

The Official USU Newsletter

the pulse

Volume 9, Issue 5 - March 24, 2014
www.usuhs.edu



Learning to Care for Those in Harm's Way

Sharon Holland

Deputy Vice President for External Affairs and Managing Editor

Gwendolyn Smalls

Chief, Media Affairs

Master Sgt. Oshawn Jefferson

NCOIC of VPE and Deputy Chief, Media Affairs

Christine Creenan-Jones

Editor and Layout Design

MC2 Brittney Cannady

Writer

MC3 Laura Bailey

Writer

The Pulse is printed by USU's Duplicating Center.

Production

The Pulse is funded by the Department of Defense and published by the Uniformed Services University. It is authorized for members of the U.S. military services, USU alumni, faculty and staff. Contents of the Pulse are not necessarily the official views of, or endorsed by, the DoD or USU. Appearance of anything resembling advertising in this publication does not constitute endorsement by the DoD, USU or Pulse staff members.

The contents of this publication shall be made available for use or patronage without regard to race, color, religion, sex, national origin, age, marital status, physical handicap, political affiliation or any other non-merit factor of the user or patron.

Editorial content is edited, prepared and provided by the USU Office of External Affairs. The editor reserves the right to edit articles to conform to DoD policy and Associated Press style. All photos are DoD photos unless otherwise indicated.

The Pulse will be published bi-weekly on Mondays. The deadline for submissions is at 4 p.m. Tuesday prior to the publication date. Submissions can be sent to Christine.creenan-jones@usuhs.edu.



Courtesy photo

On the cover

Navy Lt. Cmdr. Carolyn Howard completed a medical mission in Haiti before enrolling in the Graduate School of Nursing at the Uniformed Services University. Read more about Howard's life and career on page 6.

Esteemed physician delivers USU's Packard Lecture

By MC3 Laura Bailey, writer



Photo by Thomas Balfour

Army Lt. Col. (Dr.) Justin Woodson, president of the Faculty Senate at the Uniformed Services University, presents a token of appreciation to Dr. Brent James, the university's 2014 David Packard Lecturer.

Dr. Brent James, executive director of the Institute for Health Care Delivery Research and the chief quality officer for Intermountain Health Care, was the 2014 keynote speaker at the 29th Annual David Packard Lecture at the Uniformed Services University.

James, an internationally known medical expert in the field of clinical quality improvement, presented, "We Count Our Successes in Lives: The Best Clinical Result at the Lowest Necessary Cost."

"Higher quality is usually lower cost," he said. "Fifty percent of all resource expenditures in hospitals are quality-associated waste."

Recovering from preventable foul-ups, building unusable products, providing unnecessary treatments and simple inefficiency are all examples of quality-associated waste, according to James.

Other major themes of James' talk were captured in three im-

portant lessons – "we count our successes in lives," "better care is cheaper care," and "there is nothing new here except the idea that it takes a team."

James' message is substantiated by his impressive professional record, which includes recognition from the White House and Dartmouth Atlas for efficient operational costs that averages 30 percent less than his peers. Furthermore, James was also named one of the "50 Most Influential Physician Executives in Health Care."

"We were very fortunate to have Dr. James as this year's Packard Lecturer. His address was provocative and motivating, especially during this time of fiscal challenges. Dr. James is a leading figure in American medicine whose career has focused on consistent and sustainable improvements in quality to improve patients' experience and outcomes," said USU President Dr. Charles Rice.

Largest-ever study of mental health risk, resilience in Army personnel releases findings

By Sharon Holland, managing editor and deputy vice president for External Affairs

Most mental health disorders and suicidal ideation among U.S. Army soldiers start before enlistment, according to findings published in the March 3, 2014, online version of JAMA Psychiatry.

The study findings are from the Army Study to Assess Risk and Resilience in Servicemembers, or “Army STARRS,” the largest study of mental health risk and resilience ever conducted among U.S. Army personnel.

Army STARRS researchers, led by study co-principal investigators, Dr. Robert J. Ursano, chairman of the Department of Psychiatry at the Uniformed Services University, and Dr. Murray B. Stein, professor of Psychiatry and Family and Preventive Medicine at the University of California, San Diego, found that a majority (58.2 percent) of soldiers who ever thought of suicide had these thoughts before enlistment, 76.6 percent of soldiers with current mental disorders had onsets before enlistment, and nearly half (47 percent) of soldiers who ever made a suicide attempt did so for the first time before enlistment. Furthermore, nearly 60 percent of soldier suicide attempts can be traced to pre-enlistment mental disorders, which are more common among non-deployed U.S. Army soldiers than demographically similar populations of civilians (25.1 percent vs. 11.6 percent).

These initial published findings include three papers that use different strategies to evaluate suicide risk and protective factors among service people, including an analysis comparing the prevalence of mental disorders among Army and civilian populations.

“Some of the differences in disorder rates are truly remarkable,” said Ronald Kessler, McNeil Family Professor of

Health Care Policy at Harvard Medical School and senior author of the paper on mental disorder prevalence. “The rate of major depression is five times as high among soldiers as civilians, intermittent explosive disorder six times as high, and PTSD nearly 15 times as high.”

The most common disorders in the Army STARRS survey were attention-deficit hyperactivity disorder and intermittent explosive disorder, which is characterized by recurrent and uncontrollable anger attacks, Kessler said. The findings suggest that soldiers did not have higher rates of most “internalizing disorders” (anxiety disorders and depression) than civilians before enlistment, but rather developed high rates of these disorders only after they enlisted in the Army. The situation was different, though, for “behavioral disorders” (ADHD, IED, and substance abuse), which were much more common among young people who subsequently enlisted in the Army than those who did not and increased even more after enlistment. Nearly half of current soldier internalizing disorders and 80 percent of behavioral disorders started before enlistment.

“These results are a wake-up call highlighting the importance of outreach and intervention for new soldiers who enter the Army with pre-existing mental disorders,” said Ursano.

The second of the three Army STARRS papers appearing in JAMA Psychiatry revealed that 13.9 percent of soldiers considered suicide at some point in their lifetime, 5.3 percent made a suicide plan, and 2.4 percent attempted suicide, with between 47 to 60 percent of these outcomes first occurring prior to enlistment. Prior mental disorders were found to be by far the

strongest predictors of these suicidal behaviors.

“It is striking that nearly 50 percent of the soldiers who attempted suicide made their first attempt before joining the Army, as history of suicide attempts is asked about in recruitment interviews and applicants who report such a history typically are excluded from service,” said Matthew Nock, professor of Psychology at Harvard University and lead author of the STARRS report on soldier suicidality.

Nock noted that the most practical implication of this finding might be for the Army to develop outreach and intervention programs for new soldiers based on the realization that a nontrivial proportion of new soldiers come into the Army with a history of mental disorder and suicidality, and that they are not always forthcoming about these concerns during the recruitment process. Importantly, findings also show that it is not only depression and PTSD that predict suicide attempts.

The third JAMA Psychiatry article by lead author Michael Schoenbaum of the National Institute of Mental Health at the National Institutes of Health, examined the suicide and accident death rates in relation to basic socio-demographic and Army experience factors in the 975,057 regular Army soldiers who served between Jan. 1, 2004 and Dec. 31, 2009, charting variations in the rates based on a variety of factors including sex, race, education level, and rank.

Enhanced screening of applicants and expanded interventions to help new soldiers with mental disorders hold promise for reducing the high suicide rate in the U.S. Army.

USU research closing knowledge gap on TBI

By Christine Creenan-Jones, editor

Throughout history, brain injuries have presented challenges for military medicine. This is particularly true for brain injuries on the mild end of the spectrum, which have traditionally taken a backseat to some of the more severe and life threatening injuries common in combat. Furthermore, because mild brain injuries can result in cognitive and psychiatric disorders, rather than more visible injuries, they have largely been ignored in past conflicts.

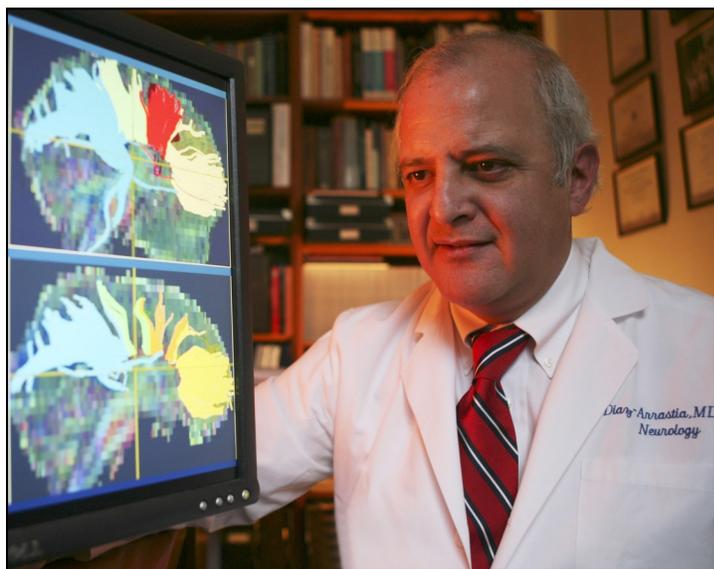
But new science over the past 10 years, and the wars in Iraq and Afghanistan, have catalyzed greater understanding about the effects of brain trauma and ways to heal these complex wounds.

Although progress is being made worldwide, the Uniformed Services University is leading the TBI charge with programs like the Center for Neuroscience and Regenerative Medicine.

The CNRM was established at USU by an act of Congress in 2008. Since then, it has catapulted novel TBI research by uniting creative minds with cutting-edge technology.

Dr. Ramon Diaz-Arrastia, the director of Clinical Research at the CNRM, oversees much of this work. He collaborates with investigators at USU, Walter Reed National Military Medical Center and the National Institutes of Health, and mentors junior scientists while leading his own TBI studies. The latter includes a pilot study to investigate the use of sildenafil citrate – or Viagra – to treat cerebral vascular reactivity after brain injury.

“Blood vessels – like axons and neurons – are damaged by brain injury. But vascular disease is a relatively understudied area of TBI research, despite evidence that it is common,” said Diaz-Arrastia. “We wanted to learn more about this problem, and study the use of sildenafil to potentiate the signaling of nitric oxide, which may correct the deficits of cerebral vascular reactivity



Dr. Ramon Diaz-Arrastia

common in patients with TBI.”

Insufficient production of nitric oxide when needed by the brain can lead to dizziness, fatigue, and memory loss. But Diaz-Arrastia’s sildenafil-research is showing tremendous promise for mitigating these side effects of TBI across both short and long-term trajectories.

“Besides studying the immediate benefits of using sildenafil to improve blood flow, we’re also measuring any lasting clinical benefits,” he said. Diaz-Arrastia’s pilot study is complemented by dozens of research programs at the CNRM, which tackle TBI from every angle.

“Brain injury is complex. It can lead to many long-term complications, some of them very debilitating. But the science being done at the CNRM is incredibly exciting, and we’re finally making important headway for TBI,” said Diaz-Arrastia.

Visit <http://www.usuhs.mil/cnrm/> for more information about the CNRM.



Countdown to Commencement Trivia Answer #2

Congratulations to Marsha Howell for being the first person to correctly answer last issue’s Trivia Question:

Who delivered the 34th commencement address at USU?

Her response, Bob Kerry, is correct. Kerry was a United States Senator and Congressional Medal of Honor recipient.

USU welcomes new School of Medicine commandant

by MC2 Brittney Cannady, writer

Army Lt. Col. (Dr.) Brigilda Teneza was selected as the new commandant of the F. Edward Hébert School of Medicine at the Uniformed Services University in January. As commandant, Teneza serves as the senior military officer-in-charge of all assigned students to the School of Medicine.

As a 1997 USU alumna, Teneza believes her background will resonate with the students here.

“I understand the hardships and stressors that USU students go through and I can empathize with them,” she said. “The fact that I’ve been here before makes the transition to this new position easier. It allows me to focus earlier on implementing programs that enhance the students’ training as military physicians.”

Teneza’s clinical and military experience from various assignments laid the groundwork for her return to USU in a leadership position. After graduating from USU, Teneza completed her pediatric residency at Tripler Army Medical Center in Honolulu. She also provided comprehensive healthcare to thousands of infants, children, and adolescents of military families at Fort Hood in Texas and Fort Belvoir in Virginia. She served in various leadership capacities at these treatment facilities, such as inpatient pediatric chief, pediatric clinic chief, and pediatric service chief. In addition, Teneza taught pediatric and family medicine residents at these teaching facilities.

Furthermore, Teneza was assigned to several units and participated in training exercises at

Fort Hood and Fort Irwin in California. In 2006, she deployed for one year and served as a supervisory medical officer for Detainee Healthcare at Camp Bucca, the largest detention camp in Iraq. Teneza was awarded the Bronze Star Medal for her service.

Teneza returned to USU and received a Master in Public Health in 2009. She completed sequential residencies in preventive medicine and occupational/environmental medicine in 2011 and served as chief resident for the latter. Teneza is board certified in pediatrics, preventive medicine and occupational medicine.

Prior to returning to USU this winter, Teneza served as assistant director of the Epidemiology and Analysis Division at the Armed Forces Health Surveillance Center in Silver Spring, Md. At AFHSC, Teneza supervised a robust health surveillance and analysis portfolio on military-relevant disease and injuries that affect the operational readiness of the U.S. Armed Forces. Many of these health surveillance and analyses are used by policy makers and military leaders at the Office of the Army Surgeon General, the Office of the Assistant Secretary of Defense for Health Affairs and Army Medical Command for their action to improve the health and readiness of America’s troops.

Teneza’s new commandant position gives her the opportunity to continue shaping future military medical leaders by providing leadership and professional development support to stu-



Army Lt. Col. (Dr.) Brigilda Teneza

dents at USU with help from service-specific company commanders and senior enlisted advisors.

“As clinicians, it’s easy to focus on taking care of patients and we forget about things we need to do for ourselves to continue to progress in our military careers,” said Teneza. Helping students understand the importance of striving for excellence in their military careers and academics are the main goals for Teneza’s tenure as commandant. She also hopes to instill among the students a lasting sense of a deeper purpose that extends beyond USU.

“When students leave USU, they represent this institution, their service, and the military. As military medical officers, we should always uphold professionalism and integrity, so I want the students to understand and appreciate the importance of military core values before they leave USU,” said Teneza.

Countdown to Commencement: A Look at the Class of 2014

Navy Lt. Cmdr. Carolyn Howard, Graduate School of Nursing

By MC3 Laura Bailey, writer

Some people grow up knowing they want to be a nurse. But, that's not the case for everyone, including Navy Lt. Cmdr. Carolyn Howard – who didn't realize her calling until some careful soul searching during her college years.

"I started out as a biology major with intentions to become a surface warfare officer upon graduation," said Howard. "I had some interest in pre-medicine as well, but wasn't sure if that was for me."

Her focus shifted toward nursing when she started talking with fellow cadets who were pursuing the nurse option in the Naval Reserves Officer Training Corps program at the University of North Carolina at Chapel Hill. They talked about the evolving roles in nursing, and how members of this community were taking on greater responsibility. This, along with the ability to help another person feel better emotionally and physically, appealed to Howard.

"I think just having the chance to actually make a difference for somebody is really rewarding," she said. "You may not remember a specific patient, but the patient will most likely remember you and how you made them feel."

With new resolve, Howard switched to the nursing program

at UNC and graduated with a Bachelor of Science in Nursing.

After serving as an active-duty nurse for eight years, she had the desire to return to school. But before Howard began pursuing a master's degree in nursing, she went on her first mission trip to Haiti in 2012.

"Soon after returning from a deployment to Afghanistan, I felt a desire to do some good in the world, hopefully using my nursing skills," said Howard. "I found a North Carolina church group that performed medical missions to Haiti every year, led by a family nurse practitioner. We set up clinics in various villages, seeing and treating the local people there."

The mission clinics in Haiti saw 2,000 patients in a seven-day period with three to four hundred patients being seen daily. Howard and other healthcare providers administered vitamins, basic over-the-counter medication, antibiotics and diabetes medications during the mission.

The mission experience and a desire to gain the expertise needed to better care for patients was the driving force behind her decision to enroll in the Family Nurse Practitioner program at the Daniel K. Inouye Graduate School of Nursing.

About midway through her

program, Howard returned to Haiti in 2013 as a part of her clinical rotation, using some of the experience she gained at USU to improve patient care in an underserved community.

"I feel like as a nurse practitioner I'll have a lot more diversity in skills and ability to make a difference – more opportunities to be able to better assess and better treat patients to do more service," she said.

Howard is gearing up for graduation in May, and she's excited about her next duty assignment, but will miss the camaraderie at USU. Howard's teachers have also positively influenced her experience on campus.

"The faculty is very supportive and gives us a lot of positive feedback and encouragement, even when we feel like we're drowning," said Howard.

"They're trying to make the program as good as possible for us students."

Howard is looking forward to her future as a nurse practitioner, where she'll leverage all of her experiences and skills to improve military medicine.

"As a family nurse practitioner, I look forward to intertwining my previous nursing experience with my newly developed practitioner skills to provide the best kind of care for patients in need."

Junior, Senior Employees of the Year selected

By Christine Creenan-Jones, editor

Robert Carter, a materials handler in the Logistics Division, and Barbara Shelton, a program analyst in the Office of Accreditation and Organizational Assessment, were selected as the Junior and Senior Employees of the Year at the Uniformed Services University for 2013.

Carter and Shelton were selected for this pres-

tigious honor after previously being named Junior and Senior Employees of the Quarter for demonstrating exemplary dedication to workplace excellence.

As Employees of the Year, Carter and Shelton received a 16-hour time off award.

New guidelines for CAC replacement

By Christine Creenan-Jones, editor



U.S. Air Force photo illustration

New regulations are being enforced for lost or stolen Common Access Cards, which includes contacting the Security Office at the Uniformed Services University before campus personnel can be issued a new CAC.

The Security Office at the Uniformed Services University routinely stresses the importance of safeguarding the Common Access Card, which provides access to Department of Defense computer networks and systems.

Because of the sensitive nature of the CAC, it should never be left unattended, but if it does get lost or stolen, USU's Security Office must be notified immediately. Security staff members will provide USU personnel with the documentation needed to obtain a new CAC. A report will also be filed in the Defense Enrollment Eligibility Reporting System – a worldwide, electronic database managed by the Department of Defense.

Beginning in April, this procedure, and the requirement to bring supporting documentation, will be enforced across the DoD, and noncompliant personnel will not be issued a new CAC.

For more information about the CAC, visit <http://www.cac.mil/>.

PMB faculty to serve on national Drowning Prevention Advisory Group

By Sharon Holland, managing editor

Dr. Deborah Girasek, associate professor and director of Social and Behavioral Sciences in the Department of Preventive Medicine and Biometrics at the F. Edward Hébert School of Medicine, was invited by the National Park Service Office of Risk Management to serve as a member of the newly-formed Drowning Prevention Advisory Group.

Drowning is the leading cause of fatal injuries in national parks. Since 2008, there have been more than 400 deaths due to drowning-related incidents in the parks. This group will be comprised of NPS staff with expertise in emergency medical services, search and rescue, and water safety as well as national experts in drowning prevention from scientific organizations, academia and federal land management agencies.

Girasek was invited based on her many years of expertise in the field. During her graduate training, Girasek specialized in the social and behavioral aspects of unintentional injury prevention. While pursuing her doctoral degree at Johns Hopkins University, Girasek contributed to a study of boating and alcohol use. In 2002, she was asked to advise intramural researchers from the National Institute for Child Health and Development on the design of a major drowning prevention study.

Since coming to the Uniformed Services University, Girasek has developed and evaluated an intervention designed to protect toddlers from drowning in residential swimming pools. The drowning prevention video that was created for that study was recognized by the International Safety Media Awards “for excellence in safety and injury prevention messages.” In 2007, she pre-

sented her work on persuading mothers with backyard pools to take infant/child CPR training at the World Water Safety Conference in Portugal.

Girasek was later asked to serve as an instructor for the National Park Service's Public Risk Management Internship Training Program at Prince William National Park in Virginia. For the past two years, she has been collaborating with the Preventive Search and Rescue staff at Yosemite National Park to increase the understanding of when and why hikers leave the trail to approach water hazards.

“The Park Service is to be congratulated,” said Dr. Girasek, “for taking a data-driven approach to reducing visitor injuries. I am honored and excited to contribute to their efforts.”

The Drowning Prevention Program was established to assist parks – at a national level -- to implement science-based drowning prevention efforts where there is high risk for water-related incidents caused by recreational activities in and around natural/open water sources such as lakes, streams, rivers and oceans. The program will provide park managers with technical assistance via the Drowning Prevention Advisory Group. The Group will provide input into the design, pilot, implementation and evaluation of park drowning prevention initiatives.



Courtesy photo

Dr. Deborah Girasek

Final Frame



Photo by Sarah Marshall, Walter Reed National Military Medical Center Public Affairs



Naval Security Force officers subdue an “active shooter,” during the base-wide Active Shooter drill held at the Uniformed Services University, Feb. 27.