Dear colleagues,

I am delighted to serve as the eighth director of the TriService Nursing Research Program (TSNRP). It is amazing to look back 9 years to when I first attended Grant Camp and had a passing thought that it would be fantastic to be the Executive Director of TSNRP someday. Amazingly enough, the timing worked out perfectly, and I am thrilled to be able to fill this role. It really is my dream job!

In the past few months, I have had the opportunity to attend an Evidence-Based Practice (EBP) Course in San Antonio (hosted by the Air Force 59th Medical Wing), visit with the staff at the San Antonio Military Medical Center's Center for Nursing Science and Clinical Inquiry, attend Grant Camp in San Diego (this time as a faculty member), and even host the third annual TSNRP Research and EBP Dissemination Course. I am always amazed to see such a dynamic community of nurse scholars who are passionate about strengthening military nursing. It is my goal to visit key military treatment facilities over the next few years to help foster a culture of inquiry throughout the Military Health System.

As many of you may have heard, there have been a few recent changes at TSNRP.

Both Natasha Hurwitz and Debra Esty served TSNRP as grants managers, and within the past few months, both were offered new opportunities for their personal and professional growth. Although we were sad to see them leave, we really are happy for this new chapter in their lives—and very grateful for their service to the science of military nursing. Jaya Pothen and Brandie Peterson were recently selected as the new TSNRP grants managers, and I am excited by the energy and drive they bring to the role.

Another major change is the transition to submitting new grant proposals through Grants.gov. Grants.gov is a government-wide Web site where all grant funding opportunities are posted, and we have been instructed to post our Call for Proposals to that site for this cycle of funding. It has been a logistical challenge to completely reformat the funding announcement and identify the appropriate forms from those that are available on Grants.gov. Although the types of awards and content of the applications have not changed, I know the new submission method will be a little confusing, and perhaps a little frustrating, at first. We definitely appreciate your patience during this transition, and please let us know if you have any problems submitting proposals. We will post answers to frequently asked questions on the TSNRP Web site (www.usuhs.edu/tsnrp), but we encourage you to submit your proposals well before the last minute, just in case you encounter a problem.

While I have several ideas of ways that TSNRP can expand to further support research and EBP within military nursing, I want to make sure you know that I am dedicated to maintaining the scientific excellence of TSNRP and the research and EBP grant process that has served as the primary focus of the program. I have come to appreciate that TSNRP is in a strong position primarily because of the...
contributions from prior TSNRP Executive Directors, especially my predecessor, COL Michael Schlicher, AN, USA. His tireless dedication to strengthening the fiscal management of TSNRP and his vision to combine the Karen A. Rieder Poster Session and the Phyllis J. Verhonick Short Course into the TSNRP Research and EBP Dissemination Course has ensured that the program remains relevant to today's military nursing practice. I am honored to carry on that legacy.

Lt Col Jennifer Hatzfeld, PhD, RN, APHN-BC, USAF, NC

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

Army
• Jennifer Coyner to COL (O-6)
• Geoff Duncklee to LTC (O-5)

Navy
• Lisa Braun selected for CAPT (O-6)
• Dennis Spence to CAPT (O-6)

Air Force
• Laurie Migliore selected for Lt Col (O-5)
• Dawnkimberly Hopkins selected for Lt Col (O-5)

Air National Guard
• Sean T. Collins to Brig Gen (O-7)

Retirements
Please join us in wishing the very best to Col Karen Weis, USAF, NC, and LTC Terri Yost, AN, USA, who have joined the ranks of the recently retired!

New Assignments
The following military nurses recently made permanent change of station moves. We wish them the best in their new assignments.

• CDR Virginia Blackman, NC, USN, is now the Senior Navy Military Advisor at the Uniformed Services University for the Health Sciences.
• CDR William Danchanko, NC, USN, became Chief of the Center for Nursing Science & Clinical Inquiry at Walter Reed National Military Medical Center.
• MAJ(P) Geoff Duncklee, AN, USA, is now a Phase II CRNA Instructor at Fort Gordon.
En Route Care Nursing: Uncovering the “Faces of War”

Lt Col Jennifer Hatzfeld, USAF, NC, COL Angela Simmons, AN, USA, LTC (ret) Felecia Rivers, AN, USA, COL (ret) Linda Yoder, AN, USA, and Sandi Gordon

“. . . if I don’t help other nurses by doing something like this, answering whatever questions you have to help the studies to maybe make something better, then . . . I can’t impact anything, so that’s why I said I would do it, because there’s people out there—I know, I know now that I’m not the only one, but it was a long ride to figure that one out.”

—Interview participant

En route care nursing is an incredibly rewarding—and sometimes glamorous—job. It’s the type of military nursing role that is often highlighted by recruiters and pictured on the front of magazines. But, as we learned through the course of this research study, it is a dynamic and challenging job that often requires caring for unstable and critically injured combat casualties.

We know from previous literature that high operation tempo, long hours of flight missions, unrelenting exposure to massive physical injury, and the stress of serving in a combat environment can cause lasting behavioral health symptoms that persist well after the post-deployment reintegration process. However, limited research has focused on the impact of the challenging and demanding roles of en route care nurses. We conducted this research study to more fully understand the post-deployment behavioral health symptoms of military en route care nurses and their process of seeking behavioral health services.

The study used a mixed-methods research design, including an online survey with an optional follow-on interview, to obtain richer, in-depth information about specific experiences. Participants completed the following valid and reliable surveys: demographic and personal military characteristics, the Post-Deployment Readjustment Inventory (PDRI), the Posttraumatic Growth Inventory (PTGI), the Generalized Anxiety Disorder-7 (GAD-7), the Center for Epidemiological Studies Depression Scale (CES-D), and the Post-Traumatic Stress Disorder Checklist–Military (PCL-M).

We received completed surveys from 119 nurses (37 Army, 65 Air Force, and 17 Navy) and completed 22 in-depth interviews (11 Army, 9 Air Force, and 2 Navy), achieving saturation. A majority of participants (n = 63, 53%) reported feeling the need to talk with someone in behavioral health after returning from deployment, yet only 33% (n = 39) reported actually seeking behavioral health support. When we looked at the correlations between the survey scores, the largest statistically significant correlation was between the GAD-7, which measures degree of anxiety symptoms, and the PCL-M, which measures post-traumatic stress disorder (PTSD) symptoms (r = .866, p < .001), followed by the PDRI and the PCL-M (r = .85, p < .001).

When we considered the impact of the number of deployments on the total behavioral health scores from the PCL-M, CES-D, PTGI, GAD-7, and PDRI, the results were small and nonsignificant (ranging from r = -.002, p = .98, to r = .07, p = .46).

Nurses who chose to participate in the face-to-face interviews were asked, “When you think about the en route care you provided while in Iraq and/or Afghanistan, what stands out to you on how it may have impacted your own behavioral health?” This question generated an outpouring of honest and raw emotions from each participant, some of whom had been back from deployment as long as 10 years. A thematic structure derived from the contents of the qualitative interviews included seven main themes: (1) Terror of War—You Can’t Unsee That, (2) You Have to Have a Team, (3) This is My Purpose, I Made a Difference, (4) Leadership Matters, (5) I’m Not Prepared—Indecision Kills, (6) Here is My Suffering, and (7) I Don’t Fit In.
Figure 1 reflects these themes in a picture of a tree; all of the participants, at one point or another, mentioned the flights at night and the stars against a dark sky. Participants who flew in helicopters during en route care service mentioned providing care with only a blue light to help them see. Other nurses mentioned working in a blackout situation or with minimal lighting. Like these nurses, the tree in the picture appears to be bending and then turning back in a different direction, indicating the need to be flexible and to adapt to meet the next challenge.

The qualitative findings validated the quantitative data. Overall, the findings indicated that military en route care nurses are psychologically affected by their wartime en route care experiences. In the PDRI, several inventory items related to thoughts of deployment and PTSD symptoms. These items and the percentage of positive responses from participants included the following: having frequent thoughts about deployment (67%); everything seems trivial since deployment (69%); feeling tense, jittery, or anxious (50%); having difficulty concentrating (64%); and being easily irritated with others (81%). These findings were similar to the PCL-M data collected on comparable items:

- avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it (42%); being “super-alert” or watchful or on guard (43%); feeling irritable or having angry outbursts (58%).
- Many participants voiced their responses in the interviews:
  - “...I guess I kind of tried to forget... You try to forget some of the stuff you see, because it’s not pleasant and, and I think that maybe at the beginning that’s why I was having difficulty, you know, like with the nightmares.”
  - “... when I came back, it wasn’t like places weren’t safe. It was like there were just too many things all in the same space. All too crowded... too much stimulation all at that same time...”
  - “I became very intolerant of other people’s minor, petty things that to them were probably significant, because they are these daily irritations that going on and chinking away at their day and to me it’s like, ‘It wasn’t a bullet.’ You know? ‘It wasn’t an IED.’”

The team concept was extremely important to this group of nurses. They depended on one another to share knowledge, experiences, and tips to increase their coping skills. However, the responses to PTGI items that related to teams—“I more clearly see that I can count on people in times of trouble” (48%) and “I have a greater sense of closeness with others” (39%)—were surprisingly low when compared with the narratives.

- “...It was nice working with the team that I was with, because all of the flight medics, all of the crew chiefs, all the pilots, you all kind of became very cohesive, and I still keep in touch with a lot of them today.”
- “The best part about it for me was being part of a team... I tried to immerse myself in everything the team did... if they were out sweeping the floor in the hangar, I would go grab a broom and help, and my cohort was the same way with that.”

Without a team, these nurses lacked the support they needed, which affected their deployment and reintegration experiences. Some of them had difficulties fitting into their team, as one nurse recalled.

- “Oh. Well, we don’t need you.’ ‘I’m sorry but I’m here.’ So it was just one of those where, again, it was like they just felt like we were stepping on their turf or their territory and just were kind of ultra protective of it. I don’t know. But that was the cause of the greatest stress on me during the deployment.”

Leadership support was imperative for the cohesiveness and morale of the team. Unfortunately, that was not always available.

- “You know, our senior leaders get it but interesting is the challenges we are seeing with our first-time leaders, our commanders, our chief nurses, our administrators—the first time...”
they’re in those roles—they’re trying to figure out their own role, let alone reaching out and thinking about others.”

“... We didn’t get along. We didn’t trust our leaders, and so it was just this constant tension.”

“So, most of my deployments I’ve had really poor commanders, and those deployments have been hell.”

Similarly, the nurses noted at times that leadership was lacking both before deployment and upon return. A total of 78% of the nurses reported in the PDRI that they felt pressured to work soon after their return.

In addition to the specific study findings, our research team learned other important information along the way. We gained a sincere appreciation for the individual stories and suffering shared by the interview participants. Although this study wasn’t designed to hear everyone’s story, each person had experiences that were difficult to share. In some cases, study team members needed to bracket their own emotions as they moved through the numerous pages of transcripts. We took many breaks between the readings to regroup and protect our own emotional well-being, because several of the team members had been previously deployed.

We also wondered where these en route care nurses would be able to share their memories if not through a formal behavioral health provider. Perhaps that is one reason that the data collection phase for this study was complete in less than 2 months—and many of the nurses also expressed an interest in participating to help improve conditions in the future. One interview participant specifically mentioned being motivated to take part in the study to make things better for other nurses. Each time we have presented the findings at conferences, and after checking back with the study participants, we have received confirmation that we are adequately and appropriately representing their experiences.

We also garnered a new understanding of the many facets of en route care—from its history to the current state of providing care within and outside the combat zones.

In addition, we learned an important lesson about conflict. Our research team was deliberately multi-Service, which introduced a few additional challenges with the interpretation of data, particularly with the Service differences in language and culture. Through the research process, we discovered that these differences were less about the interpretation of the data and more about the words used to communicate the findings. It was an iterative process to ensure the terminology adequately reflected all of the Service experiences. In the end, the experiences were very similar, regardless of the Service branch.

The most important takeaway lesson from this study is the necessity for leadership to be engaged and sensitive to the specific needs of en route care nurses. Leaders set the tone of both the deployment and the reintegration. The nurses simply need to know that they are valued; to be asked whether they need assistance reintegrating; and to be encouraged to get the care they need so that they can function in their new normal roles as military nurses, spouses, mothers and fathers, or sons and daughters. They deserve it, and so do those under their care.
Increasing HPV Vaccine Uptake and HPV Vaccine Knowledge among U.S. Military Personnel Through Research

CDR Jennifer J. Buechel, NC, USN

The human papillomavirus (HPV) is the most common sexually transmitted infection (STI) in the United States, with 79 million people currently infected and an estimated 6.2 million new cases each year. An anticipated 50% of men and women will contract HPV in their lifetime. HPV can be transmitted via anal, oral, or vaginal intercourse; during sexual play; or during vaginal birth. As the leading cause of more than 360,000 new cases of genital warts (GWs) annually, HPV has become a national and global disease burden. HPV accounts for 5% of cancers, contributing to 90% of anal cancers; 70% of cervical cancers; 40% of vulvar, vaginal, or penile cancers; 12% of oral and pharyngeal cancers; and 30% of laryngeal cancers. Low-risk HPV types (6 and 11) are the major etiology of GWs; in contrast, the high-risk HPV types (16 and 18) are the major etiology for HPV-related cancers.

Vaccination against HPV could prevent approximately 21,000 HPV-related cancers. In December 2014, the Food and Drug Administration approved a new HPV vaccine, HPV9 (or Gardasil 9), that has been shown to protect against nine forms of HPV. The American College of Immunization Practices (ACIP) recommends routine vaccination of all males and females 11 or 12 years of age with three doses of HPV vaccine. The ACIP also recommends vaccination for females 13 through 26 years of age and males 13 through 21 years of age who have not completed the three-dose series.

As a ship's nurse and adult nurse practitioner aboard the USS Harry S. Truman, I have seen firsthand the devastating outcomes when military personnel receive an incurable STI diagnosis while on deployment.

These personnel can suffer physical and emotional effects related to HPV. The virus can have a major impact on the U.S. military by decreasing manpower, readiness, and troop morale. Therefore, increased HPV surveillance and research among military personnel needs to be a high priority.

With my knowledge and experience of treating sexual health problems, I began to explore meaningful research topics that would help military medicine prevent and treat STIs among active duty personnel. In 2009, the HPV vaccine was first approved for use in males. HPV vaccine research was the hot emerging topic. With the concerning HPV prevalence rates and women making up only approximately 15% of the U.S. Armed Forces, there was a strong need to expand HPV vaccine research among military men. A review of HPV military literature revealed few studies on HPV and HPV vaccine uptake in females, and no studies had examined HPV vaccine uptake among males after the approval of the vaccine. In 2012, I discovered my dissertation topic and started my PhD journey at the University of San Diego. I had the unique opportunity to begin my dissertation work under the supervision of researchers in the fields of vaccine, women's health, and survey research.

My 2015 TSNRP-funded dissertation, “HPV Knowledge and HPV Vaccine Uptake among U.S. Navy Personnel 18 to 26 Years Old,” used a descriptive, cross-sectional, correlational research design to describe the HPV knowledge and HPV vaccine uptake among a representative subset of military personnel who were candidates for the HPV vaccine. The study was designed to address the following specific aims: (1) describe the participants’ general HPV knowledge, HPV testing knowledge, HPV vaccination knowledge, sociodemographics, and HPV vaccine uptake; (2) describe relationships between HPV knowledge (general HPV knowledge, HPV testing knowledge, and HPV vaccination knowledge), sociodemographic factors, and HPV vaccine uptake; and (3) identify select variables that determine the odds of HPV vaccine uptake among U.S. Navy (USN) personnel 18 to 26 years of age.

I found the results to be interesting in many ways. For example, a larger percentage of women (n = 40, 67.8%) received the HPV vaccine compared to men (n = 56, 32.2%). The percentage of military males in my study who reported receiving at least one dose of the HPV vaccine (32.2%) was more than five times the percentage of males surveyed in the 2013 National Health Interview Survey (NHIS) who reported receiving at least one dose of the
vaccine (5.9%). The percentage of military females who reported at least one dose of the vaccine (67.8%) was almost twice the percentage of the female adults who reported receipt of the HPV vaccine in the NHIS (36.9%). Although my study suggests high HPV vaccine uptake among the participants, only a small percentage of the participants (n = 38, 16.3%) completed the three-dose series.

Participants who completed a 16-item HPV knowledge scale, a 6-item HPV testing knowledge scale, and a 13-item HPV knowledge scale had median scores of 10 (range = 16), 2 (range = 6), and 6 (range = 12), respectively. Most of the participants rated their overall HPV knowledge as poor or fair. Participants appeared to be more familiar with the “common” HPV items (e.g., that it is transmitted by sexual intercourse) rather than “critical” items (i.e., prevalence, consequences, and vaccine guidelines). This finding suggests that clinicians need to explain critical HPV information more thoroughly so that patients can better understand it.

USN personnel had higher HPV knowledge (general HPV, HPV testing, and HPV vaccine) if they had initiated the HPV vaccine; had obtained more than one dose; had heard of HPV, HPV testing, and the HPV vaccine; and had higher HPV knowledge self-ratings. I used a logistic regression model to determine the odds of HPV vaccine uptake. The logistic regression model contained nine variables. Factors that significantly increased the odds of HPV vaccine uptake included participants’ statement that they strongly agree that their chain of command recommends the HPV vaccine (OR = 14.34); female gender (OR = 4.52); having learned about the vaccine from providers (reference), media (OR = 0.17), or the Internet (OR = 0.10); and HPV vaccine knowledge scores (OR = 1.46) (p < 0.05).

The study adds to a growing body of military research surrounding sexual health and preventive health care. The results may allow health care professionals to better understand the content needed to develop effective HPV immunization programs and evidence-based practices (EBPs). The study highlighted significant gaps in HPV knowledge that preventive health programs can use to develop information campaigns. Although the findings are promising, the study had some limitations. Further research is needed to assess the generalizability of these findings to other USN populations (e.g., submariners) and other Service branches (e.g., the Marine Corps, the Army). Since female gender is a strong predictor of HPV vaccine uptake among USN personnel, I recommend research to further evaluate HPV vaccine knowledge and barriers among men in the U.S. military. In addition, I recommend a longitudinal research approach to confirm the causality of associations between the factors studied and HPV vaccination behavior.

Conducting this study was one of the most rewarding experiences of my military career. I was surprised by the sheer number of survey responses and comments that I received during the recruitment phase. Participants’ responses ranged from “What is HPV? Is that like Ebola or something?” to “Yes, my mom is a nurse; she made me get that shot in high school.” I was shocked to receive phone calls from members deployed in the Persian Gulf or standing duty on a vessel. For example, I received a phone call one Saturday morning from a young female Sailor who was out to sea. She stated that she was having problems connecting to the electronic survey and wanted to find another way to complete the survey. She said, “I want to help because I had HPV, and I do not want other girls to have what I had—it was horrible.” These comments gave me the drive to continue the study and continue to explore what young military personnel knew about HPV topics.

The study is currently in the dissemination phase. My goal is to present the study findings in as many avenues as possible to help increase HPV knowledge and HPV vaccine uptake among our armed forces. I have had the privilege of presenting my findings at national and international conferences, including the 19th Annual Conference on Vaccine Research and the Sigma Theta Tau International Honor Society of Nursing’s 26th International Nursing Research Conference. I am currently writing manuscripts for peer-reviewed journals and plan to disseminate my findings to preventive medicine leaders in Navy Medicine West. I would like to help clinicians and policymakers translate the study’s results into EBP. I also plan to perform a secondary data analysis of my findings, including examining HPV knowledge differences between the genders and examining my study’s exploratory aims. I am excited to continue on this program of research.

I am extremely grateful to TSNRP for its outstanding research development courses and grant funding, which supported this research. I am so impressed with the unconditional support, mentorship, and dedication that the TSNRP staff provides to
novice military researchers. I could not have completed my dissertation work without the support of an amazing team of mentors and colleagues. My deepest appreciation and gratitude goes to Ann M. Mayo, DNSc, RN, FAAN, for "taking the helm" as my dissertation chair. I would also like to recognize my committee members, Ruth A. Bush, PhD, MPH, and Cynthia D. Connelly, PhD, RN, FAAN; my TSNRP Navy nurse research mentor, CAPT (sel) Heather King; and my fellow Navy nurse researchers for their support of my study. Furthermore, I am grateful to the military participants who made this study possible. I hope this program of research can provide valuable information to improve sexual health and immunization programs for our nation's Soldiers, Sailors, Marines, and Airmen.

Lifestyle Interventions: What Works Best with the Active Duty Population?

Col Nicole H. Armitage, USAF, NC

During the past 30 years as a nurse, I have continually searched for ways to improve the health and well-being of patients under my care. Not surprisingly, I have come to realize that I don’t have all the answers to my patients’ questions or concerns. Nor can I do for them all of the things that will help them to be as healthy and happy as possible. However, I have learned that what I can do is listen to their concerns and try to facilitate their ability to optimize their own health and sense of well-being. This realization led me to my research focus on health and fitness in the active duty population.

As a women’s health nurse practitioner, I have seen numerous active duty patients who express frustration at being overweight and out of shape. Consequently, I have spent many hours telling my patients that simply eating a healthy diet and exercising will help them lose weight and pass their fitness assessment with no trouble at all. Although I “checked the box” by giving them this advice, did my guidance really help? Anecdotal evidence suggests it made little difference, and this can have long-term repercussions.

As a health care professional within the Air Force Medical System, I am charged with providing care to active duty personnel not only to facilitate their ability to accomplish their present mission but also to prevent the development of chronic disease. When military personnel retire from active duty service, they are eligible to receive continuing care within the Military Health System (MHS). Preventing chronic disease in active duty members is necessary not only to keep them functioning in their active duty missions but also to decrease the overall disease burden as they move into retirement. Therefore, all MHS clinicians need to understand which interventions are effective in helping active duty members maintain optimal weight and fitness.

I first became really interested in active duty Airmen’s ability to be physically fit and pass the U.S. Air Force (USAF) fitness assessment while I was caring for postpartum clinic patients. Hearing postpartum patients’ stories about their struggles with training for the fitness assessment led me to study their experiences for my dissertation research.

Preventing chronic disease in active duty members is necessary not only to keep them functioning in their active duty missions but also to decrease the overall disease burden as they move into retirement.

From that TSNRP-supported study, I discovered that many active duty women struggled as they tried to get back into shape while also taking care of a new baby. Most of the study participants stated that they did not know how to physically train and eat to lose weight and become fit enough to do well on their fitness assessments at 6 months postpartum. Some participants stated that they felt so much pressure to be ready for their 6-month postpartum assessment that they engaged in unhealthy behaviors as part of their preparation. The results
of that study informed the USAF policy change from fitness testing at 6 months postpartum to testing at 12 months postpartum. That study also led me to my current interest in lifestyle interventions that may help all Airmen maintain their optimal weight and fitness.

As in the general U.S. population, excessive weight gain and obesity have become problematic for many active duty personnel. As overweight and obesity rates increase, so do comorbid conditions, such as type 2 diabetes, resulting in diminished readiness and enormous financial costs to the MHS. According to Air Force Instruction 36-2905, physical fitness and nutrition education should be incorporated into unit physical training programs. Various lifestyle intervention programs are available at different USAF installations. Airmen can choose which available program will be most effective in helping them improve their health and fitness. The question is, how effective are these programs?

Fellow investigators Kaye Kramer, DrPH, MPH, RN, CCRC, and Mary Nelson, PhD, RN, and I are now midway through another TSNRP-funded study to compare the effectiveness of three different lifestyle interventions that have been available to Airmen at some installations. The three interventions being studied are the Fitness Improvement Program (FIP), the Better Body Better Life (BBBL) program, and the Group Lifestyle Balance (GLB) program. All of these programs incorporate exercise and nutrition with a focus on engaging in behavioral change.

The FIP is an online program available to all Airmen through the Advanced Distributed Learning Service. This computer-based training program takes approximately 90 minutes to complete.

The BBBL program is available at some installations and involves five separate modules, each of which is presented in a 2-hour class. The modules are designed to be presented weekly for 5 weeks and can be taken in any order.

The GLB program is designed as a series of in-person classes led by a “life coach” over the course of 12 months. The first 12 classes are held for 1 hour once a week for 12 weeks. Classes are then held twice a month for 2 months and then once a month for the remainder of the year. The initial 12-week period is considered the core of the program.

Surprisingly, little is known about the effectiveness of these interventions among the active duty population. Although research has shown the GLB program to be effective in weight loss and diabetes prevention in some civilian populations, there are very few, if any, published studies on the use of the FIP and the BBBL program in any population. Therefore, the purpose of this current study is to examine the effectiveness of the GLB program compared with the FIP and the BBBL program on the following health indicators: weight, abdominal circumference, physical activity engagement, lipids and HbA1c levels, and self-perception of well-being.

In this study, we randomize participants to receive one of the three interventions. For all participants, we measure weight, abdominal circumference, minutes of participation in physical activity, lipid and HbA1c levels, and scores on the 36-Item Short Form Health Survey (SF-36, used to assess well-being) before the intervention and again 6 months later. Although 51 people have been enrolled in the study so far, we don’t yet have enough data to have meaningful results. However, we anticipate completing data collection by late summer 2017. Our hope is that we can determine which intervention is most effective among the active duty population and that clinicians and leadership can use this information to inform practice and policy.

I have enjoyed doing this type of research and very much appreciate the support of TSNRP. I remain committed to improving the care of our patients through research. It is important to continue to develop the evidence that can be applied to practice and policy in support of optimizing the health and well-being of our active duty force. I look forward to completing this study and sharing the results in the future. 

Col Nicole H. Armitage
Patrician, Swiger Receive Prestigious TriService Nursing Research Program Grants

Jimmy Creed

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University of Alabama at Birmingham (UAB) School of Nursing Donna Brown Banton Endowed Professor Pat Patrician, PhD, RN, FAAN, and PhD student Pauline Swiger, MSN, RN, CMSRN, CNL, have each received grants from the prestigious TriService Nursing Research Program (TSNRP) to further their research into various aspects of military nursing.

Patrician, a retired U.S. Army colonel and 26-year veteran of the U.S. Army Nurse Corps, received a 2-year, $400,000 award for her study “Impact of Nursing on Readmissions, Failure to Rescue & Mortality in DoD Hospitals.”

Swiger, a U.S. Army lieutenant colonel, received a 2-year, $14,193 award for her study “What Practice Environment Features Are Related to Particular Patient Outcomes?”

For Swiger, receiving her first TSNRP grant at the same time her mentor, Patrician, was funded makes it extra special.

“To have my name up there with those here at the UAB School of Nursing who have been funded through the TSNRP before, like Dr. Patrician and Dr. Lori Loan, is truly amazing,” Swiger said. “I am excited and very honored.”

Swiger’s study is a secondary analysis of 4 years of data collected through surveys (called the Practice Environment Scale of the Nursing Work Index, or PES-NWI) from 45 units at 10 military hospitals on the practice environments for nurses at those hospitals. Within her study Swiger will examine five factors relating to the nursing practice environment and five patient outcomes to determine if the quality of the nursing practice environment in military hospitals is associated with patient outcomes in the same way it is in civilian hospitals.

The five factors relating to the practice environments are nurse participation in hospital affairs; nursing foundations for quality care; nurse manager ability, leadership, and support of nurses; staffing and resource adequacy; and collegial nurse-physician relationships. The five patient outcomes are medication administration with and without harm; falls with and without injury; and patient experience.

“Multiple studies have shown that hospitals with good nursing practice environments, factors which help nurses practice professionally and provide high-quality care, have better patient outcomes,” Swiger said. “If a hospital rates high in that area, nurses are generally more satisfied with their work environment, so they have better overall job satisfaction, and the hospital has better retention rates.

“When you have high practice environment scores, you generally have better patient outcomes, which is the goal we are all striving for.”

The purpose of Patrician’s study is to investigate the relationships between practice environment, nurse staffing, mortality, readmission, and instances of failure to rescue (FTR)—death from the failure to recognize and appropriately respond to early signs of patient deterioration—in military hospitals and compare the findings with those from a set of civilian hospitals.

Using the PES-NWI and staffing data from all 23 U.S. Army and multiservice hospitals for the years 2011 to 2014, Patrician will evaluate whether professional nursing practice environments and nurse staffing in military hospitals are associated with the 30-day rates for mortality, readmissions and FTR.

She will then compare the professional nursing practice environment, nurse staffing, and patient outcomes in military hospitals with those of civilian Magnet hospitals—those that have been recognized by the American Nurses Credentialing Center after demonstrating excellence in patient care in more than 35 focus areas—and non-Magnet hospitals.

“This is the first effort in the military to explore the impact of nursing on mortality, readmissions, and FTR,” Patrician said. “There are a lot of problems nurses can help avert if they have enough staffing, if their practice allows them [to] recognize and act on pending patient problems,
and if the professionalism to do so is encouraged.

“Those are the mechanisms by which we believe nurses influence mortality, readmissions, and failure to rescue, and that is what my study will be looking at.”

Like Swiger, Patrician was pleased that TSNRP funded their projects at the same time.

“To get a TriService grant you must go through a peer-review process that is very stringent,” Patrician said. “However, when you go through the process and receive a grant, it means that someone external to you or your program has reviewed your work and deemed it good enough to receive important funding that many others are trying to get. That is validation of Pauline as a researcher and me as a mentor, and that is thrilling for both of us.”

Research Interest Groups Meet at the Dissemination Course and Recharge for Continued Collaboration

Megan Foradori, RN, MSN

TSNRP’s four Research Interest Groups (RIGs)—Anesthesia, Biobehavioral Health, En Route Care, and Military Women’s Health—pride themselves on doing great work year round with members all over the globe. But the opportunity for the RIGs to meet in person is always a highlight of the research year, and this August was no exception. From Monday, 22 August, through Thursday, 25 August, all four established RIG teams, in addition to a group interested in military families that hopes to become a RIG, used the TSNRP Research and Evidence-Based Practice (EBP) Dissemination Course as an opportunity to share their work, generate new ideas for the future, and rekindle their shared interests in their respective topical areas.

As a new addition to the course’s educational offerings, this year, TSNRP Executive Director Lt Col Jennifer Hatzfeld, USAF, NC, asked each RIG’s leadership team to put together a RIG lecture for all course attendees. From submitted abstracts, the RIG leaders chose exemplary projects that featured the work carried out by their RIG members and highlighted the RIGs’ current activities. This adjunct to the course schedule enabled participants to become familiar with each RIG’s efforts. According to many attendees, this new event was a welcome addition that allowed them to hear interesting talks about research outside of their personal focus areas but within the military nursing community.

The Anesthesia RIG (ARIG)—led by CAPT Lisa Osborne, NC, USN, and CAPT (ret) Chuck Vacchiano, NC, USN—hosted a well-attended ARIG meeting on Tuesday, thanks in part to the many future certified registered nurse anesthetists (CRNAs) from the U.S. Army Graduate Program in Anesthesia Nursing (USAGPAN) who joined the course for the day’s presentations. CAPT Osborne highlighted the ARIG’s current activities, including the creation of a pocket guide for anesthesia care in austere environments, led by retired Army CRNA Matt Welder. In addition, CAPT Osborne has been working to build connections between Defense Health Agency (DHA) workgroups and the ARIG, whose members could serve as subject matter experts for the DHA when policy questions arise.

After opening the ARIG lecture on Thursday morning, CAPT Osborne introduced presentations by members LTC Robert Long, AN, USA, and MAJ John Yauger, AN, USA. LTC Long spoke on the impact of repeated anesthetic administration during his talk, “Repeated Isoflurane Exposures Impair Long-Term Potentiation and Increase Basal GABAergic Activity in the Basolateral Amygdala.” MAJ Yauger discussed his findings, “Iron Accentuates Reactive Oxygen Species Synthesis Without Polarization Within Microglia,” which could inform the care of trauma patients requiring multiple blood transfusions.

The Biobehavioral Health RIG (BHRIG)—led by Col (ret) Penny Pierce, USAF, NC, and COL (ret) Linda Yoder, AN, USA—welcomed...
BHRIG members to their team meeting on Monday afternoon. COL (ret) Yoder announced that she would be stepping down from her role on the BHRIG as she begins her term as president of the Academy of Medical-Surgical Nurses and that the team is looking for someone to fill her leadership role. Because of the varied topical interests of BHRIG members, the team continues to focus on supporting researchers with methods education and mentoring. The leaders encouraged members to join the National Institutes of Health (NIH) Listserv (https://list.nih.gov) to receive education updates and to take advantage of NIH’s fantastic offerings. The BHRIG team meeting included great conversations about the importance of sharing data and resources and about how the BHRIG might support these efforts.

Col (ret) Pierce opened the BHRIG lecture on Monday afternoon with an overview of the group’s goals for the coming year and introduced speakers COL Ann Nayback-Beebe, AN, USA, and COL Angela Simmons, AN, USA. In her presentation, “Effect of Adjunctive Pulsed Electromagnetic Frequency Therapy on Self-Reported Physical and Mental Health-Related Quality of Life,” COL Nayback-Beebe discussed treatment for chronic low back pain in Service members. COL Simmons presented findings from her team’s exploratory, mixed methods study, “En Route Care Nurses’ Reintegration and Behavioral Health Concerns.”

The **En Route Care RIG** (ERCRIG)—under the leadership of Col Susan Dukes, USAF, NC, and Col (ret) Elizabeth Bridges, USAF, NC—hosted the team’s meeting on Monday afternoon. In addition to revising its very popular en route care (ERC) battlefield pocket guide, the RIG is working on an ERC lessons-learned journal issue. Multiple journals have expressed interest in publishing a collection of articles written by ERCRIG members and their teams on ERC training; patient care; and general en route care nursing, including nurses’ self-care. The proposed issue also will feature a collaborative overview on en route care provided by the Army, Navy, and Air Force.

Col Dukes opened the ERCRIG lecture on Thursday morning with a brief history of en route care, complete with pictures from the National Museum of Health and Medicine, located in Silver Spring, Maryland. Col (ret) Bridges and CDR Virginia Blackman, NC, USN, then lectured on their respective projects in the topic area. CDR Blackman presented her abstract-award-winning talk on “Pre-transfer Patient Assessment: Comparing Navy ERC Providers’ Performance” in simulation, and Col (ret) Bridges shared information from her extensive work on “Joint En Route Care Research Gap Analysis.”

The **Military Women’s Health RIG** (MWHRIG)—led by the tri-Service team of Lt Col Candy Wilson, USAF, NC, CAPT Jacqueline Rychnovsky, NC, USN, COL (ret) Lori Trego, AN, USA, LTC (ret) Nancy Steele, AN, USA, Maj Dawnkimberly Hopkins, USAF, NC, LTC Leilani Siaki, AN, USA, and CDR Abigail Marter Yablonsky, NC, USN—hosted its meeting on Wednesday afternoon. The meeting included a discussion about the team’s ongoing work developing a scoping literature review for women’s health papers published between 2000 and 2015. Lt Col Wilson also shared news of the well-received, MWHRIG-led Women’s Health Symposia, held the previous week at the Military Health System Research Symposium (MHSRS). It was the first breakout session in the history of the event to focus on women’s health.

The MWHRIG lecture during Wednesday’s course activities
featured presentations by newly minted PhD Maj Hopkins and CDR Lisa Braun, NC, USN. Maj Hopkins shared highlights from her dissertation work in “Fatigue Among Women With and Without Polycystic Ovary Syndrome,” and CDR Braun discussed screening communication in her presentation “How Did This Happen? Abnormal Cervical Cancer Screening Knowledge in a Navy Population.”

Course attendees who were interested in Military Family Health and Readiness gathered on Wednesday afternoon to hear talks on evaluating community resources for Service members and families, exploring trauma exposure in military spouses, and establishing a RIG focused on the military family. The RIG formation talk, given by LT Whitney Brock, NC, USN, and LCDR Allyson Whalen, NC, USN, focused on the nurses’ plan (with co-lead CDR Yablonsky) to build this new group within the coming year and formally propose a new Military Family RIG to the TSNRP Executive Board of Directors.

TSNRP is proud to support the work of these interest groups and welcomes proposals for new topical teams relevant to advancing the science of military nursing. To become an official TSNRP RIG, a group must align with TSNRP priorities, have at least five active members from at least two (preferably three) Services, demonstrate at least 12 months of active member engagement, carry out a comprehensive review of the state of the science (and/or gap analysis), and develop a draft charter. If the RIG is approved, the team will be expected to provide an annual plan and budget, a topical reference library/database, and a network of subject matter experts.

Are you interested in joining one of the TSNRP RIGs or learning more about them? If so, please contact Research Agenda Program Coordinator Megan Foradori at megan.foradori.ctr@usuhs.edu and join the new milBook pages now available for each of the groups:

**Anesthesia**
milBook (Places): TSNRP Anesthesia Research and Practice Group

**Biobehavioral Health**
milBook (Places): TSNRP Biobehavioral Health Research Interest Group

**En Route Care**
milBook (Places): TSNRP En Route Care Research Interest Group

**Family**
milBook (Places): FIG: Family Focused Research Interest Group

**Women’s Health**
milBook (Places): TSNRP Military Women's Health Research Interest Group and Facebook: “Military Women’s Health Research Interest Group”

Also watch for RIG updates and features on TSNRP’s Facebook page. ★

The Military Women’s Health RIG leaders at their meeting in August at the 2016 Military Health System Research Symposium in Florida
Mixed Methods Research
Lt Col Jennifer Hatzfeld, USAF, NC

At the TSNRP Research and Evidence-Based Practice Dissemination Course, Cheryl Tatano Beck, DNSc, CNM, FAAN, gave a very valuable lecture on mixed methods research, in which she identified six points that are worth including in this column about the basics of combining quantitative and qualitative research methods.

1 Dr. Beck pointed out that it starts with understanding the world view of “pragmatism” that supports a mixed methods approach—being problem centered, being real-world practice oriented, and understanding the value of using different methods to collect data. Sometimes we jump right into designing a study without taking a moment to appreciate the underlying worldview that guides a research method and to ensure that the method is consistent with both the researcher's perspective and the research question. Making sure that the research method matches the research question and the researcher's perspective is a really important place to begin when designing a research study.

2 Dr. Beck also highlighted two different approaches to mixed methods research that directly influence how to organize and complete a mixed methods study. She referenced Creswell and Clark (2011), who describe combining both qualitative and quantitative data in either a single study or a longer program of research, sometimes emphasizing or starting with one approach over another but occasionally dividing the importance of the two methods fairly evenly. On the other hand, Morse and Niehaus (2009) state that a mixed methods study has a single core method in addition to one or more supplementary methods that cannot be published alone. While these two views do not always conflict, a researcher must identify which approach she or he will use in a study and stay consistent throughout.

3 Regardless of the approach or the details of an individual project, Dr. Beck suggested that mixed methods studies need to have separate quantitative and qualitative research questions as well as a more general question that combines both methods. These research questions (or study aims) should be listed either in order of importance or, if one question depends on another, in chronological order.

4 Sampling is another important element of a mixed methods study. Researchers must carefully consider the way in which they recruit participants in either part of a mixed methods study in order to remain true to each method. For example, random sampling with a large sample size is important to establish appropriate representation of the larger population for the quantitative phase of the study. However, participants in the qualitative part of the study would need to be more thoughtfully selected based on specific criteria, and the sample size would be much smaller to allow for more in-depth analysis.

5 When analyzing the data and presenting the findings of a mixed methods study, it is important to remember that not only should findings be analyzed consistently with each individual method, but the analysis (not just the discussion) should specifically integrate the two methods into a single finding. Dr. Beck referenced a statement by Margarete Sandelowski, PhD, RN, FAAN (who spoke at last year’s TSNRP Dissemination Course), emphasizing that the findings of a mixed methods research study cannot be analyzed and presented completely separately, like individual fruit juices (such as apple juice or orange juice), but should result in a combined “fruit juice” in which the data and analysis contain a mixture of the two approaches.

6 There are two main challenges with publishing a mixed methods study. First is the difficult task of presenting both methods in the limited space of a paper. Dr. Beck recommended thinking about this challenge in terms of painting on a canvas, where no one element of the painting can take up the entire space. Although that suggestion doesn’t necessarily make the task any easier, it does help with thinking about the process of balancing the information to reflect the larger, mixed methods research design. The second challenge is how to organize a paper with a more complex design and multiple methods without confusing the reader. Dr. Beck suggested laying out the separate “phases” of the study in the methods section, preferably with a diagram that summarizes the approach, and then using that same order with subheadings throughout the remainder of the paper.

Mixed methods research can be very challenging and time-consuming. However, Dr. Beck’s example of understanding the prevalence and experiences of secondary traumatic stress in labor and delivery
nurses through the use of both quantitative and qualitative data was very powerful in showing how a single study using mixed methods research communicates both the facts (numbers) and the emotions (quotes). The final paper (Beck & Gable, 2012), referenced below, is a good example of how to design and publish a mixed methods study.

If you have a research question you believe can best be answered with a mixed methods study, take some time to learn more about the mixed methods research approach, and I encourage you to find a strong team member who can help make it successful.

For more information, refer to the following publications:


Recent Graduates

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

- CDR Wendy Cook, NC, USN, received her PhD.
- CDR William Danchanko, NC, USN, received his PhD.
- MAJ(P) Geoff Duncklee, AN, USA, received his PhD.
- Maj Cubby Gardner, USAF, NC, received his PhD.
- Lt Col (sel) Dawnkimberly Hopkins, USAF, NC, received her PhD.
- Lt Col Jacqueline Killian, USAF, NC, received her PhD.
- Lt Col (sel) Laurie Migliore, USAF, NC, received her PhD.
- CDR Ryan Nations, NC, USN, received his PhD.

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.

- CDR Lisa Braun, NC, USN. *U.S. Navy Women’s Experience with Cervical Cancer Screening & Follow-Up Care*, TSNRP study N14-002, NTIS accession # PB2016-103358, DTIC accession # pending.
- LTC (ret) Nancy A. Ryan-Wenger, AN, USA. *Effectiveness and Benefit of Two Sexually Transmitted Infection Prevention Delivery Methods for Military Women*, TSNRP study N11-P10, NTIS accession # PB2016-104810, DTIC accession # pending.
TSNRP Holds 2016 Research and Evidence-Based Practice Grant Camp

The 2016 Research and Evidence-Based Practice (EBP) Grant Camp was held 11–15 July at Naval Air Station North Island in San Diego, California. This year’s course included 11 attendees, allowing each student a great deal of in-depth, one-to-one interaction with his or her assigned faculty member.

Research and EBP Grant Camp is designed for novice nurse scientists and graduate (master’s and doctoral) nursing students who plan to submit a research or EBP grant application in response to a TSNRP Call for Proposals. It features a modest amount of didactic content about grantsmanship and a substantial amount of time during which attendees apply the information they learn during the course by working on their own TSNRP grant applications and receiving faculty feedback.

The faculty consists of retired military and civilians from various universities who have experience reviewing funded grant applications. Grant Camp provides each student with the tools to produce and submit a scientifically sound research or EBP grant application on a topic that aligns with the TSNRP research priorities and with the student’s dissertation chair and committee. TSNRP’s research priorities are Force Health Protection; Nursing Competencies and Practice; and Leadership, Ethics, and Mentoring.

Attendees must be prepared to spend a significant amount of time, both before and during Grant Camp, preparing and writing their grant applications. At the end of the course, students receive a 1-minute mock peer review of their topic, during which they respond to questions and receive constructive feedback from faculty.

Students who complete an online course evaluation providing feedback on their experience receive 32 hours of continuing nursing education credits. Some of the participants’ comments about the 2016 Research and EBP Grant Camp were as follows:

“This camp was a wonderful opportunity and very helpful!”
—MAJ John Reed, AN, USA

“This was a great educational offering. I am very grateful for the invitation to attend.”
—Maj Julie Roseboro, USAF, NC

“Each and every one of the faculty and staff were so generous with their time, knowledge, expertise, and support. Coming in to the program, I was apprehensive about grant writing and the feasibility of my project—every day I learned how to manage that apprehension. At the end of the program I not only know how to write a grant, but how important it is, and who to reach out to.”
—Col Marcia Potter, USAF, NC

“The faculty and participants at the 2016 Research and Evidence-Based Practice Grant Camp

Faculty and participants at the 2016 Research and Evidence-Based Practice Grant Camp

Grant Camp attendees at work

“TSNRP’s research priorities are Force Health Protection; Nursing Competencies and Practice; and Leadership, Ethics, and Mentoring.”
—Maj Peter Attilio, AN, USA

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—Maj Peter Attilio, AN, USA
The 59th Medical Wing (MDW) hosted the 2016 TSNRP Spring Evidence-Based Practice (EBP) course in June at Joint Base San Antonio-Lackland, Texas. With the many patients entrusted to our care, providing highly reliable, evidence-based care is a responsibility that we in the San Antonio Military Health System take very seriously. Our vision of continuous learning and improvement through EBP is the key to delivering on our promise, as a “high reliability organization,” to implement best practices that support safe, quality patient care processes.

The 2-day TSNRP EBP course was led by Clarence “Chuck” Biddle, PhD, CRNA, and CAPT Lisa Osborne, NC, USN, PhD, CRNA. The course began with a 2-hour All Hands Session with attendee representatives from around the San Antonio area, including Randolph, Lackland, and Fort Sam Houston. A total of 54 health care providers attended the All Hands Session, either in person at the Wilford Hall Ambulatory Surgical Center or by video teleconference from the San Antonio Military Medical Center (SAMMC). Col Susan Thornell, USAF, NC, chief nurse of 59 MDW, provided opening remarks. She reiterated the importance of the MDW’s ongoing EBP activities designed to support a spirit of inquiry across the organization, such as the 59 MDW EBP Council, Nurses Week PICOT Poster Day, and the EBP Lunch and Learn series.

The All Hands Session provided a strategic overview of the EBP paradigm of leadership: why EBP should be important to leaders in our organization; what is needed from leaders to facilitate EBP; advocacy for nursing staff engaged in EBP; and the barriers to implementing, supporting, or sustaining EBP.

Twenty-six nursing staff members—representing Army, Air Force, officers, enlisted, active duty, civilians, and contractors—were selected to attend the full 2-day EBP course based on their submitted PICOT (Population, Intervention, Comparison, Outcome, Time) questions. Submitted topics related to the delivery of evidence-based health services across a spectrum of environments, including inpatient and outpatient (e.g., specialty clinics, military treatment facility-medical home clinics, ancillary services, infection control, disease management), as well as training and research.

During the 2 days of the course, the instructors introduced the attendees to the EBP process, with an emphasis on identifying problems, developing questions, searching and appraising the evidence, applying the evidence, and evaluating outcomes. Examples of attendees’ PICOT topics discussed during the course included foot care for trainees, healthy behaviors for people with diabetes, dental safety needle use, downgrading of intensive care units, decay of basic life support skills, blood culture contamination, patient falls, newborn bathing, simulation for nursing respiratory syncytial viruses, immunizations, albuterol nebulizers, patient-team communication, sleep screening, outdoor play, hypertension education referrals, and laughter yoga.

Especially exciting for attendees was the interactive nature of the course. Participants working on the same research project attended the course together, resulting in valuable discussions within and across teams. Attendees most appreciated hearing about other projects and learning from researchers who were further along in the EBP process. At the same time, the more advanced attendees had the opportunity to act as mentors to new research teams, providing an added confidence booster.

Taken together, attendees earned more than 375 continuing nursing education credits by the end of the fast-paced course. In addition, all of the attendees had the opportunity to discuss their areas of interest and receive real-time feedback on their PICOTs. Finally, attendees received orientations on various resources, including a library and nurse scientist consultants, at both SAMMC and 59 MDW to help them move forward with their EBP projects.
Since its inception in 2014, the TSNRP Research and Evidence-Based Practice (EBP) Dissemination Course has generated enthusiasm and served as a forum to share information to promote nursing practice across all Services. The course is dedicated to disseminating scientific nursing research and EBP findings, disseminating professional nursing knowledge, and improving the delivery of health care services.

The ongoing support from the Executive Board of Directors was evident as MG Barbara Holcomb, AN, USA, Deputy Commanding General (Operations) of the U.S. Army Medical Command and Chief of the Army Nurse Corps, and RADM Rebecca J. McCormick-Boyle, NC, USN, Director of the Navy Nurse Corps and Commander of the Navy Medicine Education and Training Command, delivered their inspiring messages to the attendees. An added welcome via video by Maj Gen Dorothy A. Hogg, USAF, NC, Chief of the Air Force Nurse Corps and Deputy Surgeon General of the Air Force, provided an enthusiastic beginning to this year’s course.

More than 300 nurses from all three Services assembled to discuss innovative ideas, share collaborative scientific approaches, and present the latest in military nursing research and EBP.

Highlights included more than 125 posters and podium presentations as well as keynote lectures from major military nursing leaders, who provided insight into the status of military nursing and its ongoing participation in research.

Presentations by the leaders in the Biobehavioral Health, En Route Care, Anesthesia, and Military Women’s Health Research Interest Groups (RIGs) gave the course participants a glimpse into each RIG’s ongoing work. In addition, Megan Foradori, RN, MSN, discussed the valuable lessons of collaboration learned in developing the RIGs.

Several guest lectures added to the wealth of information presented: Bernadette Mazurek Melnyk, PhD, RN, CPNP/PMHNP, FAAN, FAAN, spoke on “Key Strategies for Enhancing Healthcare Quality and Patient Outcomes with Evidence-Based Practice and the ARCC Model”; Cheryl Tatano Beck, DNSc, CNM, FAAN, discussed “Mixed Methods Research: The Best of Both Worlds”; and COL (ret) Laura Ruse Brosch, AN, USA, presented “Compliance with Human Research Protections Requirements: Challenges, Strategies, and Suggestions for Planning, Conducting, and Completing Studies.” COL (ret) Bonnie Mowinski Jennings, AN, USA, rounded out the course with her presentation “Mentoring Morsels,” which drew an enthusiastic response from all course participants.

The course provided an excellent forum for sharing ideas and establishing new networking opportunities. It also offered an opportunity for members of the TSNRP RIGs to meet in person and develop strategies for continued success. Incorporating the RIGs into the plenary sessions this year increased the opportunity to provide the participants with an in-depth review of what each RIG had been working on during the past year.

This year’s course once again led the way in meeting the challenge to “create the science and advance our practice” by providing participants with an excellent forum for sharing accomplishments and contributions across all the nursing corps.

TSNRP extends a heartfelt thank you to the Uniformed Services University of the Health Sciences (USU), Palladian Partners, and the USU Office of the Vice President for Research, whose support and dedication to this program made this course possible.

Abstracts for all TSNRP Research and Evidence-Based Practice Dissemination Course presentations are available on the TSNRP Web site at https://www.usuhs.edu/tsnrp.
TSNRP Posters Go Interdisciplinary and Joint

Col Susan Dukes, USAF, NC

Traditionally, during the TSNRP Research and Evidence-Based Practice Dissemination Course, senior Nurse Corps leaders make it a point to stop and visit each poster presenter from their Service. During this year’s course in August, that was a bit more difficult. Interdisciplinary, joint teams conducted many of the studies that the posters represented, often resulting in visits by senior leaders of the Army, Navy, and Air Force.

Col Maggie Jones, the newly appointed Director of the Air Force Nurse Corps, visited with and presented coins and certificates to 21 “Air Force” poster presenters. Of the 21 posters, 6 had study team members from multiple Services, and 10 had university partners. Air Force posters were presented not only by active duty nurses but also by retired military nurses, government civilians, and contract nurses, all committed to scientific inquiry and advancing nursing care for Service members and their families.

Nurses were not the only ones contributing to the studies presented. Interdisciplinary teams included nurses with all levels of academic preparation, physicians, and enlisted medical technicians. Eight of the 21 Air Force posters had study team members who were not nurses. A1C Margo Olson, USAF, NC, presented her team’s poster, “Med Zone Bundle Implementation on a Medical-Surgical Unit” to Col Jones during the course, with the support of the team’s leader, 1LT Carmen Dickerson, AN, USA.

Thanks to the interdisciplinary and joint nature of military health care today, many more poster presenters in the future are likely to receive visits from more than just their own senior Service leader.
Published Articles and Presentations by TSNRP Nurse Scientists

Published Articles

**Army**


**Navy**


Presentations

**Army**


The Springfield Armory National Historic Site was the backdrop for the recent promotion ceremony for a native son who has risen to the rank of brigadier general in the Air National Guard and will serve at the Pentagon in Washington, D.C.

Brig Gen Sean T. Collins, USANG, NC, of Southwick, a veteran of more than 20 years with the Air National Guard’s 104th Fighter Wing, based in Westfield, will serve as the assistant for mobilization and reserve affairs in the Office of the Assistant Secretary of Defense for Health Affairs. His promotional ceremony, attended by family, friends, military, and civic leaders, was held on June 12.

Brig Gen Collins is the grandson of a well-known Springfield police officer, Capt. James J. Collins, and his father, Dr. James J. Collins, served as medical director for many years at the former Springfield Municipal Hospital. His father and his mother, Jane Collins, were present for the pinning ceremony.

In his new role, Brig Gen Collins will be a principal advisor to the director of health affairs on Guard and Reserve matters at the Pentagon.

Brig Gen Collins was most recently commander of the 104th Fighter Wing Medical Group. During four combat tours with the 104th, Brig Gen Collins received multiple awards and recognition, serving with distinction. In 2011, he deployed as a senior researcher for the Joint Combat Casualty Research Team in Afghanistan, providing theater-wide support to vital research activities while in Helmand Province.

“[Brig Gen] Collins mentors several people in every area of his life and gives back to his community continuously,” said Maj Gen Gary Keefe, the state’s adjutant general, who previously served with Brig Gen Collins at the 104th. “I am happy for the Collins family, who has a long and rich military career. [He is a] great officer, [a] great airman, and truly a great friend.”

Brig Gen Collins headed the medical group at the 104th, based at Barnes Regional Airport, for 11 years. In that capacity, he was responsible for the health and well-being for more than 1,200 military members assigned to the wing as well as more than 60 medical personnel. He entered the Air Force in 1995 after being commissioned as a first lieutenant in the 104th Medical Squadron.

“The enlisted corps is the one who gets the work done and you have to listen to,” said Brig Gen Collins. “I was fortunate at the 104th for an outstanding enlisted force. It’s because of the enlisted corps I am [a general today].”

Brig Gen Collins is a board-certified nurse practitioner. In his civilian career, he is an assistant professor at the University of Massachusetts Medical School, with a joint appointment in medicine and the graduate school of nursing. He also holds a clinical appointment in the Diabetes Center for Excellence at UMass Memorial Medical Center in Worcester.

He also serves as president of a family-owned business, Governors America Corp., located in Agawam. The manufacturer of engine control products employs nearly 100 people.

“I am from a hard-working family,” said Brig Gen Collins. “My father, as a residence medical director, was up at 3 in the morning doing rounds. I scratch my head when he says I am working too hard.”

Brig Gen Collins earned his bachelor’s degree from UMass Amherst and his master’s degree from UMass Worcester as a clinical nurse specialist in dialysis and transplantation. He also holds a Ph.D. from UMass Worcester.

He and his wife, Sharon, make their home in Southwick. They are the parents of three children: sons Mackenzie and Cameron and daughter Gabrielle.
CAPT(ret) Patricia Kelley Inducted as Fellow of the American Academy of Nursing

In October, CAPT(ret) Patricia Kelley, NC, USN, was inducted as part of the 2016 class of American Academy of Nursing (AAN) fellows. AAN selected CAPT(ret) Kelley as a fellow in recognition of her contributions to nursing and health care.

CAPT(ret) Kelley is one of TSNRP’s former Executive Directors. She is currently a professor in the Duquesne University School of Nursing in Pittsburgh. She also serves on the board of directors for the Navy Safe Harbor Foundation, which is dedicated to supporting the recovery of seriously wounded, ill, and injured Sailors and Coast Guardsmen and their families. CAPT(ret) Kelley is an experienced researcher, clinician, and leader who pioneered programs and infrastructures for military and Department of Veterans Affairs nursing research.

TSNRP congratulates CAPT(ret) Kelley on receiving this honor.

CAPT Dennis Spence, NC, USN, a nurse anesthetist from San Diego assigned to hospital ship USNS Mercy (T-AH 19), receives the oath of office from his father through video teleconference during his promotion to captain in a ceremony aboard Mercy. Deployed in support of Pacific Partnership 2016, Mercy is sailing to her homeport of San Diego. TSNRP congratulates CAPT Spence, a member of the advisory board, on his promotion. (U.S. Navy photo by Mass Communication Specialist 2nd Class Hank Gettys/Released)
Awards and Honors

TSNRP Abstract Award Winners

TSNRP congratulates the following abstract winners from the Karen Rieder and Phyllis J. Verhonick Poster Session at the 2016 TSNRP Research and Evidence-Based Practice (EBP) Dissemination Course. The first author of each winning abstract is pictured below with MG Barbara Holcomb, AN, USA, who is Deputy Commanding General (Operations) of the U.S. Army Medical Command, Chief of the Army Nurse Corps, and a member of TSNRP’s Executive Board of Directors.

Research Abstract Winners

**First Place:** COL Elizabeth Mann-Salinas, AN, USA, and Jennifer Trevino, “Evaluation of Elapsed Time and Mode of Transportation from Point of Injury to Role 2”

**Second Place:** MAJ Monica M. Holloway, AN, USA, and Col (ret) Don Johnson, USAF, NC, “Effects of Humerus IO Versus IV Amiodarone Administration in a Hypovolemic Porcine Model”

**Third Place:** CDR Virginia Schmied Blackman, NC, USN; LCDR Christine DeForest, NC, USN; CDR John Alex, NC, USN; Lauren Reeves; Alejandra Mora; Crystal Perez; and CDR Benjamin Walrath, NC, USN, “Pre-Transfer Patient Assessment: Comparing Navy En Route Care Providers’ Performance”

EBP Abstract Winners

**First Place:** LTC Pauline Swiger, AN, USA; Donna Belew; and LTC Julie Freeman, AN, USA, “Implementation and Sustainment of the Patient Caring Touch System”

**Second Place:** CDR Lalon Kasuske, NC, USN, “The Electronic Health Record as a Research Lab: A Methodological Approach to Study Health Outcomes”

**Third Place:** 1LT Mackenzie Hoffman, AN, USA; SrA Zachary Ferguson, USAF, NC; 1LT Kristen Conley, AN, USA; 1LT Katherine Platz, AN, USA; 1LT Lee Anna Daniel, AN, USA; A1C Alicia Pratt, USAF, NC; Ann Marie Lazarus, Jennifer Van Nostrand; Courtney Taylor; and Schandra Carr, “What’s Your Zone?: Standardized Congestive Heart Failure Education”
Recent Accomplishments

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

- **CDR Virginia Blackman, NC, USN**, received the RADM Mary Hall Award for Publication, given annually by the Navy Nurse Corps to recognize Navy nurses who have positively contributed to the nursing profession through professional publication. CDR Blackman’s article, “Prevalence and Predictors of Prehospital Pain Assessment and Analgesic Use in Military Trauma Patients, 2010–2013,” was published in *Prehospital Emergency Care*.

- **CDR Heather King, NC, USN**, was first runner-up for her article “Exploring Self-Reported Benefits of Auricular Acupuncture Among Veterans with Posttraumatic Stress Disorder,” published in the *Journal of Holistic Nursing*.

- **LT Thomas Diggs, NC, USN**, received the RADM Elizabeth S. Niemyer Award for Evidence-Based Practice, also given annually by the Navy Nurse Corps, for his project “Measuring Competency in Ultrasound Guided Regional Anesthesia.”

- **LCDR Patricia Butler, NC, USN**, was named first runner-up for her contributions to a project titled “More Bloody Pit: A Novel Oxytocin Protocol for Active Management of the Third Stage of Labor.”

- **Lt Col Jacqueline Killian, USAF, NC**, recently graduated from the Uniformed Services University of the Health Sciences (USU) with a PhD in nursing and received the Admiral James Zimble Selfless Service Award and the Military Officers Association of America Outstanding Student Award. She also was named to *Who’s Who Among Students in American Universities and Colleges*. Lt Col Killian was awarded first place at the USU Research Day for her nursing research poster “The Impact of a Novel Biobehavioral Intervention on Physiologic State, Perceived Stress and Affect.” Her poster was selected from among 19 Graduate School of Nursing (GSN) posters.

- **Lt Col (sel) Laurie Migliore, USAF, NC**, recently graduated from USU with a PhD in nursing and received the Daniel K. Inouye GSN Ada Sue Hinshaw Outstanding Dissertation Award and the Federal Nursing Service Chiefs Award. Lt Col (sel) Migliore was awarded second place at the USU Research Day for her nursing research poster “The Military Identity Project: A Self-Schema Approach to Investigate a Military Identity Construct.”

- **CDR Ryan Nations, NC, USN**, received a 2015 Cheryl A. Wilson Nursing Scholarship from the Doris A. Howell Foundation for Women’s Health Research. The Foundation awards the scholarship each year to PhD candidates at the University of San Diego Hahn School of Nursing and Health Science whose research focuses on women’s health.

- **COL (ret) Linda Yoder, AN, USA**, was inducted as the president of the Academy of Medical-Surgical Nurses on 2 October.

Great work! ★

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!
Col Margret M. Jones Assumes New Post as Deputy Chief of the Air Force Nurse Corps

TSNRP welcomes Col Margret M. Jones, USAF, NC, as the new Deputy Chief of the Air Force Nurse Corps. In this role, she will be the principal spokesperson and representative for the General Officer Nurse Corps Director during interactions with the Department of Defense; Air Staff; major commands; and high-level federal, national, and civilian agencies. She also will develop, coordinate, deploy, and evaluate policies and programs affecting nursing personnel in active and reserve components of the Air Force Medical Service.

Col Jones is Chief of the Officer Force Development Division and Director of Air Force Nursing Services at Headquarters Air Force, Office of the Surgeon General. In these roles, Col Jones directs nursing force structure, education and training, career development, staff utilization, and standards of nursing care and practice. The policies and programs she oversees affect 18,000 nursing personnel in active and reserve components of the Air Force Medical Service.

Col Jones, a ROTC Distinguished Graduate, was commissioned in 1991 after graduating from the University of Miami with a BSN. Her career includes clinical assignments in medical surgical, pediatric, and aeromedical staging, as well as family practice and adult medicine clinics. In addition, she had assignments in education and training, Air Staff, and Department of Defense International Affairs.

She has served as commander of the 21st Medical Operations Squadron at Peterson Air Force Base and of the 628th Medical Group at Joint Base Charleston. In addition to assignments at the Pentagon and Air Force headquarters, Col Jones has been stationed in Alabama; California; the Washington, D.C., metropolitan area; and Germany.

Col Jones’ awards and decorations include the Legion of Merit, the Meritorious Service Medal with five oak leaf clusters, the Air Force Commendation Medal with one oak leaf cluster, and the Air Force Achievement Medal. In 2011, Col Jones was a recipient of the Chief of Staff Team Excellence Award.★
TSNRP-Funded Research

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**

**COL Ann Nayback-Beebe, AN, USA,** “Microcurrent Therapy for Chronic Low Back Pain”

**COL (ret) Patricia Patrician, AN, USA,** “Impact of Nursing on Readmissions, Failure to Rescue and Mortality in DoD Hospitals”

**MAJ Christopher Stucky, AN, USA,** “A Network Analysis of Communication Patterns in a Perioperative Military Setting”

**LTC Pauline Swiger, AN, USA,** “The Military Nursing Practice Environment’s Association with Patient Outcomes”

**LTC Christopher VanFosson, AN, USA,** “The Longitudinal Prevalence of Unfinished Nursing Care at the US Army Burn Center”

**LTC Gordon West, AN, USA,** “Identifying Infectious Contamination of Military Uniform in a Hospital Setting”

**Navy**

**CDR Virginia Blackman, NC, USN,** “Building Palliative Care Communication Skills for Registered Nurses”

**LCDR Kennett Radford, NC, USN,** “Ketamine on Fear Behaviors and Brain Neurotrophic Factor in a Rat Fear Model”

**Air Force**

**Maj Sarah Huffman, USAF, NC,** “Social Support Networks of Vietnam Veterans: A Typology of Social Relations”

**Capt Laura Ransom, USAF, NC,** “Trigger Films in Nurse Anesthesia Difficult Airway Education and Training”

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**TSNRP Welcomes Grants Manager Jaya Pothen**

Jaya Pothen joined TSNRP in late June as a grants manager. A graduate of Millersville University in Lancaster, Pennsylvania, Ms. Pothen has worked in grants management in the nonprofit sector for the past 5 years. She also has a strong background in business management and administration. Her professional experience, combined with her interest in supporting military nursing research, makes her a great addition to the TSNRP team. Please join us in welcoming Ms. Pothen to TSNRP.

**Brandie Peterson Promoted to TSNRP Grants Manager**

In September 2015, Brandie Peterson joined TSNRP as an executive assistant, having just completed a master’s degree in communication from the University of Maryland, College Park. During her time at TSNRP, Ms. Peterson has shown incredible growth and demonstrated an interest and affinity toward grants management. As a result of her hard work and desire to contribute to the continued success of TSNRP, Ms. Peterson was selected to fill the grants management position. TSNRP is delighted to have Ms. Peterson serve in this new role.
TSNRP Bids Farewell to Debra Esty

Debra Esty announced her resignation as TSNRP's senior grants manager, effective Friday, 12 August, 2016. It is no surprise that Ms. Esty, a retired Navy Chief, was offered a position at the National Oceanic and Atmospheric Administration's Integrated Ocean Observing System as a management and program analyst. While at TSNRP, Ms. Esty coordinated grant portfolios; administered final reports in adherence with governmental and Department of Defense (DoD) compliance regulations; and provided managerial assistance to TSNRP grantees on administrative issues, including reporting responsibilities, Institutional Review Board compliance, budget reallocations, grant modifications, military interagency funding agreement documents, and publication and presentation clearance through DoD.

Ms. Esty's cheerful demeanor, invaluable customer service, and efficient work ethic in support of military research will be remembered.

The TSNRP community wishes her “fair winds and following seas” and all the best in her future endeavors.

Lt Col Jennifer Hatzfeld, Executive Director of TSNRP, presents Debra Esty with a TSNRP pin in recognition of her contribution to military nursing.

TSNRP Bids Natasha Hurwitz a Fond Farewell

Natasha Hurwitz, who had served as TSNRP’s grants manager since January 2015, announced her departure in April. During her time at TSNRP, her grants management background and zeal in supporting military nursing research aided in successfully integrating the various components of the overall grants process. In addition, Ms. Hurwitz exhibited an affinity for data management and thoroughly enjoyed improving processes and efficiency. Her attention to detail and insight in assisting with the TSNRP database enabled the grants team to more effectively manage the portfolios. TSNRP thanks Ms. Hurwitz for her contributions to our program and wishes her continued success as she moves to the next stage of her professional life.

Natasha Hurwitz
### Events and Deadlines

#### Calendar

**March 2017**

**Evidence-Based Practice (EBP) Course**
- **2–3 March 2017**
- Tripler Army Medical Center
- Honolulu, Hawaii

**April 2017**

**Research and EBP Dissemination Course**
- **25–27 April 2017**
- Turf Valley Resort and Conference Center
- Ellicott City, Maryland

*Registration opens 1 December. Abstract submission deadline is 31 January 2017.*

**July 2017**

**Research and EBP Grant Camp**
- **10–14 July 2017**
- Naval Air Station North Island
- San Diego, California

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### 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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- Senior Nursing Research Scientist
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#### U.S. Navy

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- Navy Nurse Research Specialty Leader
- Phase II Site Director and Clinical Assistant Professor, DNP Program, Naval Medical Center Portsmouth
- Daniel K. Inouye Graduate School of Nursing, Uniformed Services University of the Health Sciences
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#### U.S. Air Force

**Col Susan Dukes, USAF, NC, PhD, CCNS**
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