Dear Colleagues,

Safe, high-quality nursing care is essential to obtain favorable patient outcomes. Military nursing research and evidence-based practice (EBP) are fundamental for helping to provide solutions to prevent health problems, improve patient care, and contribute to safe, desirable outcomes that can help transform a mediocre health care system into a high reliability organization (HRO).

During the past 24 years, TSNRP-funded scientists and clinical researchers have focused on enhancing health care delivery systems and processes to improve clinical outcomes and advance the practice of military nursing in support of mission readiness and deployment. They also have contributed to the health status and quality of life of military personnel and their beneficiaries. Yet, despite considerable progress with research, further evolution and specific programs of military nursing research will require enhanced scholarly inquiry grounded in the theory of high reliability and the principles of reliability science.

In our journey toward becoming an HRO, we will also need to focus on research and evidence that improves reliability through better processes; intuitive designs that help people do the right thing; and, by leveraging human factors, looking at how we work and interact in our military world. Taking these issues into consideration should help us design better systems that will allow us to keep patients, families, employees, and visitors safe.

I encourage you to take a moment to review five key characteristics of an HRO and strive to incorporate basic high reliability theory into any new research proposals or evidence-based projects.

The five basic characteristics of an HRO, as suggested by Weick and Sutcliff in their 2001 book Managing the Unexpected: Assuring High Performance in an Age of Complexity, are as follows:

1. **Preoccupation with failure:** Focusing on errors and near-misses to learn from them and figure out how to prevent them from happening again. Attention to detail is crucial. Finding and fixing problems is everyone’s responsibility and is encouraged and supported by leadership.

2. **Reluctance to simplify interpretations:** Requires constantly asking “why” and inviting others with diverse experience to express their opinions. The belief is that the more you’re immersed in something, the harder it is for you to objectively observe and question things that need questioning. We need to leverage new thinking to get the right answer!

Continued on next page
3. **Sensitivity to operations (an HRO distinguishing characteristic):** An ongoing concern with the unexpected. Hallmark actions include closing loopholes in processes where there is potential for patient harm, maintaining situational awareness, and developing teams that speak up and pay attention to the front line—which in hospitals is primarily nurses!

4. **Commitment to resilience:** The concept that things will go wrong that we can't predict; mistakes will be made. However, we will quickly identify issues and have structures in place so that we can immediately respond and minimize the harm. Errors won't disable us.

5. **Deference to expertise:** Finding and using experts for the given problem in the given time. More specifically, this means recognizing that those closest to the front line are the experts and that empowering them to make decisions when a critical issue arises results in quicker mitigation of harm.

In this edition of *TSNRP News*, we continue to highlight a sampling of the outstanding research contributions and projects from our tri-Service scientists and researchers. From the Army, MAJ Johnnie Robbins, MSN, RN, CNS, describes his project on “Implementing an Evidence-Based Preceptorship Program in a Military Burn Center.” From the Navy, CDR Heather King, PhD, CRNA, provides interesting details from her study on “Acupuncture for Disturbed Sleep in Veterans with Post Traumatic Stress Disorder.” Representing the Air Force, Lt Col Jennifer Hatzfeld, PhD, describes her interventional study on “Understanding and Improving Modifiable Cardiovascular Risks Within the Air Force.”

Mark your calendars! TSNRP is pleased to announce that the Defense Health Agency (DHA) has once again approved our Research and EBP Dissemination Course. This year’s course will be held in San Antonio, Texas, from 31 August to 3 September. The 3.5-day course is one of the best collaborative forums for sharing the latest in military nursing research and innovative EBP across the tri-Service nursing research community. We have a dynamic lineup of guest lecturers planned, including Dr. Margarete Sandelowski and best-selling author Dr. Suzanne Gordon, so be sure to check our Web site for information on registration and how to submit for a poster or podium presentation—or perhaps both!

Also with this edition, we welcome our newest member of the TSNRP Executive Board of Directors: Col Stephen K. Donaldson, USAF, NC, Director of Air Force Nursing Services and Chief of the Officer Force Development Division. In addition, the TSNRP office welcomes Natasha Hurwitz as our new grants specialist.

In closing, I am proud to say that TSNRP is committed to enabling excellence by investing in targeted educational initiatives and funding strategies that support the priorities of our military. As a collective team, we must continue to keep the light of knowledge burning bright by highlighting and showing how our research contributions are making a positive impact on improving nursing practice and improving patient outcomes across the military!

COL Michael Schlicher, PhD, AN, USA

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**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 when it occurs, and we’ll save it for the next issue.

Our email address is tsnrp@usuhs.mil. Please include “investigator news” in your subject line. Thank you!
Helping Veterans with Post-Traumatic Stress Disorder Through Research

CDR Heather C. King, NC, USN

Combat-related post-traumatic stress disorder (PTSD) affects approximately 9% to 24% of veterans returning from the recent wars in Iraq and Afghanistan. PTSD is defined by characteristic symptom clusters, which include intrusion, avoidance, negative alterations in cognition/mood, and alterations in arousal and reactivity following exposure to a traumatic event. However, expression of these symptoms varies greatly among veterans diagnosed with PTSD and frequently overlaps with symptoms of other comorbid conditions, such as anxiety, depression, insomnia, sexual dysfunction, traumatic brain injury, and chronic pain. PTSD symptoms combined with symptoms of other comorbid conditions create a complex clinical presentation and can be challenging to treat with traditional modalities. Over the last decade, the Department of Defense and the Department of Veterans Affairs have expanded the use of complementary and alternative medicine (CAM) practices in an effort to expand treatment options for veterans with PTSD.

The term CAM refers to a large variety of treatment modalities not considered to be a part of traditional Western medicine. Some of the most frequently used CAM therapies are massage, spirituality, prayer, relaxation, mantram repetition, guided imagery, meditation, mindfulness, acupuncture, yoga, qigong, and tai chi. Veterans and civilians use CAM therapies at similar rates, and a recent study reported that acceptability of CAM therapies is high among veteran populations. Interestingly, acceptability of CAM therapies is highest among veterans with severe PTSD. This finding may be driven by veterans who struggle to control symptoms of PTSD with conventional therapies alone and are willing to try CAM therapies to manage their symptoms.

My journey into research on CAM for veterans with PTSD started in 2011, when I was a doctoral student at the University of San Diego. I was searching for a meaningful research topic that would help veterans with PTSD—a population that I was (and still am) passionate about. The use of acupuncture among veterans was increasing, and I was curious about the clinical benefits that acupuncture could provide to veterans. I enrolled in an auricular acupuncture (ear acupuncture) course taught by Terry Oleson, PhD, an international expert on auricular acupuncture. I began treating veterans with the new clinical skills that I learned, and I was impressed with the results. After receiving auricular acupuncture treatments, many veterans reported decreased pain, decreased irritability, and increased relaxation, and they would often fall asleep after receiving a treatment. A review of auricular acupuncture literature revealed a need to conduct further research with this treatment modality, particularly among veterans with PTSD. I wondered whether auricular acupuncture could be reliably delivered to veterans with PTSD and whether veterans would accept and actively engage in this treatment to improve their sleep quality.

My 2012 TSNRP-funded dissertation, “Acupuncture for Disturbed Sleep in Veterans with Post Traumatic Stress Disorder,” was a feasibility study to test the acceptability and efficacy of an auricular acupuncture regimen for sleep disturbances among veterans with PTSD. Data obtained during this study showed that veterans with PTSD viewed auricular acupuncture as a highly acceptable treatment for sleep disturbances. This acceptability was measured by self-reported responses to a 1–5 Likert-type question and was compared in a group that received auricular acupuncture and a control group (\( Mdn = 3 \) \( U = 12.0, z = -2.99, p = .004 \)). Additionally, qualitative data (written comments from participants) obtained during the study revealed three prominent themes regarding the self-reported benefits of receiving auricular acupuncture treatments: (1) improved sleep, (2) increased relaxation, and (3) decreased pain. These themes suggest that auricular acupuncture may be a valuable treatment modality to improve a variety of symptoms that veterans with PTSD experience.

During this study, our research team also obtained objective (actigraphy) and subjective (Pittsburgh
Sleep Quality Index) measures of sleep quality. Most of these measures did not differ significantly between groups. However, the primary aim of this feasibility study was to evaluate acceptability of the intervention and feasibility of the study design in this population. Of note, one component of the Pittsburgh Sleep Quality Index was significantly different between groups: daytime dysfunction ($F_{1,18} = 11.4, p = .003$). Veterans randomized to the auricular acupuncture group reported less daytime dysfunction than those in the control group.
These findings have limitations, and future powered studies are indicated to explore the benefits of auricular acupuncture for this population.

I learned some important lessons during this investigation:

- Many veterans are interested in and receptive to nonpharmacologic treatments to manage symptoms of PTSD and comorbid conditions.
- Studies that include veterans with PTSD often have high attrition rates due to the vulnerable nature of this population. My study had an overall attrition rate of 33%, which is similar to rates in previous studies with veterans with severe PTSD. Researchers should consider the high attrition rate when designing studies for this population.
- Because of these high attrition rates, reimbursement for participants is an important consideration when designing studies for this population.
- Timing, duration, and dosing are important to consider when designing acupuncture studies for veterans with PTSD. Auricular acupuncture treatments during this study were administered for 3 weeks (nine treatments total), but acupuncture treatments administered during the entire PTSD residential treatment program (10 weeks total) may have been beneficial. However, appropriate “dosing” and duration of auricular acupuncture treatments warrant further investigation.

During this study, data were collected from instruments administered to patients as part of their clinical assessments. Collecting data separately from clinical assessments may provide a more accurate reflection of self-reported benefits of an intervention, particularly if the investigators explain the protections of data collection, de-identification, and aggregate reporting of group data.

Conducting this feasibility study was one of the most rewarding experiences of my military career. I was surprised and overwhelmed by the comments by veterans with PTSD, which described improvements in a variety of symptoms that they were struggling to cope with. One particular written comment by one of the study participants has stayed with me. He wrote: “I have been dealing with pain for the past 7 years, and for the first time, without the aid of narcotics, I have been able to relax and sleep. I was able to actually get full rest and had energy throughout the day. Acupuncture at the end of the day helped with the entire trauma that we relived in therapy. It was such a great thing to look forward to. I will definitely carry on with this treatment.”

These comments have given me motivation to continue this program of research, and I am in the early stages of developing a protocol that will use electro-auricular acupuncture treatments to evaluate sleep quality, pain severity and interference, and anxiety levels. The study, which is currently in the development phase, will also examine PTSD symptoms before, during, and after receiving the electroacupuncture treatment. I am excited to continue on this program of research.

I am extremely grateful to TSNRP for its dedication to developing nurse scientists by offering high-level educational courses and formal mentoring and networking opportunities, and I especially appreciate the funding TSNRP provided to support this research. I am also grateful to the veterans who participated in my previous study, and I hope that this program of research can provide valuable information to improve the care of veterans.

1993
- Develops marketing strategies and grant-writing workshops.

1994
- Leadership position begins rotating between the Service branches on a yearly basis.
- Develops guidelines for sponsors to guide novice researchers; guidelines for letter of intent; and forms for interim, annual, and final reports.

1995
- Institute of Medicine reviews TSNRG and recommends continuing the group.
- Uniformed Services University of the Health Sciences (USU) Graduate School of Nursing establishes a working relationship with TSNRG.

1996
- TSNRG is authorized as part of the Department of Defense (DoD) health care program.
- Name changes to TSNRP.
- Civilian nurse researchers join TSNRP scientific merit review panels.
Research Spotlight, continued

Practice Transformation: An Evidence-Based Nurse Precepting Program

MAJ Johnnie Robbins, AN, USA

Have you ever been a preceptor? How much time did you have to prepare for that role? Were you told you were a preceptor on the same day that you were orienting someone new? Did you receive any training? Probably not.

Well, you are not alone. The lack of preceptor training for nurses has been the norm throughout the United States for quite some time.

Have you ever heard the expression “first impressions are lasting impressions”? The American Association of Colleges of Nursing found that 27% of new graduate nursing students will leave their jobs within the first year, often because of the way they were oriented into their new positions—in other words, the way in which they were integrated into practicing in their workplace.

Although significant improvements have been made in facilitating transition programs across many settings within the past 10 years, the National Council of State Boards of Nursing found in 2006 that only 40.9% of registered nurses (RNs) and 22.4% of licensed practical nurses (LPNs) worked in hospitals that had comprehensive (e.g., preceptor and preceptee development, preceptorship, internship, orientation) standardized transition programs.

We are fortunate that within the Army Nurse Corps (ANC), we provide a Clinical Nurse Transition Program (CNTP) for our new RNs. However, similar to industry outside of the military, we often don’t have comprehensive standardized transition programs for our LPNs or our experienced RNs who are transitioning into new military settings.

Is this information important? Does it matter whether a comprehensive, standardized transition program exists within one facility or, perhaps, across all military treatment facilities within the U.S. Department of Defense? The answer is yes!

An extensive amount of literature has found that a lack of a comprehensive standardized approach to transition can have lasting effects on the increasing staff turnover rate, on patient safety issues, and on promoting a healthy work environment.

The burn world is no exception when it comes to seeking a way to transition nurses to practice safely and effectively.

1997
- LTC Catherine Schempp becomes TSNRP’s first Executive Director.
- Executive Director position begins rotating among branches every 2 to 3 years.
- Develops a mandatory training program for post-award grants management.

1998
- Develops and implements research priorities.

2000
- Lt Col Diep Duong becomes Executive Director.

2001
- Establishes Research Pods or Regional Groups.
- Redefines mission, identifying four goals:
  - Increase military nursing research capacity.
  - Expand the breadth and depth of the research portfolio.
  - Develop partnerships for collaborative research.
  - Build an infrastructure to stimulate and support military nursing research.
The U.S. Army Institute of Surgical Research Burn Center has a successful history of training nurses to care for the most critically ill burn patients. However, little research has identified how to precept a burn nurse or how to precept an experienced nurse in a new setting.

Significant interest exists throughout the field of nursing regarding the transitioning of new nurses to practice and precepting experienced nurses transitioning to a new specialty. The goal of our project was to implement an evidence-based precepting program specific to the burn specialty.

The Iowa Model of Evidence-Based Practice served as the model for this project. We formed a working group of clinical nurse leaders, clinical nurse specialists, nurse scientists, senior preceptors, staff nurse preceptors, and wound care coordinators. We then conducted a systematic review of the literature focusing on nurse transition. Finally, we created both preceptor development and preceptee training programs with competency assessment and developed ongoing multifaceted evaluation and retention strategies.

After selecting the evidence-based Vermont Nurses in Partnership (VNIP) clinical coaching program, we provided education to all Burn Center staff. Although no published results existed for VNIP and precepting the burn nurse, VNIP had the most published successful results within the past 14 years:

- A total of 14 grants on comprehensive transition programs using VNIP were implemented.
- A total of 12 manuscripts were written about VNIP.
- VNIP has had more than 100 global and national speaking engagements.
- More than 250 hospitals use VNIP.
- Hospitals in 28 U.S. states and Canada use VNIP.

As you can see, VNIP is a tested program with a successful track record.

We established benchmarks for basic knowledge assessment by work site, education level, and burn wound care for current staff members to use for evaluating new hires. In addition, we created comprehensive preceptor and preceptee training manuals.

From September 2012 to May 2014, 29 new hires enrolled in the program. Twenty-six completed the program and three did not. We also conducted VNIP training for 110 staff members: 34 interdisciplinary staff (e.g., rehabilitation, education, respiratory therapy, and clinic staff), 43 staff nurses, and all of the 33 identified preceptors.

How many programs out there do you think tout their ability to create a comprehensive standardized approach to training the multidisciplinary team?

You guessed it: zero.

But VNIP is that possible bridge across disciplines.

More than 100 VNIP competencies assessment and coaching plans provide roadmaps for management, preceptors, and preceptees for both didactic and expected demonstrated outcomes in outpatient and inpatient areas of care.

As one of our executive leaders would say, “VNIP is like buying a car, but focused on transition to practice; you can add or take away from it to get the successful elements needed for the preceptee, the preceptor, and the institution to promote a healthy work environment.”

A great feature that we used from VNIP was the Tracking Progress into Independent Practice tool. We used this tool with the competencies to evaluate the competency progressions of the new hires on a weekly basis.

2003
- CAPT Patricia Watts Kelley becomes Executive Director.
- Implements the Pilot Project Award program.

2004

2005
- Institutes a 2-day workshop for prospective researchers not yet ready to produce a proposal.
using a 1–10 scale, with 10 being the best and 7 indicating safe independent practice. The initial ratings were 5.1 ± 2.0, and the final ratings were 9.0 ± 1.2 (n = 25; p < .001).

The Assessment of Process Used for Transition to Work survey revealed an increase in staff satisfaction overall and identified items for improvement.

Our turnover decreased from 33.6% (before the program) to 16.5% (after the program)—a 50% decrease.

So is the program cost-effective? What does a program like this cost? What’s our return on investment besides decreasing patient safety errors or creating a healthy work environment?

A Kaiser Permanente study placed the real cost for replacing a specialty nurse at around $85,000.

Implementing VNIP initially costs close to $14,000 for about 2 years, depending on the facility’s bed size. The program came with all the tools mentioned above and then some. Most of our costs came from hiring someone to collect the data for the 2-year period.

Basically, the 50% decrease in turnover—accounting for replacing just one specialty nurse—paid for the one administrative person hired to do data entry during the 2 years of our grant.

The evidence-based practice team created a standardized, comprehensive, and flexible precepting program to assist and support experienced nurses, new graduates, and people in other health care–related disciplines in transitioning to specialty burn practice. Using objective metrics enables ongoing assessment and makes training adaptable, individualized, and cost-effective. Applying this standardized approach across the enterprise will improve consistency in all transitions in practice and has tri-Service applicability.

In fact, this platform will be available at no cost to the Army Medical Department when a Role 2 grant that

LTC Elizabeth Mann-Salinas, AN, USA, is working on is fully funded. The ANC is looking at several facilities, including Tripler Army Medical Center (TAMC) and Brooke Army Medical Center, to expand this comprehensive standardized preceptorship process. TAMC has been using aspects of VNIP for its CNTP since around 2009. We thank LTC (ret) Sheila Bunton, AN, USA, TAMC CNTP instructor, who worked with Susan Boyer, MEd, at VNIP to bring this preceptorship development program into the Department of Defense.
The Healthy Habit Study

Lt Col Jennifer Hatzfeld, USAF, NC

The Healthy Habit Study—officially titled “Understanding and Improving Modifiable Cardiovascular Risks Within the Air Force”—was conducted at Travis Air Force Base (AFB) from 2010 until 2013. The study was developed in response to the main finding from my TSNRP-funded dissertation work, which found that among active duty Air Force members, African-Americans were more than twice as likely as Caucasians to develop hypertension, and they developed the condition at a much younger age than any other racial or ethnic group.

The good news from my dissertation was that among active duty Air Force members who received a diagnosis of hypertension, no racial or ethnic disparities in management outcomes—including the actual systolic blood pressure measurements and the proportion of active duty members that met the recommended treatment goals—were identified. (If you’re interested, you can read the primary results in our article “Racial/Ethnic Disparities in the Prevalence of Selected Chronic Diseases Among US Air Force Members, 2008,” published in a 2012 issue of Preventing Chronic Disease, at www.cdc.gov/pcd/issues/2012/11_0136.htm.) However, the primary limitation of the study was that the design did not enable us to determine why the differences in diagnosis rates occurred.

Consequently, our research team sought to understand through the Healthy Habit Study (1) what active duty Air Force members believed about modifiable cardiovascular risks and (2) how they incorporated these concepts in their daily lives. We also developed an initial outline of an intervention that would incorporate the Air Force–specific issues identified through the study.

The Healthy Habit Study was designed as a descriptive, qualitative research project. A total of 24 active duty Air Force members enrolled in the study, and each one completed a 1-hour interview. We purposely sampled participants to achieve a variety in the following: having or not having a chronic disease (i.e., hypertension), race/ethnicity, officer or enlisted status, and age. A follow-on focus group of participants allowed us to validate the key findings and identify specific factors to incorporate into the proposed intervention.

I completed the initial coding with COL (ret) Bonnie Jennings, AN, USA, who has significant experience with qualitative research as well as a military perspective that was helpful for understanding the underlying concepts. The coding process became somewhat challenging due to my unexpected deployment to Afghanistan on the Joint Combat Casualty Research Team in 2012. However, COL (ret) Jennings and I continued our collaboration by scheduling telephone meetings at night and keeping in regular contact by email.

After we developed the codes and themes, we reviewed and coordinated them with the remaining team members to finalize the factors that influenced health behaviors among active duty Air Force members. Our original analysis plan was to examine the data using a directive content analysis based on Pender's
Health Promotion Model (HPM). However, we soon realized that such an approach would suboptimize the data by force-fitting the information into preexisting categories that didn’t seem to fully reflect the identified codes and themes. Consequently, we instead used conventional content analysis to arrange the data into data-driven themes and then compared them to the HPM.

Although the HPM has been used widely to develop lifestyle modification programs, our team found that the model did not fully address all the factors that appeared to influence health behaviors in this diverse sample. Our most important discovery was a key health behavior that is not clearly identified in the HPM: the importance of “knowing myself,” which is the process of developing self-understanding to create a lifestyle that supports being healthy. Examples of self-understanding are recognizing (and embracing) personal preferences with respect to deciding the time of day to schedule an exercise program, choosing which foods to eat, or determining how to implement a new lifestyle change. The study participants identified this self-knowledge as a key element to successfully developing healthy habits and achieving a healthy lifestyle.

After we analyzed the interviews, we used the findings to identify important elements of a lifestyle modification intervention. Focus group participants then reviewed the elements, after which we further refined the intervention.

The focus group participants reinforced our finding that health is viewed as a personal activity that not only is built on knowing one’s self but also relates to the personal choices a person makes on a regular basis. In addition, the participants considered health as a separate issue from the Air Force fitness program and the annual preventive health assessment. Furthermore, participants did not view these requirements as applicable to day-to-day life but only as once- or twice-a-year events related to keeping one’s job. Based on this finding, the team identified the importance of demonstrating the link between individual health choices and the fitness and medical requirements in a way that supported all three, rather than making them either irrelevant or competing priorities.

Another important element of the intervention that the focus group members identified was the need for the intervention to be transportable.
from one AFB to another. Factors affecting the transportability of the intervention include the independence of commanders to implement various programs and the specific fitness programs and facilities available at each installation. With diminishing resources, the intervention must be provided through a centrally funded and centrally managed program that could continue to exist outside of an individual unit’s budgetary or personnel decisions. This would ensure that the intervention could be implemented in a widespread, long-term fashion, regardless of where the military member is assigned.

The Healthy Habit Study provides an important perspective into understanding the factors that influence health behaviors of active duty Air Force members. The findings also illustrate a unique perspective of the definition of health among active duty Air Force members. The proposed intervention, though preliminary, could provide a useful framework for military nurses and leaders as they identify appropriate approaches to reduce cardiovascular risk behaviors. Continued research is needed to test and evaluate lifestyle modification programs, particularly among military members with military-unique requirements and cultural factors.

In addition to incorporating these military-specific requirements, the findings of this study emphasize the need to help each of these individuals understand the critical factors of his or her own personal history, a knowledge of “who I am,” and an understanding of “what works for me.” Although the members of the Air Force active duty force are strong and capable, it is also evident that these Service members are fully human, with rich and diverse personal backgrounds that clearly influence health behaviors. As military nurses, we are uniquely qualified to integrate all of these factors in a way that maintains a fit and ready force.

Note: The Healthy Habit Study—a project near and dear to my heart—was definitely a team effort. I was honored to be a part of a strong study team, including Catherine Waters, PhD, RN, FAAN, of the University of California, San Francisco, as my ever-encouraging mentor; COL (ret) Bonnie Jennings, AN, USA, now at Emory University, who was instrumental in completing the qualitative analysis; Lt Col (ret) Mary Nelson, USAF, NC, the tireless director of the Health and Wellness Center at Travis AFB; and Art Stout, a wonderful research assistant who helped make sure the project stayed on track. These individuals and the Travis AFB community were incredibly supportive of this effort, and they were the reason the project was successfully completed.

TSNRP Research Interest Group (RIG) Updates

Megan Foradori, RN, MSN

The members of the TSNRP research interest groups (RIGs) continue to make connections, take on collaborative projects, and move nursing science forward.

TSNRP’s recently unveiled Anesthesia RIG (ARIG) has been gaining momentum and new members since its first meeting at the TSNRP Dissemination Course in fall 2014. The group has enjoyed new connections and project updates from its members on multiple RIG phone calls. At the group’s meeting in November, ARIG co-lead CAPT(ret) Chuck Vacchiano, NC, USN, gave a talk on transitioning from the military to civilian academia.

The ARIG is still establishing its priorities and welcomes participation from those interested in anesthesia research at all levels, especially students. Team leads CAPT(ret) Vacchiano and CAPT Lisa Osborne, NC, USN, welcome inquiries about joining the group and ideas for RIG activities.

The Military Women’s Health RIG (MWHRIG) has completed its systematic review of the military women’s health literature for papers published between 2000 and 2010. To pull together the project and write the systematic review report, the team met at the Naval Health Research Center in San Diego twice in 2014—last fall and early winter. The location gave the group and the RIG coordinator the opportunity to meet in person and collaborate with members of the Consortium on the Health and Readiness of Servicewomen (CHARS). The MWHRIG would like to thank all the subject matter experts who assisted with literature reviews and the CHARS members, especially Stephanie McWhorter, MA, a research psychologist, who helped the team compile and check reviews for 317
articles. Through their leadership, these experts also assisted in making the information an impressive and comprehensive picture of 10 years of women’s health literature. The RIG is still developing a searchable database of these reviews and hopes to have it available soon.

In addition, the MWHRIG continues to host a quarterly call to connect those doing similar work in the military women’s health arena. The call is scheduled for the second Thursday of each quarter, and all are welcome to participate. The response has been exciting, and the group looks forward to many more collaborations among RIG members.

The MWHRIG still has a few print copies of its self-published 2014 Military Women’s Health Researcher Guide. If you would like a printed copy, please email the project coordinator, Megan Foradori, RN, MSN, at megan.foradori@gmail.com. Electronic copies also are available.

This year, the RIG plans to produce an update to ensure the guide stays current. An electronic update is certain, and the RIG may also produce a new edition of the paper copy this year. The group’s Facebook page, named “Military Women’s Health Research Interest Group,” boasts more than 440 followers and houses up-to-date information on new military women’s health research, dissemination opportunities, and topics of interest to the community.

For more information or to get involved with the above RIGs (or the En Route Care or Biobehavioral Health RIGs), please contact RIG coordinator Megan Foradori at megan.foradori@gmail.com.
TSNRP Brings the Research Development Course to Womack Army Medical Center (and Beyond!)

MAJ Laureen Otto, AN, USA

On 3–5 November 2014, the Northern Regional Medical Command (NRMC) Center for Nursing Science & Clinical Inquiry (CNSCI), located at Womack Army Medical Center (WAMC), Fort Bragg, North Carolina, hosted the 21.5–contact hour TSNRP Research Development Course. LTC (ret) Nancy Ryan-Wenger, AN, USAR; CAPT (ret) Elizabeth Barker, NC, USN; and Victoria von Sadovszky, PhD, RN, taught the course, which was attended by more than 40 military and civilian registered nurses at WAMC. Nurses at Joint Base Andrews, Maryland; Kunsan Air Base, South Korea; Lackland Air Force Base, San Antonio, Texas; Fort Bliss, El Paso, Texas; and Fort Lee, Virginia, participated via video teleconference.

The objective of the TSNRP Research Development Course is to introduce the research process to military nurses who are interested in research but need education and mentoring on identifying a research question or planning a research study.

The 3-day course held in November introduced the research process and included topics ranging from the statement of the clinical problem to human subject protection concerns and data analysis. Besides providing didactic instruction throughout the 3 days, TSNRP faculty spent time with course attendees, helping them to refine their own research questions, determine the best research designs, and develop the best methodologies and analytic approaches to answer their research questions. In fact, at the end of the course, one surgical ward Army lieutenant said, “Each day, after the course, I went home reviewing the information and brainstorming about all the possibilities associated with research. I’m definitely interested in military nursing research!” An Army civilian nurse case manager said, “Now I know I may be on the right track in pursuing qualitative research.”

The NRMC CNSCI is grateful to COL Michael Schlicher, AN, USA, his Research Development Course staff, Linda Bell, Kemia Duncan, and TSNRP faculty for their phenomenal support in bringing this course to so many military and civilian registered nurses worldwide. ★

Research Development Course participants

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 Susan Hopkinson, AN, USA, “Development of an Instrument to Characterize Nurse Leader Communication Behavior”

MAJ (ret) Mary McCarthy, AN, USA, “Genomics of Vitamin D Supplementation and Warfighter Nutritional Resilience”

LTC Angela Simmons, AN, USA, “Influencing Professional Quality of Life Among Nurses in a Military Facility”

LTC Chris Weidlich, AN, USA, “Nurse-Led CBT-I on Service Members with PTSD in a Regional Treatment Facility”

Navy

CDR Jennifer Buechel, NC, USN, “HPV Knowledge and HPV Vaccine Uptake Among US Navy Personnel 18 to 26 Years Old”

Air Force

Lt Col Nicole Armitage, USAF, NC, “Effectiveness of a Group Lifestyle Balance Class in an Active Duty Population”
Published Articles by TSNRP Nurse Scientists

Army


LTC Angelo Moore, AN, USA. Factors and Behaviors to Consider when Implementing Patient Centered Medical Home, TSNRP study N11-P05, NTIS accession # PB2015-101279.

LTC Joseph O’Sullivan, AN, USA. Comparative Resuscitation Measures for Drug Toxicities Utilizing Lipid Emulsions, TSNRP study N10-007, NTIS accession # pending.

COL Sara Breckenridge-Sproat, AN, USA. Building a Unit-Level Mentored Program to Sustain a Culture of Inquiry for Evidence-Based Practice, TSNRP study N10-P05, NTIS accession # pending.

MAJ (ret) Mary McCarthy, AN, USA. A Coaching Intervention to Promote Nutrition and Bone Health in Deployed Soldiers, TSNRP study N10-C02, NTIS accession # pending.

LTC Angelo Moore, AN, USA. Factors and Behaviors to Consider when Implementing Patient Centered Medical Home, TSNRP study N11-P05, NTIS accession # PB2015-101279.

COL Sara Breckenridge-Sproat, AN, USA. Building a Unit-Level Mentored Program to Sustain a Culture of Inquiry for Evidence-Based Practice, TSNRP study N10-P05, NTIS accession # pending.

MAJ (ret) Mary McCarthy, AN, USA. A Coaching Intervention to Promote Nutrition and Bone Health in Deployed Soldiers, TSNRP study N10-C02, NTIS accession # pending.

LTC Angelo Moore, AN, USA. Factors and Behaviors to Consider when Implementing Patient Centered Medical Home, TSNRP study N11-P05, NTIS accession # PB2015-101279.

LTC Joseph O’Sullivan, AN, USA. Comparative Resuscitation Measures for Drug Toxicities Utilizing Lipid Emulsions, TSNRP study N10-007, NTIS accession # pending.

COL (ret) Patricia Patrician, AN, USA. Workload Intensity, the Nursing Practice Environment, and Adverse Events, TSNRP study N10-C01, NTIS accession # pending.

CAPT Janet Pierce, NC, USNR. Coenzyme Q10: A New Treatment for Hemorrhagic Shock, TSNRP study N11-C02, NTIS accession # PB2015-101350.

MAJ Johnnie Robbins, AN, USA. Implementing an Evidence-Based Preceptorship Program in a Military Burn Center, TSNRP study N12-P04, NTIS accession # PB2015-102080.

Navy


Air Force


Podium Presentation

TSNRP Welcomes Natasha Hurwitz

On 5 January 2015, Natasha Hurwitz joined TSNRP as its grants manager. Ms. Hurwitz is no stranger to the federal grants environment, having worked as a grants management specialist at the National Heart, Lung, and Blood Institute; the National Institute of Environmental Health Sciences; and the National Institute of Mental Health, all part of the National Institutes of Health (NIH). Her largest project at NIH was managing the Asthma Clinical Trial with nine sites and a data coordinating center. She also was active in the grants management community and was a member of the Staff Training in Extramural Programs Committee, serving as co-chair for the committee’s “Post-Traumatic Stress Disorder: What are the Facts?” seminar. Ms. Hurwitz, a graduate of the University of Maryland University College, is excited to work in a research-oriented environment again.

When asked what drew her to TSNRP, Ms. Hurwitz responded, “I am excited to work with the military community to support nursing research. The projects TSNRP is funding are an important part of supporting our Service members, and I am delighted to be a part of it.”

Ms. Hurwitz’s grants management background, interest in supporting military nursing research, and sense of humor make her a great addition to the TSNRP team.

Promotions

The following military nurse scientists have recently received promotions in military rank. Please join us in extending congratulations to these exceptional military nurses.

**Army**
- Michael Schlicher to COL
- Gordon West to LTC
- Patricia Schmidt to MAJ

**Air Force**
- Brenda Morgan to Col
- Lt Col Nicole Armitage selected for O-6
- Lt Col Susan Dukes selected for O-6

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, to Walter Reed National Military Medical Center
- CDR Lisa Braun, NC, USN, to Naval Medical Center Portsmouth
- CDR Abigail Marter, NC, USN, to Naval Medical Center San Diego

Retirement

Please join us in wishing the very best to **LTC Angelo Moore, AN, USA**, who has joined the ranks of the recently retired!
TSNRP Executive Board Update

Col Donaldson Joins the TSNRP Executive Board of Directors

TSNRP welcomes Col Stephen “Keith” Donaldson, USAF, NC, as the newest member of its Executive Board of Directors. Col Donaldson has served as the Director of Air Force Nursing Services and Chief of the Officer Force Development Division at Headquarters U.S. Air Force since July 2014. In this role, he develops, coordinates, deploys, and evaluates policies and programs affecting 19,000 nursing personnel in active and reserve components of the Air Force Medical Service. As the Surgeon General functional expert, Col Donaldson also directs and oversees nursing force structure, education and training, career development, and standards of nursing care and practice.

Col Donaldson earned a bachelor’s degree in nursing from Armstrong State College in Savannah, Georgia, in 1986. He then began his nursing career as a staff nurse in the Neurological Intensive Care Unit at Savannah’s St. Joseph’s Hospital. He received a master’s degree in nursing administration from Georgia College and Atlantic University in 1996.

Col Donaldson started his military nursing career in 1991, when he accepted a direct commission into the U.S. Air Force Nurse Corps as a first lieutenant. He was assigned

| CHARACTERISTICS AND DIFFERENCES OF QUALITATIVE AND QUANTITATIVE RESEARCH |
|---------------------------------|---------------------------------|-------------------------------|-------------------------|-----------------|
| DEFINITION                     | WORD CLUES                      | METHODS                       | SEARCH TERMS             | DATA             | RESEARCHER ROLE     |
| Qualitative                    | "Investigations which use sensory methods such as listening or observing to gather and organize data into patterns or themes." (CINAHL) | • Ethnographic study          | • Focus groups             | • Qualitative studies (CINAHL) | Subjective—in involved as a participant observer |
|                                 |                                 | • Field notes                 | • Interviews              | • Qualitative research (MEDLINE) |                                           |
|                                 |                                 | • Field research              | • Recording behavior      | • Ideas            |                                           |
|                                 |                                 | • Focus group                 | • Unstructured observation | • Interpretive     |                                           |
|                                 |                                 | • Observation                 |                          | • Narrative        |                                           |
|                                 |                                 | • Open ended                  |                          | descriptions       |                                           |
|                                 |                                 | • Phenomenological            |                          | • Text based       |                                           |
| Quantitative                   | "Scientific investigations in which numbers are used to measure variables such as characteristics, concepts, or things.” (CINAHL) | • Case-control study          | 1. Developing hypothesis | • Measurable       | Objective—separate; observes but does not participate |
|                                 |                                 | • Clinical trial              | 2. Determining methodology | • Numbers          |                                           |
|                                 |                                 | • Cohort study                | 3. Collecting data        | • Statistics        |                                           |
|                                 |                                 | • Control group               | 4. Analyzing data using mathematical and statistical techniques |                      |                                           |
|                                 |                                 | • Experimental group          |                          |                     |                                           |
|                                 |                                 | • Intervention                |                          |                     |                                           |
|                                 |                                 | • Lab experiment              |                          |                     |                                           |
|                                 |                                 | • Randomized controlled trial |                          |                     |                                           |
|                                 |                                 | • Statistical                 |                          |                     |                                           |
|                                 |                                 | • Structured questionnaire    |                          |                     |                                           |
to Strategic Air Command’s Robert L. Thompson Strategic Hospital at Carswell Air Force Base in Texas, where he worked as a staff nurse on medical-surgical and intensive care inpatient units.

Since then, he has served on numerous Air Force bases throughout the United States as well as in Japan and the Republic of Korea, steadily progressing from staff nurse to nurse manager to increasingly higher rank positions due to his hard work, extended education, and remarkable dedication to military nursing and the Air Force Medical Service.

Over more than 20 years, Col Donaldson’s experiences have covered a wide spectrum of medical operations, including inpatient, intensive care, outpatient, aero-medical evacuation, and population health, and he has held a variety of leadership positions, including executive officer; Air Force–level readiness program monitor; Major Command staff officer; and command at the section, squadron, and group levels.

Col Donaldson’s outstanding contributions to the Air Force, the Air Force Medical Service, and military nursing make him a formidable model for military nurses. His drive and dedication have earned him numerous military awards and decorations, including the Army Achievement Medal, the Air Force Achievement Medal, the Air Force Commendation Medal with two oak leaf clusters, the Aerial Achievement Medal, and the Meritorious Service Medal with five oak leaf clusters.

Please join TSNRP in congratulating Col Donaldson for his recent appointment and his many achievements as a military nurse.

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### Advantages and Disadvantages of Qualitative and Quantitative Research

#### Qualitative

<table>
<thead>
<tr>
<th>Smaller Sample Size</th>
<th>Natural Setting</th>
<th>Varied Questioning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The subject under study can be explored in greater depth.</td>
<td><strong>Advantages</strong></td>
<td><strong>Advantages</strong></td>
</tr>
<tr>
<td>• Researchers may discover new ideas.</td>
<td><strong>Results are more valid.</strong></td>
<td>• Researchers discover different directions for the research.</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Results cannot be generalized.</td>
<td><strong>Disadvantages</strong></td>
<td>• Data may not be reliable if the observer becomes less objective.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Study may be unfocused; if not properly planned, it may produce no information.</td>
</tr>
</tbody>
</table>

#### Quantitative

<table>
<thead>
<tr>
<th>Larger Sample Size</th>
<th>Artificial Setting</th>
<th>Standardized</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td></td>
<td><strong>Advantages</strong></td>
</tr>
<tr>
<td>Results can be generalized.</td>
<td><strong>Advantages</strong></td>
<td>• Data are easier to analyze (can be quantified).</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td></td>
<td>• Data can be compared over time.</td>
</tr>
<tr>
<td>• Data collection is more time consuming.</td>
<td><strong>Disadvantages</strong></td>
<td>• Results are precise (percentage, number, ratios).</td>
</tr>
<tr>
<td>• Data collection depends on instruments and the requirements associated with them.</td>
<td></td>
<td><strong>Disadvantages</strong></td>
</tr>
<tr>
<td>Results may not be valid.</td>
<td></td>
<td>• Researchers cannot ask follow-up questions.</td>
</tr>
<tr>
<td></td>
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<td>• Researchers must test instruments before the research project begins.</td>
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</tbody>
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Awards and Honors

Col Marla De Jong Named 1 of 25 Visionary Pioneers in Nursing

Former TSNRP Executive Director Col Marla De Jong, USAF, NC, associate dean for research, director of the Faye Glenn Abdellah Center for Military and Federal Health Research, and senior Air Force advisor at the Daniel K. Inouye Graduate School of Nursing at the Uniformed Services University of the Health Sciences, is among 25 University of Maryland School of Nursing (UMSON) alumni named as Visionary Pioneers in nursing for 2015. As part of its 125th anniversary celebration in April 2015, UMSON honored outstanding alumni, both living and deceased, as Visionary Pioneers who have become expert clinicians, educators, and leaders in Maryland, across the nation, and around the world. Those selected have made significant contributions to the nursing profession through their leadership, innovation, or entrepreneurship.

“We are excited to announce our inaugural Visionary Pioneer Award winners during this momentous year in the School of Nursing’s history,” said Jane M. Kirschling, PhD, dean of UMSON. “All of these outstanding alumni have had an impact on the nursing profession and health...”

Col Marla De Jong

Awards and Recognition

TSNRP congratulates the following military nurse scientists, who recently received awards or other honors.

**Maj Gen Dorothy Hogg, USAF, NC,** Chief of the Air Force Nurse Corps, was selected as Deputy Surgeon General.

**COL Laura Feider, AN, USA,** Chief of the Department of Nursing Science at the U.S. Army Medical Department Center & School, received the 2015 American Organization of Nurse Executives (AONE) Mentor Award. COL Feider was presented with the award during the AONE annual meeting on Friday, 17 April, in Phoenix, Arizona.

**CDR Virginia Blackman, NC, USN,** successfully defended her dissertation, “Prevalence and Predictors of Pre-Hospital and Emergency Department Pain Assessment, Pain Severity, and Pre-Hospital Analgesic Use in Military Trauma Patients in a Combat Zone.”


**CDR Jennifer Buechel, NC, USN,** was selected as a finalist for the 2015 Western Institute of Nursing Annual Conference’s Best Research and Information Exchange Poster Award for her poster based on her dissertation proposal, “HPV Knowledge and HPV Vaccine Uptake Among U.S. Navy Personnel 18 to 26 Years of Age.” CDR Buechel also was selected to present posters at the 2015 Sigma Theta Tau International Nursing Research Congress and the 2015 Association of California Nurse Leaders Annual Conference.

The international journal *Nursing Ethics* awarded **CDR Wendy Cook, NC, USN,** the 2014 Paul Wainwright Postgraduate Prize for her essay “Questionable informed consent of vulnerable pregnant research participants in South India: What a staff reminder poster does not say.” The paper will be published in an upcoming edition of the journal.

Col Marla De Jong
care, and we are extremely proud of them.” Col De Jong earned her MS in nursing from UMSON in 1996. During her 26-year Air Force career, Col De Jong’s contributions have shaped military and civilian nursing clinical practice, the delivery of health care, nursing education and management, research, and health policy. When deployed to Iraq as program manager for the Joint Theater Trauma System, she wrote the first air transport policy, coordinated 10 clinical practice guidelines, and secured support for trauma initiatives at NATO-led hospitals, thereby contributing to the highest combat casualty survival rate in history.

Col De Jong has held numerous leadership positions, and her extraordinary skills have been frequently recognized. She has served not only as Executive Director of TSNRP but also as dean of the United States Air Force School of Aerospace Medicine. Her military awards include seven medals with several oak leaf clusters, Air Force Field Grade Nurse of the Year, and Nurse of the Year at three military hospitals. She also received the Flame of Excellence Award from the American Association of Critical-Care Nurses, was inducted into the University of Kentucky College of Nursing Hall of Fame, received the UMSON Distinguished Alumni Award and the Grand View University Distinguished Alumni Award, and is a Fellow of the American Academy of Nursing. Please join TSNRP in congratulating Col De Jong on her latest honor.

TSNRP Executive Director Appointed to the National Advisory Council for Nursing Research (NACNR)

The National Advisory Council for Nursing Research provides scientific review and recommendations to the National Institute of Nursing Research (NINR). The Council reviews grant applications and recommends to the NINR director which applications should be approved and considered for funding. These recommendations are based not only on considerations of scientific merit but also on the relevance of the proposed project to NINR’s programs and priorities. The Council also reviews NINR’s extramural programs and makes recommendations about its intramural research activities.

The Council consists of 15 members appointed by the Secretary of Health and Human Services and six ex officio members (or their designees): the Secretary of Health and Human Services, the Director of the National Institutes of Health, the Director of NINR, the Chief Nursing Officer of the Department of Veterans Affairs, the Assistant Secretary of Defense for Health Affairs (ASD-HA), and the Director of the Health Resources and Services Administration’s Division of Nursing. COL Michael Schlicher, AN, USA, TSNRP’s Executive Director, will represent the ASD-HA’s position on the Council. TSNRP congratulates COL Schlicher on his appointment.
Events and Deadlines

Calendar

June 2015

Evidence-Based Practice (EBP) Course
4–5 June
Naval Medical Center Portsmouth
Portsmouth, Virginia

The EBP Course is designed to help students understand the importance of evidence for the advancement of nursing practice and the key principles and strategies needed to implement the EBP process. The course will provide a hands-on illustration of how to appraise, summarize, and translate evidence to support recommendations for quality clinical practice.

July 2015

Research and EBP Grant Camp
20–24 July
San Diego, California

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 includes a modest amount of didactic content about grantsmanship and substantial time during which attendees apply the didactic content to continue writing their applications on the appropriate grant application forms.

August–September 2015

Research and EBP Dissemination Course
31 August–3 September
San Antonio, Texas

The Research and EBP Dissemination Course will include presentations by military nursing leaders and other experts, a poster session, research methodology and education sessions, and a variety of networking opportunities. The course is open to active duty, Reserve, and National Guard military Nurse Corps officers.

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.

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Senior Air Force Advisor
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Fostering excellence in military nursing through science