

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 675 medical students, 180 graduate students, 160 nursing students and 170 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 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 Daniel K. Inouye 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.

The College of Allied Health Sciences (CAHS) was chartered by Health Affairs in October 2016 after receiving approval from the USU Board of Regents. Authorization for undergraduate study was authorized by Congress in December of 2016. The CAHS exists to serve the ever-increasing education and training requirements that are prerequisite to professional practice within the Military Health System (MHS) of the Department of Defense (DoD). The mission of the USU-CAHS is to educate and train

competent personnel qualified to serve the needs of the uniformed services of the United States by providing quality education and training programs.

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 mission of the Uniformed Services University of Health Sciences is to educate, train, and prepare uniformed services health professionals, officers, and leaders to directly support the Military Health System, the National Security and National Defense Strategies of the United States and the readiness of our Armed Forces.

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. Students in the Postgraduate Dental College (PDC) are all active duty officers who have already obtained a Doctor of Dental Surgery or a Doctor of Dental Medicine degree.

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.

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 & Dental Associations

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. You can visit our website at <http://usualumni.org>.

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. Infrastructure & Operations (I&O), to include telecommunications support is provided by the Network Operations & Communications (NOC) department and the Academic Support & Operations (ASO) department provides administrative, academic, and research computing support services to the University. Customer Service support services are provided by the Customer Support Directorate (CSD). The Education & Technology Innovation (ETI) department provides general education technology and instructional design support and project management, requirements analysis and process improvement services are provided through the Business Process Improvement Project Management (BPIP) office.

Network Operations & Communications (NOC) has direct responsibility for wide, local and wireless area network management, electronic mail, information systems security, and telecommunications support which includes voice and video conferencing 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 the **Information Technology Service Desk (ISD)**. 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, 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 **ISD** branch of CSD has direct responsibility for microcomputer systems and desktop software support. The Service 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 Service Desk does not provide support for personal computers that might be brought in by USU community members; however, they do maintain hours during the duty day and will answer questions by phone, email, or by coming to the area the computer is housed and for USU managed system can remotely access computers to provide diagnostic support. They also oversee several hardware contracts providing for the upgrade of issued desktop and laptop computers as well as enterprise licensed software contracts. USU also provides online access to medical and nursing school lectures through video and podcasts. Online lectures capture is also available to USU schools.

The **Academic Support & Operations (ASO)** department provides 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. They support on-campus and off-campus medical, nursing, dental, graduate, and allied health students with this highly sophisticated educational technology.

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 and a number of other services using the DoD issued Common Access Card (CAC).

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. Over 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 10,000 serial titles on current subscription and over 14,000 electronic books. The University Archives, housed within the LRC, provides access to dissertations and theses written at USU, historical documents pertaining to the history of the University, and over 2,700 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.



Education & Technology Innovation (ETI) Support Office

The **Education & Technology Innovation (ETI) Support Office** is made up of instructional designers and media developers who work with faculty on traditional classroom teaching, general curriculum and course design, and the use of distributed learning (DL) environments.

The ETI promotes innovation in many ways: consulting with faculty about teaching, facilitating conversations about learning, and offering opportunities for exploring new instructional strategies and techniques.

The experienced and innovative team at the ETI Support Office partners and supports faculty and staff design and develop a wide variety of educational resources for both the classroom and the distributed learning DL environment.

The ETI offers a wide range of services. Some of the ETI's most frequently used services include:

Course/Lesson Review

Faculty can request that ETI team members review lessons or an entire course. The review process can identify areas of a course or lesson that are instructionally sound as well as locate areas in a course or lesson that would benefit from additional attention. This process can focus on the organization of the course site, the presence of appropriate learning objectives, the level of learning-centered activities; and the use of assessment methods consistent with learning objectives and course goals. The course/lesson review process can also examine consistency in coordination of course elements as well as presence of appropriate course policies and content.

Syllabus Review

The ETI can work with faculty to develop a new syllabus or review an existing one, looking at clarity, comprehensiveness, or the alignment of learning activities and assessments with objectives.

Case-based Activity and Interactive Media Development

The ETI's media design and development specialists are available to partner with faculty to create and produce instructional media that support learning objectives. The ETI can develop animations, audio content, and simulations. The ETI team also includes trained medical illustrators who can provide USU faculty with highly-detailed, customized static or animated medical illustrations.

DL Course and Course Material Development

Faculty members can use the learning management system to support classroom-based courses or to offer courses in the online environment. The ETI can work with faculty to make the best use of the learning management system to teach courses either partly or fully in the DL environment.

Educational Game Planning and Implementation

Research shows that using games in the classroom or in the online environment can increase student motivation, participation, and knowledge retention. The ETI can help faculty members design, develop, and/or implement games effectively.

Instructional Technique Planning and Implementation

The ETI supports faculty in developing and implementing instructional techniques, strategies and innovations to support teaching and promote learning. Members of the ETI team can help faculty identify appropriate and effective ways to set up their courses, use classroom time and develop materials, as well as help faculty enable students to take active roles in learning.

Remediation Design and Development

The ETI can work with faculty members to integrate innovative remediation techniques into courses to help students with a wide variety of needs attain mastery of the material.

Small Group Activities

The ETI can help faculty members develop small group activities for the classroom or online environment.

Consultation

The ETI consults with faculty members who have questions about or ideas for course redesign, the development of new activities, or other topics relating to teaching and learning.

Evaluation and Assessment Support

The ETI can work with faculty members to develop tests and other types of formal and informal assessments to help them determine whether students are meeting course objectives throughout the semester.

The ETI team can also provide course and program evaluation support to help faculty and staff understand the strengths and weaknesses of courses or programs.

Research on the Implementation of Instructional Techniques

The ETI partners with faculty to conduct research on the use of instructional innovations and shares the results of that research with their colleagues.

DL Tool and Technique Use

The ETI can work with faculty members to help them implement DL tools and techniques to allow for greater flexibility during classroom time with students or to allow for teaching to take place when students or faculty members are not on campus.

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.

Val G. Hemming Simulation Center

The Val G. Hemming 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 70,000 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, 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 **Hybrid Simulation Laboratory** employs computerized mannequins to teach physiology and emergency management/intensive care skills and task trainers to teach 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 **Virtual Environment Laboratory** is a 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 enroute care 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 25-35 distinct sessions while at USU and when necessary, employ the operations of the entire center for their learning.

