TSNRP ★ news

From the Director

SPRING/SUMMER 2016

COL Michael Schlicher

Dear Colleagues,

Three years ago, the TriService Nursing Research Program (TSNRP) was in jeopardy of being shut down due to escalating operational costs and several other internal issues. Today, I am happy to say that we are back on target and well positioned to keep TSNRP moving forward as the premier military nursing research program that it is! Regrettably, the time has come for me to step down as the seventh Executive Director of TSNRP. In doing so, I am told that I will hold the title of being the longest-serving Director of TSNRP—truly an honor, and truly time does fly when you are having fun!

In this edition of *TSNRP News,* we continue to highlight our exceptional TSNRP nurse scientists. Representing the Army and PhD students at the Uniformed Services University of the Health Sciences (USU), we have MAJ (P) Young Yauger, CRNA, who describes his exciting dissertation research exploring the impact of excessive free iron deposition within the central nervous system (because free iron has been implicated in the pathophysiology of many neurodegenerative diseases). From the Navy, CDR Abigail Marter-Yablonsky describes her recent study dealing with relationships and increased levels of parental stress during deployments. She also tells us about her transition as a PhD graduate to being a novice scientist at her new duty station. Representing the Air Force, Col (ret) Laura Talbot completes our highlights section with her research looking at best practices to self-manage patellofemoral pain syndrome (i.e., pain in and around the knee) in active-duty military personnel. And, as if that were not enough, we are also including a special feature article by Army nurse scientist LTC Terri Yost describing her amazing adventure and experience serving as a part of a recovery team with the Defense POW/MIA Accounting Agency on a mission to recover the remains of Service members who are still listed as missing in action.

Despite a variety of challenges during my term, directing TSNRP has been such a rewarding experience, and I am honored to have worked with so many inspiring, creative, and brilliant people. Each year, we became stronger, transformed, and grew. As a direct result of our hard work, the Defense Health Agency identified TSNRP as a model of program excellence for successfully accelerating and sustaining military nursing research and evidence-based practices throughout the tri-Service military health care systems.

To highlight just a few of our many accomplishments: Last year alone, we funded a record-breaking $5.1 million in grants, which is momentous because it signifies that more than 80% of our entire budget was applied to grants; we maintained our existing 64 active grants; we created our now highly acclaimed Research and Evidence-Based Practice (EBP) Dissemination Course; and we continued to operate our other sought-after educational courses, setting new participant attendance records. We forged new research relationships with dedicated military research facilities; introduced a new award category

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for EBP; launched our online grant application process; expanded our research interest groups (RIGs) to include the Anesthesia RIG; directly answered a congressional inquiry with the help of our esteemed Military Women's Health RIG; put into place a new $5 million service contract to sustain TSNRP operations; instituted the Women's Health Research Repository Database with our USU partners; created the first ever official *TSNRP Annual Report;* formed an important collaborative research partnership with our Asia-Pacific nursing colleagues; and executed numerous internal program initiatives that have led to huge program savings, improved efficiency, increased productivity, and enhanced program visibility.

These achievements would not have been realized without the help of many who have dedicated their efforts to our mission. These people include past and current members of our Scientific and Advisory Boards; the talented and dedicated TSNRP staff; our friends and partners at various grant organizations and universities; and, of course, our committed Executive Board of Directors, instructors, and stakeholders, who have never faltered. I am also thankful for the fiduciary and administrative support provided by USU, the Office of the President, the Office of Research, and the Graduate School of Nursing; without their support, our program would not be what it is today. I extend my sincere and unreserved gratitude to all of you for being part of this exciting journey. I am proud of and grateful for your enduring loyalty and commitment to our mission.

And with every end comes a new beginning. Lt Col Jennifer Hatzfeld, PhD, USAF, NC, has been selected as the next TSNRP Executive Director. Lt Col Hatzfeld will take over this summer. She is indeed the most suitable person to take us to new horizons, and I hope everyone will extend to her the same support and welcome that you provided me.

It has been my most honorable pleasure to serve as Director for this prestigious military research program, and I leave with the highest confidence and utmost satisfaction in knowing that TSNRP will continue on its trajectory of excellence!

Sincerely,

COL Michael Schlicher, PhD, AN, USA

"Serving to Heal…Honored to Serve"

Recent Accomplishments

Promotions

The following military nurse scientists recently received promotions in military rank. Please join us in congratulating these exceptional military nurses.

Army

- MAJ Geoffrey Duncklee selected for O-5
- MAJ Christopher VanFosson selected for O-5
- MAJ (P) Young Yauger selected for O-5

Retirement

Please join us in wishing the very best to **COL Jeffrey Ashley, AN, USA,** who has joined the ranks of the recently retired!

Graduates

TSNRP congratulates the following military nurse scientists, who recently received doctoral degrees:

- CDR Jennifer Buechel, NC, USN, received her PhD.
- COL Carla Dickinson, AN, USA, received her PhD.
- Lt Col Cheryl Lockhart, USAF, NC, received her DNP.
- LTC Gordon West, AN, USA, received his PhD.

Investigating Blood Product Administration to Improve Care of Traumatic Brain Injury Patients

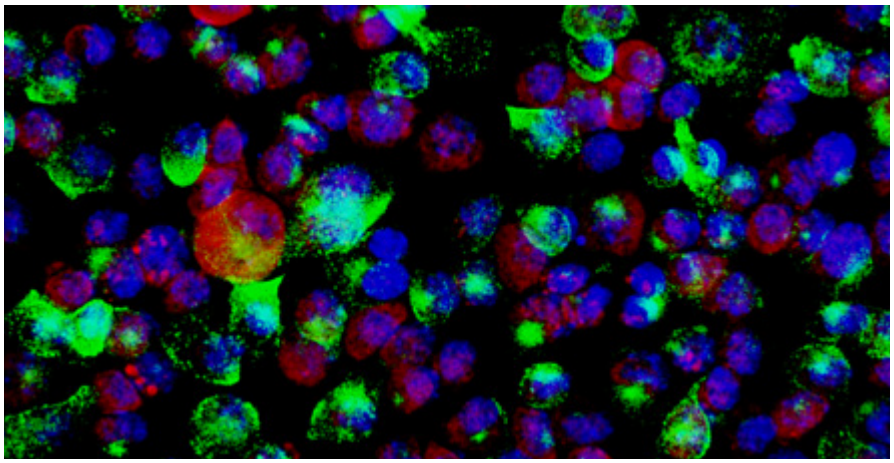
MAJ (P) Young Yauger, AN, USA

MAJ (P) Young Yauger

My deployment to Afghanistan sent me to the beginning of the Hindu Kush mountain range, and, oddly, also sparked the beginning of my scientific journey at the Uniformed Services University of the Health Sciences (USU). I vividly remember one fateful day while I was serving as the certified registered nurse anesthetist for a forward surgical team (FST). An unusual honking from the front gate roused the members of the FST. A patient had been critically wounded during an ambush. A courageous medic had done the impossible and extracted the patient from the ambush site on the hood of an up-armored Humvee, shielding the soldier from enemy fire with his own body. The medic earned a Bronze Star for his heroism that day. When I arrived on the scene, I was met with an image usually seen in horror movies—blood was everywhere. Relying on my training, I immediately moved to the head of the bed and assessed the situation. The soldier had been struck in the lower face by a rocket-propelled grenade, causing substantial soft tissue and bone damage to the mandible and anterior neck. After intravenous access was secured, I quickly induced anesthesia and intubated the patient through the exposed trachea. The patient was immediately transferred to the operating room, where skilled surgeons, nurses, and medics ameliorated all life-threatening injuries and prepared the patient for transport to a higher level of care. During this time, I managed the patient's resuscitation. Ultimately, I exhausted our FST's entire supply of packed red blood cells (PRBCs) and fresh frozen plasma (FFP). In total, I administered 15 units of PRBCs and 10 units of FFP, a massive blood transfusion event.

As a nurse, I have administered countless units of blood products to my patients over the years. Interestingly, PRBC administration has been a topic of recent controversy. Despite its obvious life-saving attributes, researchers have described a correlation between massive blood product administration and a myriad of post-operative complications. Currently, the mechanism by which these complications occur is unknown. However, the increased scrutiny of PRBC administration led to the discovery that free iron is present in each unit of red blood cells, particularly within older units nearing the end of their refrigerated shelf life of 42 days. Repeated administration of PRBCs can lead to accumulation of free iron, possibly resulting in organotoxicity. The brain is arguably the most sensitive organ in the body. Trauma and systemic inflammation can disrupt the blood–brain barrier in patients with traumatic brain injury (TBI), and when these patients receive massive blood transfusions, free iron present in the blood can deposit itself within their brain tissue.

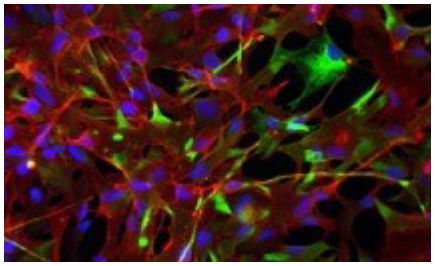
Despite iron's essential and ubiquitous distribution throughout mammalian bodies, it is extraordinarily toxic to organic compounds and, as a result, must be sequestered within protective proteins. Without this protection, free iron can directly interact with compounds inside of cells to create reactive oxygen species, which subsequently react with lipids, proteins, and nucleic acids, causing a disruption of homeostasis. Additionally, free iron has been implicated in the pathophysiology



Immunocytochemistry of microglia stained with pro- and anti-inflammatory polarization markers. The blue color represents the nucleus of the microglia. The red represents a pro-inflammatory surface marker, CD86, and the green reveals the distribution of an anti-inflammatory surface marker, CD206. Notice the presence of dual staining among some cells, illustrating the complex and dynamic transitional nature of inflammation within microglia.

of many neurodegenerative diseases, such as Parkinson's disease. The current prevailing opinion suggests that iron metabolism and elimination from the neural parenchyma may become impaired following injury or disease. Therefore, mitigation of free iron—through either iron chelation therapy or pharmacologic inhibition—may improve patient outcomes by reducing oxidative stress. However, before we can conduct clinical research, we must explore the impact of excessive free iron deposition within the central nervous system to create a foundation of basic science data.

My TSNRP-funded research in the laboratory of Kimberly Byrnes, PhD, at USU attempts to determine whether iron contributes to secondary TBI pathophysiology. The research team believes that excessive iron can facilitate and perpetuate a pro-inflammatory state within brain-specific immune cells called microglia, leading to neuronal demise and, ultimately, reduced neural function. The first step to test this hypothesis is to characterize microglia after exposure to free iron. Using cell culture experimental techniques, we have discovered that reactive oxygen species substantially increase in a dose-dependent manner following free iron exposure in vitro. We are now attempting to determine the inflammatory nature of the microglia exposed to iron by protein analysis and immunocytochemistry. Next, we will determine the fate of antioxidant proteins within the cell. Eventually, we will expose neurons to the iron-activated microglia and determine whether iron-activated microglia are toxic to neurons.



This image represents MAJ (P) Yauger's previous work with neural stem cells in Dr. Martin Doughty's laboratory at the Uniformed Services University of the Health Sciences. These cells are pluripotent in nature and can become most cell types within the central nervous system with exposure to the appropriate growth factors and cytokines. These cells are transitioning from neural stem cells to astrocytes. The blue represents the cell nucleus; the red represents an immature astrocyte marker, CD44; and the green represents GFAP, a mature astrocyte marker.

MAJ (P) Young Yauger

The effectiveness of blood product administration to treat life-threatening hemorrhagic shock was proven in 1916. This research is not questioning whether we should administer PRBCs but instead focuses on improving long-term patient outcomes by elucidating and mitigating the potentially detrimental relationship between free iron and chronic inflammation. As modern medicine improves the rate of survival among polytrauma victims, the population of soldiers living with severe TBI grows substantially. This research may provide essential knowledge to improve neurologic outcomes for wounded warriors. ★

References used in this article are available upon request. If you would like a reference list, please contact MAJ (P) Yauger at young.yauger@usuhs.edu.

TSNRP News Needs YOU!

The TSNRP newsletter is not only for you; it is *about* you! We want to know about all the great things you are doing, where you are, and what assignments you have. TSNRP is aware that you are very busy, and we know our request for information may come at a time that is inconvenient for you. Avoid the rush! Send your news to tsnrp@usuhs.edu when it occurs, and we'll save it for the next issue.

Please use "investigator news" in the subject line. Thank you!

CDR Abigail Marter Yablonsky "Inherits" Lead on Several TSNRP-Supported Studies

CDR Abigail Marter Yablonsky, NC, USN, has enjoyed 19 years as an active duty Navy nurse. After completing her undergraduate studies at the University of Rochester, she began her career as a bedside labor and delivery nurse, which inspired her to devote herself to providing comprehensive care to patients and their families. In 2007, after earning her master's degree in nursing from Rush University, CDR Yablonsky became a family nurse practitioner at Naval Medical Center Portsmouth (NMCP). During her tenure there, the Navy transitioned to the Medical Home Port model for primary health care, and she led the effort to successfully transition to this model at her busy family practice clinic at NMCP.

During this period, CDR Yablonsky encountered many military families who had experienced one or more deployment separations. Her clinical experience led her to believe that active duty Service members returning from deployment experienced stressors that also affected their families. Her concern regarding this issue became the impetus for her to pursue doctoral studies at the University of Virginia.

Working with her research mentor, Linda Bullock, PhD, CDR Yablonsky developed a research study that would focus on the connection between deployment and stress during the reunion period for military families with young children. She specifically sought to explore relationships between deployment factors in active duty fathers (such as length of time away from home) and parenting stress experienced by those fathers and their civilian wives. In addition, she intended to investigate spirituality and social support as possible mitigators of the parenting stress that these parents experienced.

CDR Abigail Marter Yablonsky at the Naval Health Research Center in San Diego

Upon receiving a TSNRP Graduate Award, CDR Yablonsky spent 8 months actively recruiting participants for her study at a large Navy medical clinic. Final enrollment included 111 active duty fathers and 82 of their civilian wives. Each participant had completed an online questionnaire assessing multiple psychosocial measures.

CDR Yablonsky's study results demonstrated a significant relationship between several deployment factors (e.g., warfare exposure and perceived threat on a recent deployment, length of time away from home related to deployment within the past 5 years) and parenting stress in active duty fathers. As the significant deployment factors increased in intensity or duration, parenting stress during the reunion period also increased for these fathers; depressive symptoms also played a significant role in intensifying this relationship. CDR Yablonsky also found that spirituality and social support served as significant positive interventions. As these two measures increased in intensity, parenting stress scores decreased for both fathers and mothers.

CDR Yablonsky has disseminated the results of her research in poster and podium presentations at several conferences. She also has written two manuscripts, developed from her dissertation work, that are pending publication in the peer-reviewed journals *Research in Nursing and Health* and *Military Medicine.*

CDR Yablonsky received her PhD in May 2015 and is now stationed at Naval Medical Center San Diego. She works part-time as a family nurse practitioner in addition to working as a research scientist in the Health and Behavioral Science Department at Naval Health Research Center (NHRC). She has "inherited" several TSNRP projects from NHRC's former Commanding Officer, CAPT Jacqueline Rychnovsky, NC, USN, who is now the Commanding Officer of NHRC's parent command, Naval Medical Research Center in Silver Spring, Maryland. CDR Yablonsky is excited to push forward on these unique and important projects.

The Phase II Congressional Military Women's Health Gap Study is an extension of work that the TSNRP Military Women's Health Research Interest Group conducted to identify extant research on the health of military women. The current literature review effort covers the years from 2000 to 2015, using a four-tiered process of review and analysis. The research team will continue working on this component

CDR Abigail Marter Yablonsky talks with a patient.

of the study and will look at health care utilization data within large military databases to cross-check and complement results from the comprehensive literature review.

The second research study, Negative Work and Social Experiences during Military Service (the WiSE study), aims to better understand the contexts within which sexual assaults occur, thereby enabling more effective, targeted prevention measures. Using 4 years' worth of data from the Workplace and Gender Relations Survey, the research team will perform a cluster analysis to identify groups of individuals whose sexual assault experiences share similar characteristics, which may break out differently across gender lines. In addition, the team will analyze the data from the WiSE study's anonymous online survey and will identify and invite potential subjects to participate in further qualitative interviews, thereby gaining deeper insight into the issues relating to sexual assault during military service.

The Career and Health Outcomes of Military Personnel with Special Needs Children study focuses on the unique needs of military families. Using large military databases, the research team will analyze career and health outcomes of military personnel across three categories: (1) military families with no children, (2) military families with a special needs child, and (3) military families with children who are not identified as having special needs. The research team also will conduct a survey of pediatric case managers working in all military treatment facilities in the continental United States in order to describe and assess variability in services offered to military families.

The final project, which will begin this spring, is the Circadian and Sleep Health Interventions in Nurses and Hospital Corpsmen study. This study aims to examine the sleep-wake cycle, circadian hormone profiles, and cognitive function of nurses and corpsmen working on rotating shifts. Thereafter, the research team will empirically test alternative sleep schedules and interventions to improve the performance of health care staff on rotating shifts.

CDR Yablonsky feels extremely privileged to be leading the research teams on these important studies, which, in many ways, reflect and expand beyond her initial inspiration to devote herself to providing comprehensive nursing care to patients and their families. Since setting course 19 years ago, and further propelled by a TSNRP Graduate Award, she has traveled far to reach this point in her career. Now, with much gratitude and enthusiasm, CDR Yablonsky leads and supports her research teams on these valuable TSNRP-supported studies and looks forward to disseminating the research findings. ★

TSNRP Scientist Spotlight: Col (ret) Laura Talbot, USAF, NC

Col (ret) Laura Talbot

After almost 30 years in the U.S. Air Force, Col (ret) Laura Talbot, USAF, NC, continues to serve her country in a research lab at the University of Tennessee Health Science Center (UTHSC) in Memphis, Tennessee.

Col (ret) Talbot is a professor in the Department of Neurology in the College of Medicine at UTHSC, and she has dedicated her research work to finding ways to help active-duty military personnel live healthier, pain-free lives. TSNRP has helped her do that through several major grants totaling approximately $1.7 million.

Her work has included testing electromyostimulation and strength walking as a treatment for knee injuries among Service members, studying ways to improve strength and function for amputees wounded in Operation Iraqi Freedom and Operation Enduring Freedom, and developing lifestyle activities to promote fitness among those serving in the National Guard.

In June 2015, TSNRP awarded Col (ret) Talbot her latest grant, $622,030 over a 3-year period. The grant will allow Col (ret) Talbot to research best practices to self-manage patellofemoral pain syndrome—pain in and around the front of the knee—in active-duty military personnel. This research is especially important because the condition, also known as "runner's knee," is the most common diagnosis among active-duty military personnel presenting in the ambulatory care setting, probably as a result of rigorous training. Col (ret) Talbot will conduct the study at Fort Campbell, home of the 101st Airborne Division.

Col (ret) Talbot and her research team will compare the results of three home-managed treatment regimens—neuromuscular electrical stimulation (NMES), transcutaneous electrical nerve stimulation (TENS), and a combination of the two treatments—with the results of a standard home exercise program. The hypothesis is that NMES combined with TENS will produce greater reduction of pain and greater improvements in muscle strength and mobility than does home exercise alone.

Ask Col (ret) Talbot why she does the research work she does, and her answer is simple: "Because the interventions we research are deployable, and the servicemen can take them with them and use them wherever they are stationed. Our goal is to improve strength, decrease pain, and improve quality of life."

Col (ret) Talbot joined the Air Force soon after receiving her nursing degree. "I wanted to see the world, and I wanted to serve," she said. "I started at the bottom as a lieutenant and worked my way up." She began her military career at Travis Air Force Base in California as a staff nurse on a medical/surgical floor.

Upon completing active duty, Col (ret) Talbot joined the Reserves. At Carswell Air Force Base in Fort Worth, Texas, she worked as a staff nurse. At the same time, she served as an assistant and an associate university professor, setting up her parallel clinical and academic career paths.

She achieved the rank of Colonel at Tinker Air Force Base in Oklahoma City. Over the years, she has held several military leadership positions, including serving as an Air Force medical commander responsible for 138 health care professionals in a stand-alone medical clinic at General Mitchell Air Reserve Station in Milwaukee, Wisconsin. Under her leadership, the station received several prestigious awards for organizational excellence.

In her final military position, Col (ret) Talbot served on the Air Staff at Bolling Air Force Base in Washington, D.C., where she was the principal adviser to the Assistant Air Force Surgeon General for Nursing Services.

Col (ret) Talbot's ties to the military go back to her childhood. Her father was in the Air Force for 20 years. Her husband, COL (ret) Jeff Metter, served more than 30 years in the Army Reserves as a neurologist. He is a professor of neurology in the College of Medicine at UTHSC.

Two of their sons are in military service: Capt Christopher Talbot is active-duty Air Force, and TSgt Paul Talbot, who serves in the North Carolina Air National Guard, is soon to be commissioned as an Air Force officer. Son-in-law Capt Josh Rountree, who is married to Talbot's daughter, Lauren, is also active-duty Air Force. Eldest son Mark Talbot is a computer engineer working at Appian.

Col (ret) Talbot's pride in her military service and that of her family is evidenced by the Blue Star Service Flag hanging prominently in the window of her UTHSC office. She displayed the same flag during her son's deployment in Operation Iraqi Freedom.

She readily says she misses her military service but treasures her continued connection and the ability to contribute.

"I feel fortunate that I can continue through my research to give back," she said, "because it was such an honor to serve for almost 30 years." ★

An Opportunity of a Lifetime in Vietnam

LTC Terri L. Yost, AN, USA

The team's base camp

I have always been fascinated by the Vietnam War. As a child, I knew that an uncle of mine had served in the war as a Navy Seabee. He had all the requisite cool Navy tattoos commemorating his service, but he never talked about his experiences there—generally a bad sign. As I grew older, I relied heavily on the influence of Hollywood to shape my opinions and knowledge of the events and the people of Vietnam against whom our military fought. As far as I was concerned, it was a bitter affair against a nasty enemy where our Service members experienced unspeakable horrors and devastating injuries and returned to an ungrateful nation. Although there were some truths backing my opinions, particularly with regard to the physical and emotional scars of those who served there, I admit that I never took the time to fully understand the war from a broader perspective. Only later, as a soldier and a scholar, did I gain new knowledge and wisdom that would fundamentally alter my historical understanding of the conflict. In 2015, I was given the opportunity of a lifetime to travel to Vietnam as a part of a recovery team with the Defense POW/MIA Accounting Agency (DPAA) on a mission to recover the remains of Service members who are still missing in action (MIA) and unaccounted for.

Did you know that Vietnam fought doggedly to support Allied forces during World War II? That the United States covertly funneled significant amounts of money to the Chinese military to arm and train Vietnamese soldiers to fight and repel the Japanese forces that had overtaken their country? That, just like our founding fathers, Ho Chi Minh wanted more than anything for his country to be an independent nation, free of French colonial rule? Don't get me wrong; the politics of the time were complex, and I know that our government wrestled greatly with how to handle Vietnam's post–World War II ambitions for independence and democracy in light of its close relationship with a newly communist China and the concerns about communism's spread. If this piques your curiosity, I encourage you to read more about the history of Vietnam. You will almost certainly be challenged by what you learn. Now that most of the history and politics of the era have been declassified, the resemblance to our own nation's quest for independence is quite striking. I learned these things while conducting research for my PhD dissertation, "Qigong as a Novel Intervention for Service Members with Mild Traumatic Brain Injury" (TSNRP grant #HU0001-1-10-TS13).

What exactly do contemporary Vietnamese history and traumatic brain injury (TBI) have in common? As it happens, the University of Virginia School of Nursing, where I earned my PhD, is home to one of only two centers for nursing history in the country. The pursuit of historical perspective on practice is part of the fabric of the nursing degree programs there. As such, I was encouraged to seek a historical perspective on TBI management to complement my dissertation research. Given my predilection for all things Vietnam, I chose to look at the nursing and medical management of TBI during the Vietnam War. That time in history featured the advent of intensive care units as well as the prominence of psychoanalytic psychiatry, both of which significantly affected the fields of neurology and neurosurgery. In addition to poring through history books, biographies, autobiographies, and journal articles of the time period, I had the great opportunity to spend a week at the Office of Medical History, immersing myself in 17 boxes of the archival Vietnam-era documents filed there. It was, at times, an overwhelming experience, but from this time spent with history, I was able to create an original work

that I presented in London and ultimately published (www.ncbi.nlm.nih.gov/pubmed/22555353). And so, when a U.S. Army Medical Command contact within our nurse scientist community put out some feelers looking for a nurse practitioner to support a DPAA mission in Vietnam, I could hardly contain my interest and excitement at the prospect of going there personally. With the blessing of my local leadership (to whom I am forever indebted), I volunteered.

The motto of DPAA, a special Department of Defense agency based in Honolulu, Hawaii, is "Fulfilling Our Nation's Promise," in reference to the creed that no Service member shall be left behind. DPAA's mission is to provide the fullest possible accounting for our missing personnel to their families and the nation and to find and return their remains to their families when possible. At any given time, small teams are searching for our fallen in places like Vietnam, Laos, Cambodia, Papua New Guinea, the Solomon Islands, the Philippines, Germany, Italy, and North Korea. According to the DPAA website, approximately 1,600 Service members who were declared MIA during the Vietnam War are still unaccounted for. More than 73,000 are still missing from World War II, and more than 7,800 are missing from the Korean War.

Each member of a recovery team brings unique expertise to the endeavor. A DPAA civilian anthropologist who scientifically evaluates the locations, interviews relevant witnesses, and plots and calculates the excavation site leads the recovery effort. The excavation is a genuine archaeological dig, and the entire team works under the anthropologist's scientific direction. The Team Leader (TL) is a military officer whose major role is to work with local government officials and negotiate logistical support for the team and recovery operation. From a military perspective, the TL is responsible for the overall execution of the mission. The Team Sergeant (TS) is a senior non-commissioned officer (NCO) who directs the team and the pace of the excavation; think of the TS as the foreman who makes sure that the job gets done right and ensures the safety and accountability of those involved.

Those three individuals make up the core of each team, but a strong cast of supporting players is also necessary, with each person filling a critical role in the overall mission. In keeping with the joint nature of DPAA, our team in Vietnam included members of the Army, Air Force, and Marines; Department of Defense civilians; and one contractor. Some team members were part of DPAA, but most of us were augmentees, just there for one mission before returning to our own units. We had two Vietnamese-born translators/linguists. They were essential, not only for translation, but also in educating and assisting the team with local customs and culture. The team also included a life science specialist whose job was to examine any non-human material and determine its significance. He brought knowledge and resources to aid in the identification of military uniforms, artifacts, and aircraft hardware to help determine whether we were digging in the right place. We had recovery specialists, typically mortuary affairs NCOs who were schooled in the proper rights, care, and chain of custody for remains. We had a communications specialist, an NCO who was responsible for setting up the daily updates and communications from our jungle site to the DPAA detachment in Vietnam. We also had a military photographer who was responsible for visual documentation of the archaeological dig site and all official elements of the mission. Because we were excavating in a prior war zone, we had an explosive ordnance disposal specialist who was responsible for performing area sweeps and searching for potentially unexploded ordnance. We had a construction NCO who was critical in helping to build up the infrastructure of the base camp where we lived for approximately 2 months. Because our excavation site was located on a steep slope within the rainy jungle terrain, a mountaineer-trained NCO engineered rope bridges, cut steps into hillsides, and orchestrated an impressive and memorable sling-load operation to get our gear across a ravine.

And then there was me, the medic. Given the austerity of the missions that DPAA conducts, the medic must be able to work autonomously. As I have learned, this role is most commonly filled by either a Navy Independent Duty Corpsman or an Air Force Independent Duty Medical Technician, both of whom have an expanded scope of practice compared with an Army medic. Therefore, when the Army is called upon to fill the role, it typically sends a nurse practitioner (NP); a physician assistant; or, less commonly, a

TRI-SERVICE NURSE CORPS ANNIVERSARIES

2 FEBRUARY 2016
115th Army
Nurse Corps anniversary

13 MAY 2016
108th Navy
Nurse Corps anniversary

1 JULY 2016
67th Air Force
Nurse Corps anniversary

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Team members build the base camp's kitchen.

physician. Apparently, the Army does not fill this role very often, because my presence on the team (both as an officer and as a NP) was treated like a real novelty.

Because DPAA is located in Hawaii, the team members began our mission by traveling to Joint Base Pearl Harbor-Hickam (JBPHH) for training. While gearing up for the mission, we had classes on how to screen dirt and identify bone fragments, teeth, clothing, metal, or anything else that might provide clues to the authenticity of the site or to the identification of our MIA Service members. Those of us going to mountainous sites learned how to tie climbing knots and practiced rappelling. We broke out into our individual specialties for more specific tasks, such as, for me, drawing and packing all of the medical equipment and medications that I would need to support the mission. We also had some downtime, allowing us to shop for any important last-minute items, most notably shelf-stable food, since we each needed to bring enough to last through the 2-month mission.

After completing our training, we boarded an Air Force C-17 out of JBPHH for Vietnam. After arriving, we stayed in the city of Da Nang for the first few days while our team leadership finalized all of the in-country logistical support, negotiations, and preparations. The rest of us had a few days to adjust to the climate and time change as well as to enjoy the great food and culture and take in the incredible spectacle that is Da Nang. The city is situated on the coast of the South China Sea with the Hàn River passing through it. The towering Marble Mountains nearby provide an incredible backdrop, and it is easy to see why our military chose this location to establish operations during the war. The coast of "China Beach" (as Service members would come to call it) still sports a few small olive-drab military outbuildings, which look interestingly out of place when nestled against beach front resorts like the Hyatt Regency, the Furama, and the Crowne Plaza, but Vietnam is a country still in transition.

During our stay in Da Nang, we took some initial day trips out to the mission site via helicopter (the Russian Mi-17) to make plans and to deliver large, heavy supplies that would be impractical or impossible to carry through the jungle. Because the medic must accompany all of the day trips, I logged quite a bit of air travel with my aid bag and had the opportunity to preview our site and help to plan the base camp and supporting facilities (such as showers and latrines). Once all of the official business had been completed, we set out deep into the mountains to begin our excavation. This time, a small group of Vietnamese military officers drove us to the site in SUVs; it was a slow but scenic trip. The Vietnamese officers stayed with us at base camp and helped with the excavation efforts. As part of the initial negotiations, we had been able to hire local personnel for the purposes of building the base camp and helping excavate and screen the dig site. The personnel that the Vietnamese officers hired were villagers who lived in the nearby mountains, and meeting and working alongside them was an amazing experience in culture sharing. Interestingly, because the area was so remote, our translators occasionally had difficulty with the local dialect. Despite the language barrier, though, people invariably found ways to communicate; music, gifts, and smiles were abundant.

Our base camp was situated on a beautiful little grassy spot near a large creek. We built platforms about 3 feet off the ground and pitched individual sleeping tents on top of them. A large tarp over each platform provided added protection from the jungle rains, which rolled in like clockwork each afternoon. Additionally, we built a screened-in kitchen/gathering spot for eating, watching movies, playing cards, or holding get-togethers with the Vietnamese officers. We also had a shower point with a small water tower and two latrines. Determining locations for these points is the medic's responsibility, so I definitely had to review *Army Field Manual FM 21-10* to ensure that we were doing things right. Fortunately, my TS had done this a few times (it was his 11th mission) and was a great help. Having running water so close

The camp's shower

made it convenient to pump water up to the tower above our makeshift shower as well as to wash clothes. It was also quite nice to listen to at night and ensured that our camp was visited regularly by the local wildlife in the form of stray cows and water buffalos. Considering the circumstances and some of the living conditions I've endured in the military, I considered us to be fairly well off.

Although we each had unique specialties that brought us there, when it came to the excavation site, everyone's primary job was to dig and screen. Our TS divided us up into "digging pairs" or "dig partners," and each pair would take a turn in the site digging and filling buckets with the freshly excavated dirt, rotating back out after a solid hour with the shovel. Digging continuously for an hour is a real workout, especially in the heat (July and August in Vietnam) and on the steeply pitched hillside, but I loved every minute of that job! It was humbling and gratifying and felt very productive, and I was sad each time my shift was over. The filled buckets were then brought to the screening stations, where we helped the Vietnamese workers sift through the contents and look for anything suggestive of remains. A typical day looked like this: We woke early in the morning; completed hygiene and breakfast; then gathered at the dig site, which was adjacent to the base camp, by 0700. Once the digging got under way, we dug and screened continuously until 1300, then broke for lunch (and the inevitable rains), and then resumed digging. At 1500, we halted digging and had a briefing to discuss the day's progress. After the briefing, we undertook site cleanup activities (cleaning and sharpening picks and shovels, stacking buckets, and covering the excavation site) and base camp chores (for me, refilling hand-washing stations, bleaching the shower water tower, and adding lime to the latrine pits). Then it was time for a well-deserved and desperately needed shower, dinner, some socializing with the team, and an early turn-in. After a few days, we settled into a nice rhythm.

As for my medical responsibilities, I was kept busy with frequent musculoskeletal injuries, insect bites, rashes, colds, and general aches and pains. In addition to our DPAA team, I also provided care to our Vietnamese officers and the local villagers, which was rewarding. No matter where I went, my aid bag and tackle box filled with every variety of topical cream you can imagine was close by, with a bottle of Bactine® and a fresh stack of Band-Aids®. Many times, I felt more like a mom than a medic, but that was because we were fortunate enough to have no serious medical emergencies on this mission, for which I am very grateful.

I cannot say enough great things about our team. As a group, we truly represented the perfect balance of knowledge, experience, enthusiasm, sincerity, sarcasm, physical strength, wisdom, playfulness, opposition, and amnesia. Not pulling your weight that day? You were immediately called out for it. Worked particularly hard or made an impact? You were given a nice little pat on the back by the team. Of course, sometimes people got on each other's nerves; we were living in a base camp, after all. But regardless of how each day went, we ate dinner together in our makeshift kitchen made from cinnamon trees, relaxed, slept in our individual tents, and started the next day fresh and without carryover.

Because of the sensitivity of the missions and out of respect to the family members of those still missing, I cannot speak directly about the individual names or nature of events related to our dig site, nor can I divulge the outcome of our individual mission. I can say, however, that DPAA publicly

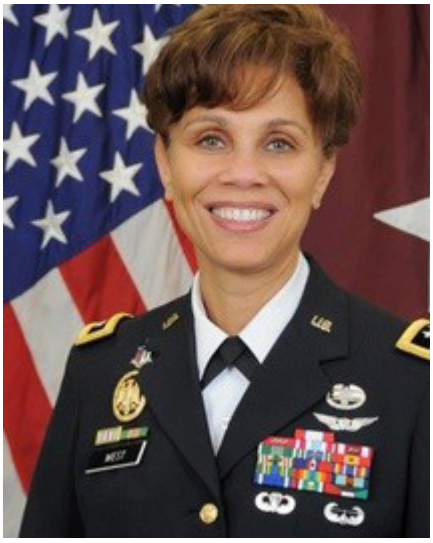
Team members work at the excavation site's screening station.

disseminates the names of newly repatriated remains from all over the world on its public website after they are positively identified through forensic analysis at the DPAA laboratory at JBPHH.

I'm not sure exactly what I was expecting, but I was overwhelmed by how positively we, as Americans, were received by the people of Vietnam. If anyone there still bears hard feelings, I certainly never encountered them. Not in Da Nang, not in Hôi An, not with the Vietnamese military officers with whom we shared our mission, not among the people of the mountain village near our dig site, and not with anyone in any of the small towns where we stopped to rest and eat in our travels through the country. No matter where we went, people opened their doors to us, went out of their way to greet us, and initiated warm and genuine conversation. "Are you American?" they would start, eager to practice their English. They offered genuine gratitude that we were there, which I found particularly interesting given that Da Nang is a popular vacation destination and foreigners are common. One moment I will never forget: An older gentleman whom I encountered while walking on the beach, after some brief conversation, asked me, "Isn't it so great that we are friends again?"

As I ease into my military retirement this summer, I will forever treasure the opportunity to close a loop with regard to my interest in and understanding of Vietnam and the war that we fought there. Having served two combat deployments, I am even more grateful to have been able to be part of the DPAA mission: "Fulfilling Our Nation's Promise." As a soldier, I cannot think of a more peaceful and honorable way to complete a military career. ★

LTG Nadja West Becomes First African American Army Surgeon General



LTG Nadja West

TSNRP congratulates LTG Nadja Y. West, who in December became the 44th Surgeon General of the U.S. Army and Commanding General of the U.S. Army Medical Command.

With her appointment, LTG West achieves two firsts: She is the first African American to become Army Surgeon General and the first African American woman to achieve the rank of Lieutenant General.

The Army Surgeon General advises the Secretary of the Army and Army Chief of Staff on health care matters and is responsible for the army's health service system. As Commanding General of the Army Medical Command, LTG West will oversee more than 48 medical treatment facilities providing care to nearly 4 million active duty military, retirees, and their families.

LTG West is a native of Washington, D.C. Her military career began at the U.S. Military Academy, where she majored in engineering. She earned her MD from the George Washington University School of Medicine and Health Sciences. She also earned a master's degree in national security strategy from the National War College.

A veteran of Operations Desert Shield and Desert Storm, LTG West has also completed tours in Germany, Macedonia, Kosovo, and South Korea and in various parts of the United States. She has served as Deputy Chief of Staff in the Office of the Army Surgeon General and as Commanding General of the Europe Regional Medical Command.

LTG West was the first Army officer to become part of the leadership team when she served as the Deputy Commander for Integration at the National Naval Medical Center (now known as the Walter Reed National Military Medical Center). Most recently, she was the Joint Staff Surgeon at the Pentagon, where she served as the Chief Medical Advisor to the Chairman of the Joint Chiefs of Staff.

LTG West's awards and decorations include the Distinguished Service Medal, the Legion of Merit with three oak leaf clusters, the Defense Meritorious Service Medal, the Army Meritorious Service Medal with two oak leaf clusters, and the Army Commendation Medal. She is a fellow of the American Academy of Dermatology and the American Academy of Family Physicians. ★

TSNRP Welcomes New Members to the Executive Board of Directors

The TSNRP Executive Board of Directors (EBOD), which comprises the Chief of the Army Nurse Corps, the Director of the Navy Nurse Corps, and the Chief of the Air Force Nurse Corps, provides programmatic oversight for TSNRP. Final funding approval rests with the EBOD members and their deputies. Recently, TSNRP welcomed new member MG Barbara R. Holcomb, AN, USA, to the EBOD as well as two new deputies: COL Richard L. Evans, AN, USA, and CAPT Deborah Roy, NC, USN.

MG Barbara R. Holcomb, AN, USA

MG Holcombe is the Deputy Commanding General (Operations) of the U.S. Army Medical Command and the Chief of the Army Nurse Corps. Her career has encompassed numerous nursing and leadership positions around the country and the world. Her previous assignments include serving as a clinical staff nurse in emergency medicine at Madigan Army Medical Center and at the 47th Combat Support Hospital at Fort Lewis in Washington; as Chief Nurse in the Department of Outlying Health Clinics at the 67th Combat Support Hospital in Würzburg, Germany; and as Commander of Medical Task Force 21 in Operations Iraqi Freedom and New Dawn. She also deployed to Operations Desert Shield and Desert Storm. MG Holcomb was the first Nurse Corps member to be named Commander of Landstuhl Regional Medical Center in Landstuhl, Germany. She also served as Command Surgeon at the U.S. Army Forces Command headquarters at Fort Bragg in North Carolina. Before becoming the Deputy Commanding General of Operations, MG Holcomb served as the Commanding General of the Regional Health Command — Central (Provisional).

MG Holcomb is a 1987 Distinguished Military Graduate of the Seattle University Army ROTC, where she earned a BS in nursing. She holds a master's degree in nursing administration from the University of Kansas, a master's-level certification in emergency and disaster management from American Military University, and a master's degree in military strategic studies from the U.S. Army War College at Carlisle Barracks in Pennsylvania. She also has completed extensive military education.

MG Holcomb's awards and decorations include the Legion of Merit with two oak leaf clusters, the Bronze Star, the Meritorious Service Medal with five oak leaf clusters, the Army Commendation Medal with three oak leaf clusters, the Army Achievement Medal with one oak leaf cluster, the National Defense Service Ribbon, the Iraq Campaign Medal with two campaign stars, the Kosovo Campaign Medal, the NATO Service Ribbon (Kosovo), the Southwest Asia Service Medal with three campaign stars, the Kuwait Liberation Medal (Saudi Arabia and Kuwait), the Meritorious Unit Commendation Ribbon with one oak leaf cluster, and the Expert Field Medical Badge. She is a member of the Order of Military Medical Merit.

COL Richard L. Evans, AN, USA

The Surgeon General appointed COL Evans as the Deputy Chief of the U.S. Army Nurse Corps on 2 November 2015. Before his appointment, COL Evans was the Chief Nursing Officer and Deputy Commander for Nursing at Brooke Army Medical Center at Fort Sam Houston in Texas. His previous assignments include serving as Deputy Commander for Nursing for the 10th Combat Support Hospital at Fort Carson in Colorado and as Executive Officer in the Army Nurse Corps Office of the Chief at the Army Medical Department Center and School at Fort Sam Houston. He also has served as a clinical staff nurse and as a nursing instructor.

COL Evans holds a BS in nursing and master's degrees in adult health nursing and nursing administration and in strategic studies. His military awards and decorations include the Legion of Merit, the Bronze Star, the Meritorious Service Medal with four oak leaf clusters, and the Army Commendation Medal. He was awarded the 9A Proficiency Designator in Medical-Surgical Nursing by the Army Surgeon General, and he is authorized to wear the right shoulder sleeve insignia for combat service in support of the 44th Medical Brigade during Operations Desert Shield and Desert Storm and the 62nd Medical Brigade for combat service in Operation Enduring Freedom.

CAPT Deborah Roy, NC, USN

CAPT Roy is the Deputy Director of the Navy Nurse Corps. She began her 25-year Navy career as a staff nurse at Naval Hospital Jacksonville in Florida and has since completed a variety of assignments around the world.

After leaving Naval Hospital Jacksonville, CAPT Roy gained critical care specialty experience at Naval Hospital Guam, at Naval Medical Center San Diego, and aboard the USS *Bonhomme Richard* (LHD 6). She went on to earn an MS in nursing with a focus on critical care and trauma. Upon graduation, she reported to Naval Hospital Okinawa as the Division Officer for the Multiservice Ward. While serving in Okinawa, CAPT Roy deployed to Joint Special Operations Task Force-Philippines, where she provided critical care nursing support for ill and injured Philippine and U.S. forces. Later, while serving as Division Officer of the Intensive Care Unit at Naval Medical Center Portsmouth in Virginia, CAPT Roy deployed aboard the USS *Iwo Jima* (LHD 7) as interim critical care specialty leader in support of Hurricane Katrina relief efforts. Most recently, she served as the Senior Nurse Executive at Naval Hospital Lemoore, where she was integral in the CONUS Hospital Initiative transition of the medical treatment facility from a full-service inpatient facility to an outpatient ambulatory surgical center and primary care facility.

CAPT Roy holds a BS in nursing from Boston College in addition to her MS from the University of California, San Francisco.

A huge welcome to all! ★

Be sure to register for the 2016 TSNRP Research and Evidence-Based Practice Dissemination Course! Registration is open now. Visit the TSNRP website for the registration link and additional details.

COL Michael Schlicher Appointed Consultant to the Army Surgeon General for Nursing Research

COL Michael Schlicher

In March, LTG Nadja Y. West, MC, USA, appointed COL Michael L. Schlicher, AN, USA, as the military consultant to the Army Surgeon General for nursing research. Currently TSNRP's Executive Director and a key member of the National Institute of Nursing Research's National Advisory Council for Nursing Research, COL Schlicher will be moving to a new leadership position at the Walter Reed National Military Medical Center. COL Schlicher has held several key administrative and clinical leadership positions throughout his career, having previously served as the Chief of Nursing Research for the Pacific Regional Medical Command in Honolulu, Hawaii, and for the Southern Regional Medical Command in San Antonio, Texas. He has also held an adjutant faculty and instructor appointment at the Army Trauma Training Center in Miami, Florida, and was a Senior Clinical Instructor for the critical care and emergency nurse specialty courses at the U.S. Army Medical Department Center and School.

COL Schlicher has been a primary and associate investigator on numerous funded randomized controlled interventional studies using both human and animal models. His research interests include using aspects of nanotechnology to develop new nursing therapeutics for wound healing, pain control, and prevention of infectious diseases. COL Schlicher holds a PhD from the University of Washington as well as four other degrees.

TSNRP congratulates COL Schlicher on his new appointment! ★

How to Determine Your Survey Sample Size

How many survey participants do I need for my study? This simple question is a never-ending quandary for researchers. A larger sample can yield more accurate results, but excessive responses can be pricey. To have confidence that your survey results are representative of your chosen demographic, you must have a large number of randomly selected participants in each group you plan to survey.

Consequential research requires an understanding of the statistics that drive sample size decisions. A simple equation will help you sample confidently. However, before you can calculate a sample size, you need to determine a few things about the target population and the sample you need:

- **Population size**—How many people, in total, fit your demographic? For instance, if you want to know about active duty mothers living in the U.S., your population size would be the total number of active duty mothers living in the U.S. Don't worry if you are unsure about this number. It is common for the population to be unknown or approximated.
- **Margin of error** (confidence interval)—No sample will be perfect, so you need to decide how much error to allow. The confidence interval determines how much higher or lower than the population mean you are willing to let your sample mean fall. If you've ever seen a political poll on the news, you've seen a confidence interval. It will look something like this: "The poll shows that 68% of voters said yes to Proposition Z, with a margin of error of ± 5%."
- **Confidence level**—How confident do you want to be that the actual mean falls within your confidence interval? The most common confidence levels are 90% confident, 95% confident, and 99% confident.
- **Standard deviation**—How much variance do you expect in your responses? Since you haven't actually administered your survey yet, the safe decision is to use 0.5—this is the most forgiving number and ensures that your sample will be large enough.

Now that you have these values defined, you can calculate your needed sample size.

Your confidence level corresponds to a z score. This is a constant value needed to determine your sample size. Here are the z scores for the most common confidence levels:

- 90%: z score = 1.645
- 95%: z score = 1.96
- 99%: z score = 2.576

If you choose a different confidence level, you will need to use a z score table to find your score.

Next, plug your z score, standard deviation (StdDev), and margin of error (confidence interval) into the following equation:

Necessary sample size = (z score)^2 × StdDev × (1 – StdDev) / (margin of error)^2

Here is how the math would work if you chose a 95% confidence level, a standard deviation of 0.5, and a margin of error (confidence interval) of ± 5%:

$$(1.96^2 \times .5(.5)) / .05^2$$

$$(3.8416 \times .25) / .0025$$

$$.9604 / .0025$$

$$= 384.16$$

With this simple calculation, you've determined that your study needs approximately 385 respondents. ★

Newly Published Final Reports

Congratulations to the following military nurse researchers for completing the Final Report process. Their Final Reports were assigned NTIS accession numbers and entered into the DTIC, NTIS, and CINAHL databases.

- COL Laura Feider, AN, USA, *Implementing Evidenced Based Oral Care for Critically Ill Patients,* TSNRP study N09-009, NTIS accession # PB2016-102636, DTIC accession # pending.
- MAJ (ret) Mary McCarthy, AN, USA. *An RCT of Nurse Coaching vs. Herbal CAM for Soldier Weight Reduction,* TSNRP study N12-007, NTIS accession # PB2016-101387, DTIC accession # pending.
- Lt Col Candy Wilson, USAF, NC. *Military Medics' Insight into Providing Women's Health Service,* TSNRP study N10-C05, NTIS accession # PB2016-101395, DTIC accession # pending.
- CDR Abigail Yablonsky, NC, USN, *Link Between Deployment Factors and Parenting Stress in Navy Families,* TSNRP study N13-P01, NTIS accession # pending, DTIC accession # pending.

Published Articles and Presentations by TSNRP Nurse Scientists

Published Articles

Army

McCarthy, M. S., & Martindale, R. G. (2015). Update your nutrition care practice: Delivering evidence-based nutritional therapy to critically ill patients. *Nurs Crit Care 10*(1), 18–26.

McCarthy, M. S., Warren, M., & Roberts, P. R. (2016). Recent critical care nutrition trials and the revised guidelines: Do they reconcile? *Nutr Clin Pract 31*(2), 150–154.

McClave, S. A., Taylor, B. E., Martindale, R. G., Warren, M. M., Johnson, D. R., Braunschweig, C., **McCarthy, M. S.,** Davanos, E., Rice, T. W., Cresci, G. A., Gervasio, J. M., Sacks, G. S., Roberts, P. R., Compher, C.; Society of Critical Care Medicine; American Society for Parenteral and Enteral Nutrition. (2016). Guidelines for the provision and assessment of nutrition support therapy in the adult critically ill patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.). *JPEN J Parenter Enteral Nutr 40*(2), 159–211.

Moore, A. D., Hamilton, J. B., Krusel, J. L., Moore, L. G., & Pierre-Louis, B. J. (2016). Patients provide recommendations for improving patient satisfaction. *Mil Med 181*(4), 356–363.

Swiger, P. A., Vance, D. E., & **Patrician, P. A.** (2016). Nursing workload in the acute-care setting: A concept analysis of nursing workload. *Nurs Outlook,* Epub ahead of print.

Taylor, B. E., McClave, S. A., Martindale, R. G., Warren, M. M., Johnson, D. R., Braunschweig, C., **McCarthy, M. S.,** Davanos, E., Rice, T. W., Cresci, G. A., Gervasio, J. M., Sacks, G. S., Roberts, P. R., Compher, C.; Society of Critical Care Medicine; American Society for Parenteral and Enteral Nutrition. (2016). Guidelines for the provision and assessment of nutrition support therapy in the adult critically ill patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.). *Crit Care Med 44*(2), 390–438.

Navy

King, H. C., Moore, C., & Spence, D. L. (2015). Exploring self-reported benefits of auricular acupuncture among veterans with posttraumatic stress disorder. *J Holist Nurs,* Epub ahead of print.

King, H. C., Spence, D. L., Hickey, A. H., Sargent, P., Elesh, R., & Connelly, C. D. (2015). Auricular acupuncture for sleep disturbance in veterans with post-traumatic stress disorder: A feasibility study. *Mil Med 180*(5), 582–590.

Pierce, J. D., Shen, Q., & Thimmesch, A. (2016). The ongoing controversy: Crystalloids versus colloids. *J Infus Nurs 39*(1), 40–44.

Podium Presentations

Army

McCarthy, M. (6 March 2015). "Emerging role of vitamin D in mental, physical, and nutritional resilience." Juanita Warman Nursing Excellence Conference, Madigan Army Medical Center, Tacoma, Washington.

McCarthy, M. S. (22 February 2016). "An insider's look at the updated SCCM/A.S.P.E.N. Guidelines for the Provision and Assessment of Nutrition Support in the Critically Ill Adult." Critical Care Medicine Congress, Orlando, Florida.

McCarthy, M. S., Mount, C., Fabling, J., & Poprawski, C. (22 February 2016). "Indirect calorimetry is superior to predictive equations for ICU patients with prolonged stay." Critical Care Medicine Congress, Orlando, Florida.

Poster Presentations

Army

Hodge, N., Gowenlock, L., & **McCarthy, M. S.** (26 January 2016). "Differentiating between quality improvement, evidence-based practice, and research activities." Seattle Nursing Research and EBP Conference, Lynnwood, Washington.

Locke, M., Eccleston, S., & **McCarthy, M. S.** (26 January 2016). "Developing an ICU diary program to minimize post-intensive care unit syndrome." Seattle Nursing Research and EBP Conference, Lynnwood, Washington.

McCarthy, M. (25 January 2015). "The relationship between body composition, vitamin D levels, and bone health in a cohort of Service members." Seattle Nursing Research Consortium, Lynnwood, Washington.

McCarthy, M. (24 April 2015). "The relationship between body composition, vitamin D levels, and bone health in overweight Service members." Madigan Research Day, Tacoma, Washington.

McCarthy, M. (17–21 August 2015). "The relationship between body composition, vitamin D levels, and bone health in overweight Service members." Military Health System Research Symposium, Fort Lauderdale, Florida.

McCarthy, M. (4 October 2015). "Impact of weekly brief coaching and weight at time of enlistment on soldier weight loss." Food and Nutrition Conference and Expo, Nashville, Tennessee. ★

Kudos

Debra Esty Receives TSNRP Most Valuable Player Award

In December, senior grants manager Debra Esty was named TSNRP's Most Valuable Player at the Uniformed Services University of the Health Sciences (USU) Vice President for Research Staff Appreciation and Giving Day. Yvonne T. Maddox, PhD, Vice President for Research at USU, and COL Michael Schlicher, AN, USA, recognized Ms. Esty for her strong interpersonal abilities, resourcefulness, and perseverance—qualities that have led to the successful completion of numerous mission-critical projects at TSNRP. Most recently, Ms. Esty established an energetic working relationship with the new Defense Technical Information Center; as a result, more than 90 Final Reports were entered into this new military database. This proactive accomplishment helps to significantly reduce Service-specific silos and, more importantly, makes TSNRP research outcomes accessible military-wide. Ms. Esty is a consummate team player, and TSNRP congratulates her on this well-deserved award. ★

Awards and Honors

TSNRP congratulates the following military nurse scientists on their recent accomplishments:

- COL (ret) Laura Brosch, AN, USA, received the Major Jonathan Letterman Medical Excellence Award for her work conducting research in the field to answer important patient care questions during the conflicts in Iraq and Afghanistan. The award, given by the National Museum of Civil War Medicine, honors individuals and organizations who make outstanding contributions to improving medical processes and patient outcomes.
- COL (ret) Patricia Patrician, AN, USA, received the 2015 Research Mentor Award from the Interdisciplinary Research Group on Nursing Issues, which is an interest group of AcademyHealth, the leading professional association for health services researchers.
- CAPT (sel) Dennis Spence, NC, USN, received the 2016 Mary Hanna Memorial Journalism Award from the *Journal of PeriAnesthesia Nursing* for his article "Obstructive Sleep Apnea and the Adult Perioperative Patient."

Great work! ★

CDR Lisa Braun Appointed Military Consultant to the Navy Surgeon General

CDR Lisa Braun

CDR Lisa Braun, NC, USN, was recently appointed as the military consultant to the Navy Surgeon General for nursing research. CDR Braun is a nurse scientist in the Nursing Research Department at Navy Medical Center Portsmouth in Virginia and is also a family nurse practitioner.

CDR Braun brings extensive experience to her new position. She has served as a military government liaison on scientific review panels for TSNRP and the U.S. Army Medical Research and Materiel Command. A Fellow of the American Association of Nurse Practitioners, she has also reviewed abstracts and articles for *Military Medicine, the Journal of the American Association of Nurse Practitioners,* and the *Journal of Research Practice.* CDR Braun is a mentor and advocate for doctoral education, research, and evidence-based practice, and she has received recognition for her dedication to improving health care delivery standards, especially for military women. TSNRP congratulates CDR Braun on her new appointment.

Newly Funded Studies

TSNRP recently awarded grants to the military nurse scientists listed below. These grants will enable them to conduct research or evidence-based practice projects on their respective topics. Please join us in congratulating these new TSNRP grant recipients.

Army

LTC MeLisa Gantt, AN, USA, "Efficacy of Brain Entertainment Technology on Sleep Quality in Military Healthcare"

COL Susan Hopkinson, AN, USA, "Intervention to Decrease Perception of Horizontal Violence in Military Nursing"

LTC Ann Ketz, AN, USA, "Effect of Photobiomodulation as an Adjunct to Usual Care for Plantar Fasciitis"

LTC (ret) Joseph O'Sullivan, AN, USA, "Study of Epinephrine Resuscitation in a Swine Hypovolemic Cardiac Arrest Model"

Navy

CAPT Jacqueline Rychnovsky, NC, USN, "Circadian and Sleep Health Interventions in Nurses and Hospital Corpsmen"

Air Force

Col Penelope Gorsuch, USAF, NC, "Impact of Formal Education on Evidence-Based Practice Competence of Nurse Teams"

Lt Col Candy Wilson, USAF, NC, "Battlefield Acupuncture for the Treatment of Low Back Pain"

Air National Guard

Lt Col (ret) Denise Smart, ANG, NC, "Effects of Sleep Deficiency on National Guard Personnel Responding to Disasters" ★

LTG Patricia D. Horoho Retires

LTG Patricia D. Horoho (U.S. Army photo by SSG Steve Cortez/Released)

LTG Patricia D. Horoho, the 43rd U.S. Army Surgeon General, retired on 15 December 2015 at Joint Base Myer-Henderson Hall in Virginia. LTG Horoho devoted more than 32 years of service to the U.S. Army. TSNRP wishes her all the best in her retirement.

Army Nurse Corps Association Offers Assistance for Article Processing Charges

Attention, Army Nurse Corps Association (ANCA) nurse scientists! ANCA has established a new award to help Army nurse scientists who submit manuscripts to professional journals. The organization will provide funds to fully or partially reimburse article processing charges.

ANCA members whose manuscripts are currently in press or have been published since October 2015 are eligible to apply for funding. Applicants should submit the following materials to ANCA:

- Brief cover letter with article citation, ANCA member number, and reimbursement requested.
  Note: If you are not an ANCA member, you may submit an application for membership with the cover letter. Visit www.e-anca.org for more information.
- Copy of correspondence from editor or publisher indicating acceptance of manuscript.
- Statement of processing charges from editor or publisher.
- Applicant contact information (name, mailing address, phone number, and email address).

Support will be available on a first-come, first-served basis until the allocation is expended each year. The funding available in 2016 will support up to five applicants at a maximum of $1,000 each. For more information, contact ANCA at ancadocs@e-anca.org or 888-742-9910.

Events and Deadlines

Calendar

June 2016

Evidence-Based Practice (EBP) Course
9–10 June 2016
Joint Base San Antonio-Lackland
San Antonio, Texas

July 2016

Research and EBP Grant Camp
11–15 July 2016
Naval Air Station North Island
San Diego, California

August 2016

Research and EBP Dissemination Course
22–25 August 2016
La Quinta Inn and Suites,
San Antonio Riverwalk
San Antonio, Texas

Know Your Research Specialty Leaders

Your research specialty leaders are a valuable resource for current research requirements and initiatives throughout the military, the U.S. Department of Defense, and the Federal Nursing Services.

U.S. Army

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U.S. Navy

CDR Lisa A. Braun, NC, USN, APRN, FNP-BC, JD, MBA, PhD, FAANP
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Phase II Site Director and Clinical Assistant Professor, DNP Program, Naval Medical Center Portsmouth
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U.S. Air Force

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