</sup>For active duty military only

# School of Medicine Graduate Programs

their research and thesis preparation. Graduate training programs are conducted in state-of-the-art research facilities on the USU campus. Students can enhance their educational experiences at USU through collaboration with the National Institutes of Health, Walter Reed Army Institute of Research, Naval Medical Research Center, United States Army Medical Research Institute of Infection Disease and numerous biotechnology companies in the area.

The over 200 students currently enrolled in the doctoral and master's programs at USU come from all parts of the country and from all types of undergraduate academic institutions. Two-thirds of the graduate students are pursuing doctoral degrees (Ph.D. or Dr.P.H.) and one-third are master's degree candidates. The University offers stipends on a competitive basis to civilian doctoral students who are U.S. citizens or legal immigrants. First year students receive approximately \$35,800. Outstanding applicants may be nominated for the Dean's Special Fellowship that supports a standard stipend with an additional \$5,000. Civilian students do not incur a service obligation to the United States government after the completion of their graduate training program. Active-duty military personnel accepted to study full-time must have the consent and sponsorship of their parent service.

Applicants must have completed a bachelor's degree from a U.S., Canada, or Puerto Rico accredited academic institution prior to enrollment. Information and application can be found at: www.usuhs.edu (click on "Graduate Education")

Completed application should be received before December 1 for matriculation in late August the following year. There is no application fee.



## **Specific Programs and Research Areas:**

## Emerging Infectious Diseases Program

This interdisciplinary program has three academic tracks within the field of emerging infectious diseases: microbiology and immunology, pathology, or preventive medicine/parasitology, with primary interest in the pathogenesis, host response, pathology and epidemiology of infectious diseases. Research training emphasizes modern methods in molecular biology, cell biology and interdisciplinary approaches. www.usuhs.edu/eid.

## Molecular and Cell Biology Program

This interdisciplinary Ph.D. program offers training to address many of the fundamental questions of modern biology ranging from protein-nucleic acid interactions to cytokines, growth factors, and developmental biology. Prospective students should have a background in biological or chemical sciences. Study for the M.S. degree is available to uniformed officers. www.usuhs.edu/mcb.

## Neuroscience Program

This is an interdisciplinary Ph.D. program for students with strong training in the biological, behavioral, and/or physical sciences. Research includes development, regeneration, and plasticity in the nervous system, molecular neurobiology, and adaptive responses of the nervous system to stress, injury, and a changing environment. Integrated instruction in the development, structure, function and pathology of the nervous system and its interaction with the environment is provided. www.usuhs.edu/nes.

#### Department of Medical and Clinical Psychology

Doctoral programs and research in medical psychology emphasize the application of psychology to behavioral medicine and to clinical psychology. Study in applied areas on the interface of health, psychology, and behavior, and in basic areas of psychology is offered. An American Psychological Association-accredited clinical psychology Ph.D. program is offered to selected members of the Uniformed Services. www.usuhs.edu/mps.

# School of Medicine Graduate Programs

#### Health Professions Education

The HPE programs are meant to provide a spectrum of opportunities for health professionals (such as physicians, nurses, and dentists) or those that are committed to working with health professionals as a career (e.g. executive administrators) in the Military Health System (MHS). The HPE programs meet an identified need to produce DoD health professionals with expertise in health professions education, who can lead programs across the continuum. Thus, the overarching goal of the HPE programs is to educate practitioners who will serve as academic leaders and will contribute to the continuous advancement of health professions education and research. Graduates of these graduate programs are uniquely situated to take major leadership roles within the MHS. The HPE programs have several offerings spanning from a Foundations in Health Professions Education certificate to a PhD in HPE degree. www.usuhs.edu/hpe.

# Department of Preventive Medicine and Biostatistics

The Master of Public Health (MPH), Master of Tropical Medicine and Hygiene (MTM&H), and the Master of Science in Public Health (MSPH) programs are designed for students with at least 3 years of experience in a health-related field. Two Ph.D. programs are offered: Medical Zoology, for students with a master's degree in entomology or parasitology who wish to pursue further study in field-oriented medical parasitology or vector biology; and Environmental Health Sciences, which includes environmental health science research particularly in the area of military-relevant exposure assessment. visit www.usuhs.edu/pmb.

#### Masters of Healthcare Administration and Policy (MHAP) Program

The MHAP Program is a 2-year program designed to develop health systems leaders with sophisticated interagency policy expertise. The primary focus of the degree is the merging of critical thinking and knowledge while exposing students to the global, political, and institutional factors that influence the need, demand, and cost of health services. The faculty and staff provide an innovative curriculum that offers access to top policy-making federal government agencies, of both a didactic and residency phase. The first year is composed of five academic quarters focused on an in-depth approach to the study of healthcare policy, applied science, and leadership. The second year of the program consists of an administrative residency in the NCA which will provide practical experience in healthcare administration, policy and leadership.

www.usuhs.edu/pmb/hsa-grad-edu.

#### For more information contact:

Graduate Education Office (301) 295-3913, 301-295-9474

Email: graduateprogram@usuhs.edu

Web: www.usuhs.edu (click on "Graduate Education")

#### **School of Medicine Graduate Education Team**

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