

## General Information

Military healthcare professionals must understand and treat syndromes and injuries that often are rare and require knowledge of tropical medicine and hygiene, parasitology, epidemiologic methods and preventive medicine. Healthcare professionals in the U.S. Public Health Service rely on much the same education and training to acquire the expertise needed in their fields, including providing health interventions for natural disasters.

USU faculty, staff and students remain deeply committed to developing the skills, technologies and knowledge necessary to provide the best possible care for those in harm's way. It is our job to educate those who protect the health of our soldiers, sailors and airmen; to develop the next generation of medical research; and to ensure that healthcare practitioners are equipped to deal with the unique challenges of military medicine and public health.

The university's worldwide reputation as a center of excellence for education and research was set in motion with USU's first class, which matriculated in 1976 and graduated in 1980. That reputation continues today with typical enrollments of more than 650 medical students, 170 graduate students, 150 nursing students and 130 post graduate dental students.

The F. Edward Hébert School of Medicine ("America's Medical School") has a year-round, four-year curriculum that is nearly 700 hours longer than that found at other U.S. medical schools. These extra hours focus on subjects that relate to the unique requirements of career-oriented military and public health physicians.

The Graduate Education in the Biomedical Sciences and Public Health program awards doctoral and master's degrees through interdisciplinary and department-based graduate programs within the School of Medicine. Program strengths include infectious disease, neuroscience, and preventive medicine research. A large number of graduates serve the federal biomedical research enterprise.

The Graduate School of Nursing (GSN) has a year-round curriculum that focuses on preparing graduate nursing students to provide care, to teach, and to conduct research for the uniformed services and the federal healthcare system during peace, disasters, war, and other contingencies.

The GSN offers the Doctor of Philosophy in Nursing Science in its Ph.D. program and four Master of Science in Nursing program options: Nurse Anesthesia, Family Nurse Practitioner, Perioperative Clinical Nurse Specialist, and Psychiatric Mental Health Nurse Practitioner. The GSN's signature curriculum integrates operational readiness in a changing environment, clinical decision making in the federal healthcare delivery system, and population health and outcomes.

The Postgraduate Dental College was established in May 2010 after receiving approval from the USU Board of Regents. The college is comprised of the Army Postgraduate Dental School with educational sites at Fort Bragg (North Carolina), Fort Hood (Texas), and Schofield Barracks (Hawaii), the Naval Postgraduate Dental School at Walter Reed National Military Medical Center (Maryland) and the Air Force Postgraduate Dental School at Lackland Air Force Base (Texas). Each school grants a Master's of Science in Oral Biology degree after the completion of a graduate dental residency program. All students matriculated into the program have obtained a Doctor of Dental Surgery or a Doctor of Dental Medicine degree.

Through its extensive continuing education program, the university serves and sustains the professional and readiness requirements of the Defense Department's worldwide military healthcare community through on-site and distance education.

The university's nationally ranked military and civilian faculty conduct cutting edge research in the

biomedical sciences and in areas specific to the Department of Defense healthcare mission, such as combat casualty, infectious diseases, and radiation biology. The university, which holds more than 289 patents or pending patents, is committed to technology transfer to ensure that the results of its research are made widely available.

The Armed Forces Radiobiology Research Institute (AFRRI), which became a part of the university in March 2006, offers research opportunities to understand the biological effects of ionizing radiation and to develop means of protecting against the effects, determining levels of exposure, and assessing risks associated with radiation injury combined with other battlefield threats.

## ***Mission***

The Uniformed Services University of the Health Sciences is the Nation's federal health sciences university and is committed to excellence in military medicine and public health during peace and war. We provide the Nation with health professionals dedicated to career service in the Department of Defense and the United States Public Health Service and with scientists who serve the common good.

We serve the uniformed services and the Nation as an outstanding academic health sciences center with a worldwide perspective for education, research, service, and consultation; we are unique in relating these activities to military medicine, disaster medicine, and military medical readiness.

## Unique Community

Students attending USU can focus on their education without the worry of incurring debt. Medical students enter the university as commissioned officers in one of the four uniformed services: U.S. Army, U.S. Navy, U.S. Air Force or U.S. Public Health Service. No prior service is required for admission. Students pay no tuition or fees and, in fact, receive the full salary and benefits of a uniformed officer throughout their four years at the university in exchange for a seven-year active duty service



commitment. The obligation for those serving in the Public Health Service is ten years, as the Public Health Service does not have an inactive ready reserve component. Students in the Graduate Education programs, a mix of civilians and uniformed officers, also pay no tuition or fees. Civilian students may receive stipends, and uniformed graduate students continue to receive their active duty pay and benefits while attending USU. The Graduate School of Nursing (GSN) master's

students are all active duty, uniformed nurses. GSN doctoral students are all active duty, uniformed nurses or work in federal civilian service. GSN students pay no tuition or fees and continue to receive their regular salaries while students at the university.

The university gives careful consideration to all available information about each applicant and selects students on a competitive basis without regard to race, color, gender, creed or national origin. Minorities underrepresented in science are encouraged to apply. USU is an equal opportunity employer.

## Student Government

Each class of the School of Medicine, its Graduate Education program, and the Graduate School of Nursing elects officers to manage class business and activities and to represent and advocate student interests in the USU community. Class elections are conducted on an annual basis. The Student Advisory Council is the student forum designed to study issues across class lines and provide a student body consensus, which may be communicated to responsible USU officials. Within the medical school, a particularly important part of student government is the Academic Council in each class, which consists of approximately 12 students who gain exposure to every course and interact with every course director throughout the School. This system facilitates and augments communication and mutual understanding between faculty and students.

## Chaplain Services

Students do their best in medical school when they feel their best. If something distracts a student from his or her studies, the chaplain's office is a safe and caring place to seek aid and counsel with plenty of potential resources, regardless of faith. The Office of the Chaplain is near the student lounge, telephone 295-9658/3193. To obtain more information or to e-mail the chaplain for an appointment or with questions, visit our website at [www.usuhs.edu/brigade/chaplain](http://www.usuhs.edu/brigade/chaplain).

The Brigade Chaplains Office facilitates the free exercise of religion within the university community.

The goal of the university chaplain and staff is to support and enhance the quality of life for university personnel and their families through spiritual development. Chaplain ministry is needs based, cooperative, and seeks to work with other faiths. The chaplain and staff members:

- Publicize locations for places of worship-military or civilian chapels
- Perform religious sacraments/ordinances, rites, and ceremonies (weddings, memorials, etc)
- Advise on ethical and religious issues
- Provide religious education and instruction
- Contribute pastoral care-visit the hospitalized and confined
- Offer pastoral counseling-spiritual, moral, personal, ethical, religious, crisis, grief, etc.

The USU mission revolves around students, as does the design of its religious program. Faith-specific student associations are formed as needs arise. Faculty and staff are encouraged to participate in the student association of their choice and to support/mentor students' spiritual formation in a manner similar to that used to foster academic excellence. Within regulations under the university president and the brigade commander, and administered by the Office of the Chaplain, the student associations are self-governed to meet the needs and interests of their constituents. USU has the following faith-specific groups:

- Catholic Medical Student Association
- Latter-Day Saint Student Association
- Christian Medical Association

Others can form as needed. Further information on these groups can be obtained by contacting the Office of the Chaplain. We look forward to knowing you and serving you.

## USU Alumni Association

The USU Alumni Association was created in 1978 by students interested in building a special network for uniformed physicians, nurses, and scientists by providing opportunities for USU graduates to build relationships with colleagues, to represent alumni views, and to encourage alumni goodwill and intentions to further strengthen USU, its faculty, and student body.

The association sponsors alumni reunions and provides support for various student activities including graduation ceremonies. It operates the Alumni Store (tel: 301-295-3686; fax: 301-295-6879); website: <http://usualumni.org/store/>, which sells specialized USU clothing as well as items like reference books for students, faculty, and alumni. The association also aids in providing information for the Class Notes section of the *USU Medicine* magazine.

## Academic Environment

The university, located on the grounds of the Naval Support Activity Bethesda (NSAB) and adjacent to Walter Reed National Military Medical Center in Bethesda, Maryland, is close to major federal health facilities. Cooperative agreements between these facilities and the university allow for expanded placements and additional resources that enhance the educational experience of USU students.

## Teaching Support

The university complex, completed in 1979, with an additional building completed in 2008, contains 550,000 square feet of space and has a full range of modern laboratories, teaching halls, seminar rooms, student study areas, and faculty and staff offices. The lecture halls, conference rooms, and laboratories all have state-of-the-art presentation equipment for use by faculty and students. The "laboratory teaching spaces" were recently renovated, maximizing the space for small groups as well as for lab exercises. In addition, many of the rooms also have Video Teleconferencing (VTC) and web-conferencing capability

for use during conferences and meetings.

## Information Technology Management

The Office of the Chief Information Officer (CIO) departments provide Information Management (IM) and Information Technology (IT) services to the University. Academic Technology (ATD), Application & Web Development (AWD) and Research Computing (RCD) departments provide administrative, academic, and research computing support services to the University. Information Technology (IT), Telecommunications, and Customer Service support services are provided by the Network Operations & Communications (NOC) and the Customer Support Directorate (CSD).

**Network Operations & Communications (NOC)** has direct responsibility for wide and local area network management, electronic mail, information systems security, and telecommunications support which includes voice and video teleconferencing as well as collaboration support. The NOC provides planning for a state-of-the-art network infrastructure that provides high-speed Internet access on campus and for several outlying locations in the local area. It also oversees many technical contracts for computer hardware and software support. A wireless network is also available throughout the USU for those students with laptops or other wireless capability and for guests visiting the University.

The Customer Service Directorate is comprised of the Center for Multidisciplinary Services (**MDL**) and **Help Desk**. Lecture halls, conference rooms, and laboratories are available for use by the students during non-class hours and may be scheduled through the MDL. The MDL facility houses a complex of laboratory/teaching rooms in which USU students spend a great deal of time while at the University. For example, in most schools, students report to the physiology department for laboratory exercises. At the university, every student goes to the MDL for all departmental laboratory exercises; MDL staff members set up the equipment and supplies used in these exercises. In addition, MDL facilities are open 24 hours a day, except when committed for teaching purposes. The rooms have multiple configurations available for use maximizing use of this space.

A part of the MDL includes the **Anatomical Teaching Laboratories (ATL)**, traditionally called “gross anatomy lab.” This facility provides laboratory teaching support of the anatomical sciences. It is under the direct supervision of the anatomical curator, who is responsible to the MDL director. The ATL provides cadavers/anatomical materials for dissection, osteological study sets, instruments, instructional aids (anatomical models, charts, embedded cross-sections), audiovisual materials (videotapes and slides), and protective clothing for all anatomical-related laboratory teaching. The ATL also provides support for anatomical-related research protocols. A wide range of courses and conferences are held in the ATL to take advantage of the unique setting for utilization of cadaveric material and lecture-setting instruction. In addition, the anatomical curator is responsible for overseeing the USU Anatomical Gift Program (whole-body donations).

The **Help Desk** branch of CSD has direct responsibility for microcomputer systems and desktop software support. The Help Desk provides support to the faculty, students, and staff at USU with their computer questions. The technicians are actively involved in resolving computer issues in the teaching areas, offices, and any other area that might house a USU computer. The Help Desk does not provide support for personal computers that might be brought in by USU community members. They do maintain hours during the duty day and will answer questions by phone, email, remote access to your computer, or by coming to the area the computer is housed. They also oversee several hardware contracts providing for the upgrade of issued desktop and laptop computers as well as enterprise licensed software contracts.

**Information Management (IM)** related services are provided by the **Applications and Web Development Directorate (AWD)**, **Research Computing Directorate (RCD)**, and **Academic**

**Technology Directorates (ATD).** Together they provide a wide range of software development services, system integration, data analysis, hardware virtualization, and database management to faculty and research staff. Academic computing in particular is a central activity for the support of medical informatics applications in teaching, distance learning; medical simulation; research and medical information planning. Specifically, they are charged with providing medical informatics and instructional design support and services for worldwide utilization and they support on-campus medical and graduate students with this highly sophisticated educational technology. USU provides online access to medical school lectures through video and podcasts. Online lectures capture is also available to USU schools.

The **Sakai Learning Management System** family of software applications enhances teaching and learning. Built by over 40 leading universities, Sakai integrates the best of breed open source technologies to support distributed learning. The system supports test & quizzes, course management, assignments and open source portfolios. Sakai augments didactic learning with custom learning paths for individual courses or students. It facilitates student participation, communication, and collaboration via the Internet. Sakai is accessible to over 10,000 students, faculty and staff at <https://learning.usuhs.edu>. Sakai and numerous other USU systems rely upon CAS (Central Authentication Services) which enables remote access to Sakai, room scheduling, course registration and Mail.

## Learning Resource Center

All faculty and students have access to the James A. Zimble Learning Resource Center (LRC). The LRC provides a rich learning environment with health sciences related information resources that are globally accessible online. Ninety databases are available through the LRC's webpage. Other in-house services include: Interlibrary Loan, numerous study spaces (including 9 group study rooms, a quiet study area, and a computer classroom), and a computer-use area with 75 workstations (MACs and PCs). Computer assistance is available daily, and classes are offered on-demand or on a regular schedule. The LRC reference staff provides on-site and web-based training for LRC affiliates. Classes include: EndNote, MEDLINE, GIS, citation metrics, as well as basic and advanced classes on searching techniques and performing systematic reviews. The LRC reference department offers support for literature searches and systematic reviews.



The LRC has over 7,100 serial titles on current subscription and over 15,000 electronic books. The University Archives, housed within the LRC, provides access to dissertations and theses written at USUHS, historical documents pertaining to the history of the University, and over 2,600 rare books. The LRC computer-based systems reside on the Internet at <http://www.lrc.usuhs.edu> and are accessible to LRC registered users anywhere in the world.

## Environmental Health and Occupational Safety

The mission of Environmental Health and Occupational Safety (EHS) is to provide the USU students and staff with the optimal healthful work environment by controlling health hazards, promoting safety, providing occupational health support and protecting the environment through compliance with military, federal, state and local regulations.

To accomplish this mission, EHS has four divisions: Radiation Safety, Industrial Hygiene and Environment, Occupational Safety and Occupational Medicine. The university safety officer works for the director of EHS and can address any general safety questions. EHS performs regular radiation safety and industrial hygiene surveys throughout the university. Additionally, EHS performs annual health and safety inspections of university spaces to include research laboratories. Each division is dedicated to optimizing safety and the prevention of occupational injury and illnesses.

Additional EHS program elements include biological and chemical waste management, medical surveillance for various occupations and positions, laboratory safety and hazard communication to include several and varied training sessions offered by EHS.

Urgent safety issues or questions regarding how to perform a task safely, especially involving work in laboratories, should be immediately brought to the attention of the work center supervisor, instructor, professor, and/or principal investigator. To discuss urgent or routine issues with EHS directly, contact any EHS staff member or the director of EHS. The EHS main office is in building A, room A-2020. The phone number is (301) 295-9443. You may request that your name be kept confidential.

Safety is everybody's business. In addition to EHS staff, responsibility for safety falls with everyone working at the university to include all students, faculty and staff. There are no silly questions. Please ask your supervisor, instructor or a member of the EHS staff should you have any safety questions regarding your work at the university.

## National Capital Area Medical Simulation Center



The Val G. Hemming Medical Simulation Center is a state of the art 30,000 square foot facility located in the Forest Glen Annex of Silver Spring. The center is dedicated to re-creating medical environments in order to teach and assess the clinical skills needed for practice. These skills include patient communication, physical examination, diagnostic reasoning, emergency skills, surgical procedures and teamwork training. Opened in 2000, our center provides over than 30,000 contact hours of instruction to medical and nursing students, postgraduate trainees, and

practicing physicians. We are the largest simulation center in the Department of Defense and one of the largest such centers in the country. We use the methodologies of standardized patients, interactive software, human patient simulators, task trainers and immersive virtual environments to accomplish our mission.

The center is divided into laboratories: The **Clinical Skills and Assessment Laboratory** utilize standardized patients to teach health assessment, history taking, patient communication and physical exam skills to learners.

The **Surgical Simulation Laboratory** employs computerized mannequins to teach physiology and

emergency management/intensive care skills and procedures to learners across the continuum of medical education.

The **Computer Skills Laboratory** is designed for the development of medical education software and the administration of clinical examinations.

The **Procedure Skills Laboratory** uses task trainers to teach laparoscopic skills, endoscopy skills and basic trauma skills.

The **Medical Virtual Environment Laboratory** is a new state of the art immersive virtual reality theater, the largest one of its kind for healthcare in the world. In this laboratory, we can train groups of individuals in a 3-D immersive environment to surround them in the sights and sounds of medicine – from battlefield to operating room – in order to re-create the stress of medicine in the real world. We use this lab to train interprofessional groups of learners in teamwork and cooperative care.

Each of our laboratories can function independently or work cooperatively depending on the needs of the learner and the course goals and objectives. Medical and nursing students attend up to 25 distinct sessions while at USU and when necessary, integrate the operations of the entire center for their learning.

