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Learning to Care for Those in Harm's Way

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USU welcomes new students to campus

by Sharon Holland

New students at the Uniformed Services University of the Health Sciences (USU) were officially welcomed to campus during the school's Fall Convocation ceremony, September 18.

Medical students from the F. Edward Hébert School of Medicine recited the Hippocratic Oath, led by medical school Dean Arthur Kellermann, the school's graduate students recited a pledge with Dr. Gregory Mueller, associate dean for Graduate Education, to uphold scientific excellence. Advanced practice nursing students from the Daniel K. Inouye Graduate School of Nursing were welcomed to campus by Dean Carol Romano, who urged them to reaffirm their commitment to the principles of the nursing profession.

In welcoming the new students to campus, USU President Charles Rice said, "When you leave here in a few short years you will all have in common a degree from the Uniformed Services University of the Health Sciences. You will join an illustrious group of alumni... who are making great strides in this world and who believe deeply in our mission of education, research and public service, and in our nation's service members and their families.

I am delighted you're here and honored that you chose USU to further your education. I am confident that you will continue to uphold – and advance--the University's tradition of excellence. To all of you, my colleagues and I congratulate you, and we welcome you to our ranks."

USU set to kick off 2015 CFC charity initiative

by Eric D. Ritter

The 2015 Combined Federal Campaign (CFC) is about to kick off October 2 at the Uniformed Services University (USU), and the CFC staff want to get the word out about the benefits those contributions can bring.

According to USU CFC Campaign Manager, LaQuetta Robinson, USU is poised to be highly proactive in the charity effort by raising its goal from last year's goal of \$135,000 (which was surpassed by 18%) to this year's USU-established goal of \$170,000.

The CFC is an effort established by President John F. Kennedy in 1961 as a way to tap into America's historical attitude of charitable giving by offering lists of approved donors who have a positive track

record or charitable contributions either through efforts or through monetary donations. Last year, the National Capital Region alone raised more than \$10 million.

"USU's contribution may seem like a small fraction of that," said Robinson. "But, every dollar counts when it comes to charity."

To help raise awareness and funds, Robinson said USU will be holding events on campus such as the official kick-off October 2, then the Red, White and Blue Day on October 19 and finally the CFC Games Day on October 30. She said all of the proceeds raised from the events will go toward the general procurement CFC funds.

There are more than 23,000

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**On the cover**

F. Edward Hébert School of Medicine Dean Arthur Kellermann administers the Hippocratic Oath to new medical students at this year's Fall Convocation at USU, September 18. See story, this page. (photo by Tom Balfour)

Lushniak to Join Hébert SOM Academic Leadership Team

by Sharon Holland

Retired Rear Adm. (Dr.) Boris D. Lushniak, former Deputy Surgeon General of the United States, will join the faculty of the Uniformed Services University of the Health Sciences (USU) E. Edward Hébert School of Medicine, effective in November 2015. Lushniak was selected as the school's Preventive Medicine and Biostatistics department chair and succeeds retired chair Dr. Gerald Quinnan in the position.

"I am delighted that Dr. Lushniak will be our next chair of Preventive Medicine and Biostatistics," said Dr. Arthur Kellermann, dean of the Hébert School of Medicine. "This is a happy day for USU. Equally important it bodes well for the future of preventive medicine and public health in the United States and worldwide."

As chair of Preventive Medicine, Lushniak will lead one of the largest departments within the School of Medicine with more than 60 full-time faculty members supporting 10 programs and divisions responsible for enhancing health through medical education, research, and service that support and improve programs of preventive medicine, community health, and health promotion in the uniformed services. He will oversee medical

student education programs in preventive medicine and public health, occupational and environmental health, health administration and policy, global health and social and behavioral sciences, and eight accredited graduate degree programs in various aspects of public health. Additionally, he will oversee accredited residency programs in two preventive medicine specialty areas and specialized training programs in tropical medicine in conjunction with the American Society of Tropical Medicine and Hygiene, as well as a robust research program that includes the Infectious Disease Clinical Research Program.

Lushniak served as Deputy Surgeon General from November 2010 to September 2015, where he helped the country's top physician articulate the best available scientific information to the public regarding ways to improve personal health and the health of the nation. He assisted in overseeing the operations of the U.S. Public Health Service (USPHS) Commissioned Corps, comprised of approximately 6,700 uniformed health officers who serve in locations around the world.

Lushniak was acting U.S. Surgeon General of the United States from July 17, 2013 to December 18, 2014. During that time, he released *The Health Consequences of Smok-*

ing—50 Years of Progress: A Report of the Surgeon General, 2014 and the first-ever Surgeon General's Call to Action to Prevent Skin Cancer. Most recently, he commanded the USPHS Monrovia Medical Unit in Liberia, the only U.S. government hospital providing care to Ebola patients, from January to March 2015.

He is a graduate of the six-year Honors Program in Medical Education at Northwestern University. He completed his Bachelor of Science degree in Medical Sciences in 1981 and obtained his Doctor of Medicine degree in 1983. In 1984, he received a Master of Public Health degree at Harvard University. He completed a residency in family medicine in 1987 at St. Joseph Hospital in Chicago and a residency in dermatology at the University of Cincinnati in 1993. He was commissioned in the USPHS as an Epidemic Intelligence Service officer at the CDC's National Institute for Occupational Safety and Health in 1988 where he was trained in preventive (occupational) medicine. Lushniak maintains board certifications in dermatology and preventive (occupational) medicine. He serves as a staff physician in dermatology at Walter Reed National Military Medical Center and prior to this appointment, was an adjunct professor at USU.

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vetted charities to which potential donors may contribute. Robinson said with that number of charities involved, it's almost guaranteed there's a charity for everyone. The program is completely voluntary

and open to all federal employees who can have their contributions electronically deducted by signing up on the MyPay website. Robinson did add that potential donors aren't limited to just federal employees,

"Anyone can go on the CFC

website and use the Nexus tool to contribute." She also said she wanted to remind donors that their contributions are tax-deductible as well.

For more information about the campaign, contributing and the participating charities, please visit <http://www.cfenca.org/>.

New Curriculum Highlights Care Considerations for Seniors during a Disaster

Courtesy of the National Center for Disaster Medicine and Public Health

America's senior citizens often face unique challenges during disasters. The National Center for Disaster Medicine and Public Health (NCDMPH) at the Uniformed Services University (USU) of the Health Sciences has just released its newest resource for health educators and trainers, "Caring for Older Adults in Disasters: A Curriculum for Health Professionals," to address these issues.

Developed through the support of the U.S. Department of Veterans Affairs, the Caring for Older Adults in Disasters (COAD) curriculum is comprised of 24 lessons in seven modules covering topics ranging from special considerations for older adults in specific types of disasters to ethical and legal issues related to the care of the senior population during a disaster.

"This comprehensive new resource will benefit all healthcare professionals in preparing themselves and their staff for the realities of caring for seniors during a natural or man-made disaster," said Dr. Kenneth Schor, acting director of the NCDMPH. "This issue grows in importance by the day as, accord-

ing to the Administration on Aging, America's older adult population (65+ years) is expected to grow to more than 21 percent of the population by 2040."

The COAD curriculum's lessons range from 30 to 120 minutes in length based on the particular learning context. They include suggested learning activities for educators to engage their learners, as well as required and supplemental readings for both learners and educators. The curriculum can be used in its entirety, teaching all lessons in the order provided, or trainers may select individual lessons or portions of lessons most relevant to their learners. The curriculum's material can be adapted to best meet a specific setting and learner needs by substituting resources, modifying activities, or augmenting content.

Educators and trainers also have flexibility in how they choose to teach the content portions of the lessons (i.e., drawing on lecture, discussion, or group project modalities). The topics of the modules are: **Module 1** - Overview of the curriculum and a demographic background on older adults

Module 2 - Reviews of conditions already present in older adults before a disaster that may impact their preparedness, response, and recovery

Module 3 - Outline of special considerations for older adults in particular types of disasters

Module 4 - Overview of caring for older adults during the disaster cycle

Module 5 - Review of special considerations for older adults in various settings in which they reside and receive care

Module 6 - Overview of ethical and legal considerations for the care of the older adult population during a disaster

Module 7 - An interactive capstone activity, which allows learners to apply new knowledge to their specific role and work setting

The COAD curriculum presents lessons for dealing with a wide array of issues related to senior care in a disaster. An often overlooked aspect of disaster medicine and older adults are ethical and legal implications. In this module, authors Lillian E. Ringel, JD, of Columbia University, and Dr. Judith C. Ahronheim, of New York Medical College, include a discussion of the potential limits of patient autonomy in a public health emergency or disaster for adults with and without decisional capacity. Also outlined is information on individual state resources that providers can consult regarding state-specific regulations covering the participation of unaffiliated providers and other volunteers in a disaster.

"Caring for Older Adults in Disasters: A Curriculum for Health Professionals" can be accessed at <https://ncdmpn.usuhs.edu/KnowledgeLearning/2015-OAC.htm>.



Photo courtesy of NCDMPH

Homework is key before taking supplements

By Mass Communications Specialist 3rd Class Laura Bailey

Data from the 2011 Health Related Behaviors Survey of Active Duty Military Personnel suggests up to 25% of active duty service members report using a weight loss supplement at least once in the past year, said Dr. Jonathan Scott, a senior scientist and nutritionist at the Consortium for Health and Military Performance (CHAMP) at the Uniformed Services University of the Health Sciences (USU). Nearly 40% of service members surveyed reported daily multivitamin and mineral use. The total number of usable, eligible respondents to the survey was 39,877 (including Coast Guard) out of 154,011 eligible respondents.

If the data are correct, then it is extremely important to ensure that service members take supplements with caution, said Scott.

Unlike prescription drugs – which are regulated by the Food and Drug Administration (FDA) before they reach the market, dietary supplements are not approved by the FDA before they are marketed, said Scott. It is only after products are made available to the public that the FDA can evaluate ingredients and inform the public.

Some supplements on the market are potentially harmful and can contain “hidden” ingredients. For example, the FDA posts public notifications advising consumers not to purchase a particular product promoted for weight loss due to the presence of a hidden drug ingredient. An example of one such warning includes the following:

“The product poses a threat to consumers because sibutramine is known to substantially increase blood pressure and/or pulse rate in

some patients and may present a significant risk for patients with a history of coronary artery disease, congestive heart failure, arrhythmias, or stroke. This product may also interact, in life-threatening ways, with other medications a consumer may be taking.”

This is just one example and there are many more, said Andrea Lindsey, another Senior Nutrition Scientist at CHAMP and the director of Operation Supplement Safety (OPSS). Since 2007, the FDA has uncovered more than 600 tainted supplements. The use of these supplements can cause serious conditions that can lead to death and so the importance of education and using available resources on OPSS can't be understated, according to Lindsey.

OPSS is a joint initiative between CHAMP, and the Department of Defense (DoD). Their goal is to educate service members and retirees, their families, leaders, health care providers and DoD civilians about supplements and how to choose supplements wisely.

As quickly as the FDA is able to evaluate and publish notifications about potentially harmful supplements currently on the market, staff push that information to personnel via a link on the OPSS and HPRC websites, said Lindsey.

Other tools such as information sheets, printable materials, videos and apps for smart phones are also available.

The OPSS app allows military members with a .mil address to open an account with the Natural Medicines Comprehensive Database to access information about dietary

supplement products. An OPSS app focused only on the OPSS High-Risk Supplement List will be released in the next six weeks which will allow users to identify supplements that contain stimulants, steroids, hormone-like ingredients, controlled substances, or unapproved drugs.

But even with exhaustive resources to answer many of the questions surrounding supplements, sometimes it is necessary to call in the experts. So, OPSS has provided the “Ask the Expert” button to connect personnel and experts through a portal allowing dialogue exchanges to happen directly.

“The important thing is that we provide evidence-based answers. In some cases we may reach out to other government agencies and partners to get all the pieces needed for a complete answer. We have a list of experts we can reach out to including folks at the FDA,” said Lindsey. “Experts include Dr. Patricia Deuster, a professor in the Department of Military and Emergency Medicine and the director of CHAMP at USU, among others,” said Lindsey.

“Ultimately, supplements are not substitutes for a healthy diet and exercise,” said Scott. “But, these products are out there and available to the public – including our military personnel. Our job is to inform them. We hope that anyone considering the use of supplements or who is taking them now will talk to their health care provider, take time to look at the facts and then make an educated decision – one that could potentially save their life.”

For more information, please visit <http://hprc-online.org/dietary-supplements/opss>.

Hendra Vaccine Receives APVMA Registration

by Sharon Holland

The Hendra virus horse vaccine, first developed in Dr. Christopher Broder's laboratory at the Uniformed Services University of the Health Sciences, has received registration from the Australian Pesticides and Veterinary Medicines Authority (APVMA).

The APVMA is an Australian government statutory authority established in 1993 to centralize the registration of all agricultural and veterinary chemical products into the Australian marketplace. Its United States equivalent is the Center for Veterinary Biologics in the Animal and Plant Health Inspection Service, a branch of the United States Department of Agriculture. Vaccine registration requirements are very strict and a vaccine must be proven effective and safe before it receives APVMA approval.

"Until now, the vaccine has been available on a temporary permit, and during that time any reactions to the vaccine have been recorded and investigated. We welcome the release of information about these adverse reactions by APVMA with less than 0.03% of doses causing some kind of adverse reaction; this is in line with what our members have told us—that they have seen only small numbers of problems with the vaccine," said Ian Fulton, BVSc, MSc, FACVSc, president of Equine Veterinarians Australia, a special interest group of the Australian Veterinary Association, in a released statement.

According to Fulton, the regis-

tration is an "important step forward" in managing the risks associated with the Hendra virus.

"The vaccine decreases the risk of exposure to Hendra virus for horse owners, handlers, and veterinarians and is the single most effective way of reducing the risk of Hendra virus infection," he said. "Of course, it also helps to protect horses against this fatal disease, which is especially important in Queensland and northern New South Wales where there have been Hendra cases confirmed.

"Vaccinating horses provides a public health and workplace health and safety benefit," he concluded. "Horse owners should discuss the need for Hendra vaccination for their horses with their veterinarian."

The Equivac® HeV, from Zoetis, Inc., was first made available in November 2012 in response to the growing number of outbreaks and subsequent horse deaths in Queensland and New South Wales in Australia. To date, more than 380,000 doses of the vaccine have been administered to horses in Australia. The vaccine is derived from original work by Broder and Katharine Bossart, Ph.D., a USU alumna, who recently launched her own company, Integrated Research Associates, LLC, in San Rafael, Cali-



Dr. Christopher Broder (Courtesy photo)

fornia. Their work was supported by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health.

"The vaccine component is a soluble portion of the Hendra virus G glycoprotein, known as Hendra-sG," said Broder. Bossart developed Hendra-sG using the inherently safe approach of recombinant protein expression while a graduate student in Broder's laboratory at USU. "It is this glycoprotein that mediates viral infection. If you block its function, you block virus infection." The vaccine also provides complete protection from infection by Hendra's cousin Nipah virus which has caused outbreaks and human deaths in Bangladesh and India nearly every year since 2000, said Broder. Efforts to launch a safety trial in humans are ongoing.

Chasi exemplifies Hispanic Heritage Month at USU

By Mass Communications Specialist 3rd Class Laura Bailey

National Hispanic Heritage Month is a time to honor the histories, cultures and contributions of American citizens whose ancestors came from Spain, Mexico, the Caribbean and Central and South America. The celebration began Sept. 15 and runs to Oct. 15.

The theme of this year's observance, "Hispanic Americans: Energizing our Nation's Diversity," harkens to the vibrant and thriving contributions of Hispanics to our nation.

More than 17 years ago, a young boy living in Ecuador dreamed of joining his father in the land of opportunity – the United States.

"My father had come to the U.S. for work so he could provide a better life for me, my mom and my brothers," said Army Sgt. Darwin Chasi, a logistics non-commissioned officer in the department of Military and Emergency Medicine at USU.

The opportunities for a promising job in Ecuador were scarce, he said. The only way to get ahead was to know someone or be tied to a prominent family.

"My father left me with my mom in Ecuador and came to New York City not knowing any English," said Chasi. "He got a job as a mechanic and took a class to learn the language, so he could work and then send for us. He had to work very hard. When we got to the U.S., my mom got a job working in a factory. Both of my parents were very hard working, and they taught me to be

that way, too."

Coming to the U.S. changed everything for him. After he became a U.S. citizen, he embraced the honor as much as he could.

"I would not be where I am today if it were not for this country. I love my country. I love the United States," said Chasi. "I wanted to give back to this great nation that has given me so much."

Following in the footsteps of his now-deceased father who served in the Ecuadorian military in his youth, he joined the U.S. Army.

"It was not out of obligation," said Chasi. "I was feeling proud to join. I love our freedom, and I would do anything to keep it."

During his Army career thus far, he has deployed five times to Iraq and once to Afghanistan.

"Deploying is just part of the job," he said.

He said he is a soldier, willing to lay down his life for the country that took him in with open arms. His message to others, young and old, Hispanic or not, is to never give up.

"My mother and father taught me to work hard," said Chasi. "When my father first came here, he spoke no English and he didn't have a job. By the time he passed away, he owned five mechanic shops. My mother learned to speak English and sacrificed a lot for us kids. They taught me to

never give up on my dreams. It takes hard work to get there, but you can do it."

The feeling he has as a Hispanic American serving the greatest country in the world is one of pride, he said.

This year's celebration calls attention to the countless contributions Hispanics, including Chasi, continue to make to enrich the United States and strengthen the defense of our nation.

The university, along with the DoD, is committed to honoring and recognizing the Hispanic Americans who serve in defense of the nation. Please visit the Hispanic Heritage Month web special to learn more about Hispanic service across the Total Force: http://www.defense.gov/News/Special-Reports/0915_hispanic-heritage.



Army Sgt. Darwin Chasi (Courtesy photo)

Final Frame



(L-R) Lt. Gen. Charles B. Green (Ret.), Senior Airman Franki Ramos and 2nd Lt. Thomas Powell ceremoniously cut the cake as part of the United States Air Force Birthday celebration at USU, Friday, September 18. (Photo by Tom Balfour)