Military members sacrifice a lot for their country, even their lives. In the wake of these terrible tragedies, family members suffer, too. Yet, the impact and magnitude of their sorrow is largely unknown.

The Center for the Study of Traumatic Stress at the Uniformed Services University is bringing new visibility to these struggles by giving thousands of grieving parents, spouses, siblings and children a voice with the National Military Family Bereavement Study.

The study, led by Dr. Stephen Cozza, associate director of the CSTS, scientifically measures the impact military death has on surviving family members.

“Our study has two phases, both of which aim to understand and define the grief process in a multi-dimensional way,” said Cozza.

In phase one, participants complete an online questionnaire that covers a broad range of topics related to the loss experience. The CSTS is also collecting saliva samples, so researchers can identify candidate genes that may contribute to resiliency or prolong and intensify grief.

In the second phase, two or more members of the same family are interviewed on three separate occasions over two years, either by phone or in person. This long-range data collection gives CSTS experts a closer look at unique loss experiences over time.

“Is a mother’s grief different than a spouse’s grief? Does bereavement change if a servicemember’s death is combat related, a suicide, homicide or accident?” Cozza said. “We hope our research will find answers to these questions and more.”

In less than four months, the CSTS has already recruited more than 700 participants and collected nearly 300 saliva samples, and it plans to recruit thousands of new volunteers over the next two years.

“This is an opportunity for us to do good work and help people get through a difficult time,” Cozza said. “We hope our findings impact policy in meaningful ways, so survivors grieving the loss of a loved one get the support they need.”

In addition to Cozza, the National Military Family Bereavement Study Team includes Josce-lyn Fisher, PhD, study project manager, Jill LaMorie, DSW, senior field researcher, and geographically assigned field researchers and other scientists within the CSTS.

Visit http://www.militarysurvivorstudy.org/ to learn more about the National Military Family Bereavement Study.
Battlefield nurse learns to heal invisible wounds

By Christine Creenan-Jones, editor

Navy Lt. Cmdr. Richard Schulz, a student in the Psychiatric Mental Health Nurse Practitioner program, studies behavioral health problems every day at the Uniformed Services University. His program frames and contextualizes major psychiatric disorders – depression, anxiety, post-traumatic stress disorder and more.

Schulz will soon diagnose and treat these complex problems on his own. He and 10 other military officers in the PMHN program are finishing up their clinical rotations before graduation in May. After commencement, they’ll use the arsenal of tools they’ve gathered at USU and their military experience to begin mending some of the most vexing, misunderstood wounds of our time.

“We’re brain mechanics. That’s how I see our profession,” Schulz said. “For us, a fix-all solution doesn’t exist, because two patients with the same clinical diagnosis may need totally different interventions.”

Although these work challenges are new, Schulz has been taking care of wounded warriors for 21 years now. He began his military career as a corpsman in 1992 and was commissioned seven years later. As a naval officer, Schulz worked as a critical care nurse in several downrange locations.

“I spent six months in Kandahar, Afghanistan, treating all kinds of combat trauma wounds. At first, we received anywhere from zero to nine casualties. As the tempo of war picked up, our team would easily triage more than 30 patients in a single day,” Schulz said. “Our base flag flew at half mast for a long time, which meant another servicemember was killed in the line of duty. It was very sobering work.”

Schulz’s trying time on the front lines also provided a looking glass into a new world of invisible wounds. All around him, people were suffering, and mainstream medicine couldn’t help their kind of suffering.

“In my patients, I saw a lot of pain that couldn’t be healed on operating room tables,” he said. “I wanted to help them.”

This desire led Schulz to USU. His passion is vigilant still, but the course toward his master’s degree has been tough.

“The program is pretty grueling, but I’m glad the Navy sent me here. You get strong military exposure and a chance to see the big picture at USU,” Schulz said. “I feel like I have a leg up compared to my peers in civilian programs.”

A strong edge is necessary for a largely unchartered discipline like mental health, which according to Schulz, still needs innovators to pull back the veil of mystery.

“There’s so much that still needs to be discovered,” he said. “There’s a lot of room for us to be leaders in this field.”

HM1 Daryl Mercado USU Service Member, Sailor of the Year

By MC2 Brittney Cannady, lead writer

HM1 Daryl A. Mercado was selected as USU’s Service Member and Sailor of the Year. Although the award was given to Mercado, according to him, he didn’t earn it by himself.

“It’s a great honor to be selected. I couldn’t have done it without guidance from the chief’s mess, first classes and a few junior members,” he said. “A lot of my success goes to them, because they all helped me in some way.”

Mercado serves as USU’s leading petty officer and the enlisted advisor for the Graduate Education Office. In these roles, he assists company commanders in all matters relating to the professional development of more than 100 Army, Navy and Air Force students in USU’s Graduate Education programs. Mercado calls his job both challenging and fun.

“It’s a mixture of experienced officers and those who haven’t been in the military,” he said. “They’ve been at USU for three or four years and are ready to go, so I try to mentor them and make sure they know the military culture whether they go to the fleet or a unit.”

Mercado’s duties also include conducting formations and inspections, providing guidance to students on Navy policies and regulations, and being a positive example for students at USU.

“You have to stay hungry and driven,” he said. “I love being successful. I don’t like being recognized, but I like achieving my goals.”

Mercado has been achieving important goals for many years now. He enlisted in the Navy in June 2003 and served as a laboratory technician at Naval Air Facility in Atsugi, Japan.

As one of the top students in his class, Mercado was selected to attend the Naval School of Health Sciences in San Diego. After graduating in 2005, he served as the sole laboratory technician aboard the USS Cleveland (LPD 7) from 2007 to 2010 before coming to USU.
For a long time, the human stomach was considered the perfect safeguard against dangerous bacteria. A strong defender, the stomach is a constantly changing environment with acidic gastric fluids that kill harmful germs.

However, the discovery of Helicobacter pylori, a common but deadly bacterium, has spun conventional scientific thinking in new directions. In the early 1980s, researchers found the bacterium living and thriving inside the upper gastrointestinal tract. Since then, researchers like D. Scott (Scotty) Merrell, PhD, an associate professor in the Uniformed Services University’s Department of Microbiology and Immunology, have been working hard to understand the bug.

“If untreated, H. pylori can live in the stomach forever,” he said. “No other known bacterium can do this.”

H. pylori’s survivability is both perplexing and harmful. It’s linked to ulcers, stomach cancer and other gastrointestinal diseases, although many carriers experience no adverse side effects.

“About half of the world’s population has H. pylori in their digestive tract, but only 10 to 15 percent have clinical symptoms that range from mild to severe,” said Merrell. “In these cases, antibiotics plus proton pump inhibitors are typically prescribed. This treatment method used to be very successful with a cure rate around 95-plus percent. Recently, however, the number started dropping, which means the bacterium is adapting and becoming more resistant.”

This evolution has jump-started new research and partnerships, including Merrell’s recent collaboration with a technology institute in Israel and a local biotechnology firm in Rockville, Md. Together, they’re working on developing better anti-H. pylori therapies.

The Israeli team has taken a novel approach by creating synthetic antimicrobial peptides, which Merrell is currently testing in USU laboratories.

“The peptides appear to be a promising treatment for H. pylori. They are killing lab-grown bacteria and decreasing colonization in animals,” he said. “No other single-drug therapy being tested can do this right now.”

Medical students inducted into national honor society

Alpha Omega Alpha, founded in 1902, is the national medical honor society. AΩA is dedicated to the belief that, in the profession of medicine, care will be improved for all by recognizing high educational achievement, honoring gifted teaching, encouraging the development of leaders in academia and the community, supporting the ideals of humanism, and promoting service to others.

A number of USU personnel, including medical students from the Class of 2014, were recently inducted as the newest members of Alpha Omega Alpha and were recognized for their outstanding academic achievement in addition to significant research, community service, and leadership roles. The honored medical students include: Alexander Knobloch, Alexander Lanigan, Barbara Williams, Charles Miller, Clare Griffis, Derek Grady, Evan Sleipness, Geoffrey Farnsworth, Justin Mygatt, Michael BERGE, Michael Eliason, Patrick Grimm, Rebecca Lauters, and Timothy Russell.

Additionally, the following faculty members/alumni/fellows/residents were also selected for Alpha Omega Alpha: Faculty - Dr. Patricia McKay, Dr. Rodney Chan; Alumnus - Dr. Jason Bothwell; Residents/Fellows - Dr. Nicole Vietor; Dr. Maria Kurtz; Dr. Kevin Bernstein; Dr. Christy Sine; and Dr. Edward Stickle.

The display, which chronicles life on campus for the Uniformed Services University’s “charter martyrs,” will run through the end of March. It includes original photos and factual information about the social side of medical school during the university’s early years.

An active cohort, USU’s charter class participated in several extracurricular activities, including sports, yearbook and newsletter clubs. They also organized a popular talent show and faculty roast called, “Fed Med Follies.” These social activities helped shape the university’s culture and future, and so did USU’s first alumni, who set the standard for thousands more to follow.

“It is simply amazing how successful each student was in his or her career,” said Emelie Rubin, the institutional archivist at the LCR. “Most of the graduates remained in the military for their entire careers, and many have had successful private practices as well.”

Information provided by HPRC.
Heart disease is a major problem in the United States, even though it’s preventable and controllable. Because staying heart healthy is so important, Pulse staff members asked USU, “How do you keep your heart healthy?”

“I try to keep my weight down and exercise a minimum of three times per week. I manage stress and my blood pressure through yoga and a good sense of humor, watch my intake of red meats, eat a lot of fish and take nutritional supplements proven to improve heart health.”

Eric Schoomaker, MD, PhD, scholar-in-residence

“I try to eat a healthy diet and exercise regularly. My favorite activity is basketball.”

Air Force Staff Sgt. Avary Romar, information technology NCOIC for the Graduate School of Nursing

“I exercise occasionally and try not to eat much fat.”

Brian Cox, PhD, professor, Department of Pharmacology

“I work out twice a week. Secondary PT, hooah!”

Army Sgt. Matthew Baine, supply sergeant, Department of Military and Emergency Medicine

“I run six miles, five times a week. I also do CrossFit twice a week to keep the machine working.”

Canadian Army 1st Lt. Korami Dembele, Master of Science in Public Health candidate

“I watch my cholesterol, and work in exercise and stress reduction whenever possible.”

Carol Romano, PhD, associate dean for Academic Affairs, Graduate School of Nursing

“I wear a pod, so I know how many steps I take. I also work out three times a week.”

Army Maj. Kelley Togiola, DNP student in the Family Nurse Practitioner Program

“I walk two miles everyday.”

Linh Nguyen, grant coordinator
LAM goes high-tech with new waste disposal system

By Christine Creenan-Jones, editor

Operations were recently modernized in the Center for Laboratory Animal Medicine. A high-tech waste disposal system was installed, making life easier and safer for LAM technicians and everyone else at the Uniformed Services University.

Until this month, LAM had to manually transport 400-pound containers filled with animal bedding and other waste to industrial-sized dumpsters located just beyond USU's periphery.

New technology, however, has significantly lightened LAM's heavy load and improved university-wide sanitation. Now, debris moves by stainless-steel enclosed conveyor belts, and waste is deposited into exterior receptacles. The leak- and sound-proof system also senses capacity automatically and shuts down so there is no accidental discharge.

“It's more hygienic and people are less likely to get injured,” said Aladino Robles, chief of LAM's Animal Facility. “We no longer move potentially unsanitary material through common areas, and our technicians don’t have to bear as much heavy weight while carefully navigating loading docks, which can be especially dangerous in bad weather.”

Although new, the upgraded waste disposal system has already proven its worth.

“We move up to 1,200 pounds of animal bedding and feed per day,” said Robles. “This system is a great purchase for LAM and the university.”

USU hosts panel on LGBT mental health

By Jeremy K. Johnson
Naval Air Station Bethesda

The Uniformed Services University hosted the first educational panel to focus on the mental well-being of deployed gay and lesbian service-members by featuring four panelists affected by the issue, Feb. 6.

Three openly gay and lesbian servicemembers and the wife of one panelist answered questions from 31 military mental health specialists about the types of issues that affect lesbian, gay, bisexual and transgender service members, especially when deployed.

The panel was part of a 10-day course called “Topics on Deployment Psychology” conducted by USU’s Center for Deployment Psychology, which trains both military and civilian mental health professionals to provide evidence-based care for servicemembers and their families.

During the panel discussion, students also had opportunities to ask questions about a variety of LGBT-specific issues they had seen with patients or wanted to know more about. Panelists talked about life under “Don’t Ask, Don’t Tell,” trust issues with military mental health providers, dealing with hostile co-workers and feelings of isolation when a spouse is deployed.

“It was an incredible privilege to participate in this forum,” said National Guard Lt. Col. Todd Burton, a member of the LGBT-themed panel. “The students were engaged, interested, and really want to do the right thing as they move from the classroom to the field. They presented challenging questions that really showed their commitment to meeting the needs of all service members.”