

TSNRP ★ news

From the Director

SUMMER 2009



LTC Deborah Kenny

What a busy time it has been for TSNRP!

Our activities at the 114th Annual Meeting of AMSUS held in November 2008 were extremely successful and received numerous accolades. Attendance at the Karen A. Rieder Research/Federal Nursing Poster Session exceeded all past sessions—more

than 100 nurses presented 78 posters. This year, we had two international posters, one from the United Kingdom and the other from Finland. We were pleased to have our international colleagues join us, and we hope this will continue at AMSUS 2009. Also in attendance were the Federal Nursing Service Chiefs, who presented certificates and coins to poster presenters. I'm thrilled to say that the TSNRP symposium was standing room only, with Drs. Patricia and Richard Benner as part of a panel of our inter-service researchers who have worked on the study "Clinical Knowledge Development in an Operational Environment." The Federal Nursing Session that followed the symposium was equally stimulating, with excellent presentations that included a Walter Reed–Veterans Administration collaborative project involving patient handoffs and a pain management program in the British Royal Air Force. AMSUS 2008 will be hard to top! We are already planning activities for November 2009 in St. Louis.

In February, TSNRP held a successful Strategic Planning Meeting (see article on p. 2), and our invited attendees worked hard for 2 days developing new strategies to pave the way for the future direction of TSNRP. We have been busy writing congressional testimony and reports, moving forward with three calls for proposals this year, developing a new and improved Web site, reaching out to potential researchers, and planning our many educational activities, including a revised Evidence-Based Practice (EBP) Grant Camp and an Advanced Researcher Forum to be held in October.

Many of you may have noticed that we have a new executive assistant at our front desk. We were able to lure Kemia Duncan back to TSNRP as part of our team. Kemia previously worked as a Resource Center staff member; since returning, she has quickly learned the ins and outs of the programmatic side of TSNRP. Together, she and the other staff members work "behind the scenes" to keep the office functioning as smoothly as a well-oiled machine. Their dedication and hard work help to enhance the success of TSNRP!

This summer, TSNRP will again be moving—this time to offices in Rockville, Maryland. We will keep everyone posted on our new contact information. As with the last move, we expect to maintain full operations and plan not to miss a beat.

Thank you for your continued support of TSNRP.

Deb Kenny, PhD, RN, LTC, AN, USA



TSNRP news is published twice each year by the TriService Nursing Research Program. It is available online at www.usuhs.mil/tsnrp/News/news.php.

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Strategic Planning

Strategic Planning Meeting Renews TSNRP Priorities

The TriService Nursing Research Program (TSNRP) held a successful Strategic Planning Meeting on 3–4 February 2009, with 45 attendees representing active duty, Reserve, retirees, and students from each of the three services. Also in attendance were COL Susanne Clark, CAPT Kathleen Pierce, and Col. Donnalee Sykes, representing the Corps Chiefs, and Dr. Ada Sue Hinshaw, representing the Uniformed Services University of the Health Sciences. CAPT (ret) Jeanne Quindag-Raffels facilitated the meeting. CAPT Jacqueline Rychnovsky, the Active Duty Fellow from Senator Daniel Inouye’s office, gave a presentation on the history of nursing research, the development of the National Institute of Nursing Research, and the subsequent evolution of TSNRP. Prior to the meeting, TSNRP solicited input from the Corps Chiefs for strategic direction and to determine their suggested research priorities. They recommended that



Facilitator: CAPT (ret) Jeanne Quindag-Raffels

the following items be discussed: military clinical practice and outcomes management, research gaps in the TSNRP portfolio and methods to address these gaps, balancing good science with the goals of TSNRP, determining the future focus of TSNRP, mentorship of researchers, and dissemination of outcomes. They provided several areas for research priorities that included care of the wounded warrior, deployment, caring



Left to right: Col. Sandra Tynes, Lt. Col. (ret) Diep Duong, COL Susanne Clark, Lt. Col. Marla De Jong, CAPT Janet Pierce, COL Kathleen Dunemn, CAPT Jacqueline Rychnovsky

for caregivers, evidence-based practice, and care of families of deployed service members. The Corps Chiefs also suggested that fast-track grants be reinstated.

TSNRP also solicited input from attendees to help provide structure for group work during the planning session. Some of their input included strategies to unite the services toward a common goal of producing high-quality and relevant nursing knowledge, promoting the nursing perspective in multidisciplinary research, exploring team research, and reexamining TSNRP’s priorities.

During the meeting, attendees worked in one of four breakout groups to determine TSNRP’s (1) mission and vision, (2) research priorities, (3) researcher development, and (4) goals. The four groups then presented their proposed strategies for feedback from the larger group, incorporated revisions based on the comments, and ultimately presented their ideas to the Service Nurse Corps deputies for further feedback.

The finalized strategic plan for the future direction of TSNRP was presented to the Corps Chiefs at the Executive Board of Directors meeting in March. This new, updated direction outlines TSNRP’s future research priorities and focuses on the development of military nurse researchers through mentorship and development programs.





New Priorities

Mission

To facilitate nursing research to optimize the health of military members and their beneficiaries.

Vision

TSNRP is the premier program that fosters excellence in military nursing science.

Values

Innovation, relevance, excellence, integrity, inquiry, and jointness

Goals

- Expand the cadre of nursing research.
- Foster partnerships for collaborative research.
- Provide an infrastructure to stimulate and support nursing research and evidence-based practice (EBP).

Research Priorities

Force Health Protection

- Fit and ready force
- Deploy with and care for the warrior
- Care for all entrusted to our care

Nursing Competencies and Practice

- Patient outcomes, quality, and safety
- Translation of research into practice/EBP
- Clinical excellence
- Knowledge management, education, and training

Leadership, Ethics, and Mentoring

- Health policy
- Recruitment and retention
- Preparing tomorrow's leaders
- Care of the caregiver



Back row (left to right): Col. Karen Weis, CAPT Patricia Kelley, COL Phyllis Chelette, LTC Mona Bingham; front row (left to right): Col. Sharon Thomas, Col. Michaela Shafer, CAPT Kathleen Pierce, MAJ Felecia Rivers



Left to right: CDR Anita Smith, Lt. Col. Tina Cuellar, Col. Adele Hill, MAJ (ret) Mary McCarthy, CAPT (ret) Charles Vacchiano, Maj. Candy Wilson, Col. Donnalee Sykes



Left to right: COL (ret) Nancy Ryan-Wenger, CAPT Catherine Cox, Col. (ret) Laura Talbot, CDR Michele Kane, Maj. Jennifer Hatzfeld, Dr. Victoria von Sadovszky, CAPT Linnea Axman

Optimal Oxygen: What Is the Right Amount for Hemorrhagic Shock?

CAPT Janet Pierce, PhD, RN,
NC, USNR

Our military warriors have experienced much trauma during Operation Iraqi Freedom and Operation Enduring Freedom. Their injuries often result in hemorrhagic events that can affect both their lungs and diaphragm. Because the diaphragm is

responsible for between 70% and 80% of the work of breathing, reducing damage to this muscle is essential to prevent respiratory arrest. A study funded by the TriService Nursing Research Program is now being conducted to investigate

and determine the optimal oxygen concentration to use following hemorrhagic shock that will minimize damage to the lungs and diaphragm. CAPT Janet Pierce, PhD, RN, NC, USNR, and her research team have examined the effects of 21%, 40%, 60%, and 100% oxygen on hemorrhagic shock in rats.

For more than 9 months, the Pierce laboratory group has studied these different oxygen concentrations as they relate to free radical damage in the lungs and diaphragm. The type of free radical measured directly in the tissues is a reactive oxygen species—specifically, hydrogen peroxide. This group is the first to measure hydrogen peroxide in whole tissue using a new method called laser scanning cytometry.

In these experiments, 40% of the total blood volume of anesthetized rats is removed to elicit a mean arterial blood pressure below 65 mm Hg. Following 30 minutes of

Preliminary results suggest that the administration of 21% and 100% oxygen following hemorrhagic shock produces large amounts of hydrogen peroxide and apoptosis. The most common percentage of oxygen used in hemorrhagic shock patients is 100%, which may lead to unnecessary cell damage to the lungs and diaphragm. Hence, data from these experiments may influence the best practice for oxygen therapy in hemorrhagic shock patients.

In the future, the Pierce laboratory group will investigate the free radical scavenger effects of dopamine in hemorrhagic shock. One hypothesis that



CAPT Janet Pierce (second from right) and her research team at the University of Kansas

controlled hemorrhagic shock, one of four oxygen concentrations is administered for 1 hour. At the end of each experiment, the lungs and diaphragm are removed for analysis of programmed cell death (i.e., apoptosis) and hydrogen peroxide concentration to determine the degree of free radical damage.

will be tested is whether the administration of dopamine will decrease the amount of cell damage produced when higher concentrations of oxygen are administered. These experiments will provide useful information to determine whether dopamine is protective when higher concentrations of oxygen are necessary to maintain adequate tissue oxygenation. ★



Deployed Combat Casualty Research Team: Conducting Research in a Deployed Theater of Operations

COL Petra Goodman, PhD, AN, USA; Col. Margaret McNeill, PhD, USAF, NC; LTC Teresa Hendrix, PhD, AN, USA; MAJ Amber Pocrinch, AN, USA; and CPT Bethany Edge, AN, USA

Greetings from the Deployed Combat Casualty Research Team (DC²RT)! We would like to tell you about the DC²RT and how you can conduct research in a deployed theater of operations. To facilitate the provision of the best military medical care for every soldier, sailor, airperson, and marine put in harm's way, the military has placed significant emphasis on ensuring that we learn all we can about medical care in deployed settings. Based on this mission, in 2006 the DC²RT was established to help facilitate research in the Multinational Corps Iraq (MNC-I) theater. The DC²RT directly assists investigators with the development and implementation of research protocols, facilitates the approval of research protocols, and monitors active protocols for compliance with human and research regulations. Many of the treatment protocols and clinical practice guidelines that we currently use were developed as a result of lessons learned from Operation Iraqi Freedom.

The joint DC²RT Army and Air Force team consists of professional, multidisciplinary health care providers—including physicians, nurses,

and medical specialists, such as psychologists—and laboratory officers, both commissioned and non-commissioned. We currently have two teams in theater, one assigned at the combat support hospital in Baghdad and the other at the Air Force hospital in Balad. The team rotates every 6 months and includes four positions—generally, medical director, deputy director, research scientist/data collector, and non-commissioned officer in charge (NCOIC)/lab technician.

The medical director's role is to supervise the development, approval, implementation, and monitoring of research protocols in theater. He or she assists investigators with the development and implementation of research protocols and reviews all proposals to determine whether they are theater specific, will have significant operational impact, are feasible to conduct in a combat environment, and are compliant with regulations. In addition, the director has the mission of expanding research throughout the theater, establishing guidelines for joint service research, and reporting progress directly to the MNC-I surgeon and the Institute of Surgical Research (ISR) at Fort Sam Houston.

The deputy director exercises administrative oversight for the development, approval, implementation, reporting, and status of research protocols. In addition, through initial review and monitoring, he or she ensures the effective application of practices and procedures designed for the protection of the rights and welfare of human subjects and compliance with HIPAA regulations. Moreover, the deputy director ensures prompt reporting to the Brooke Army Medical

Center (BAMC) Institutional Review Board (IRB) of proposed changes in research activity, unanticipated injuries or problems involving risks to subjects or others, noncompliance issues, protocol deviations, and suspension or termination of IRB approval for research.

The research scientist/data collector serves as on-site principal investigator for select protocols, managing the protocols and conducting data collection.

The NCOIC/lab technician is responsible for team logistics, supplies, and administration as well as ensuring that the team maintains military readiness and safety. He or she maintains operational functioning/quality control; orders supplies; and collaborates with the ISR for the requisition, acquisition, hand receipt, and return of all equipment. As an experienced lab technician, this person also assists with specimen collection and processing on select protocols requiring such measures and coordinates the shipment of specimens.

Although the team includes only four positions, the positions vary depending on the site's location. For example, because the Baghdad site includes a DC²RT theater director, the Balad team only includes an on-site medical director, deputy director, and one research scientist/data collector. The Human Research Protection Plan for Afghanistan was recently approved, and a new DC²RT is being established in Baghram, Afghanistan. The Baghram team, which was scheduled to arrive in Afghanistan in April or May 2009, includes both a medical director and deputy director. In addition, a new position, human protections assurance (HPA) officer, has been added for each theater.



Research Spotlight, continued

The HPA officer audits research protocols to ensure (a) compliance with human research protection assurances; (b) appropriate maintenance of human subject protection records; and (c) reporting to the BAMC IRB of proposed changes in a research activity, unanticipated injuries or problems involving risks to subjects or others, noncompliance issues, protocol deviations, and suspensions or terminations of IRB approval for the research. The HPA officer educates the personnel involved in the planning and implementation of research on human subject protection regulatory requirements in an effort to help establish, promote, and maintain a culture of integrity while also ensuring compliance with Department of Defense and federal regulations and institutional policies relevant to the protection of human subjects.

If you are an Army or Air Force Nurse Corps officer and are interested in becoming a member of this dynamic team, we urge you to contact us. Army Nurse Corps officers should e-mail the Army Nurse Corps Research Consultant, LTC Mona Bingham, at mona.bingham@amedd.army.mil. Air Force Nurse Corps officers should e-mail Col. Karen Weis at karen.weis@brooks.af.mil.

For those of you interested in conducting research in theater, the following information will assist you in developing ideas and crafting protocols. First, contact the current deputy director via e-mail. The deputy director will then forward you the investigator packet, which includes information on development and approval of research protocols as well as templates for protocol applications, consent forms, HIPAA authorizations/waivers, and so forth. Next, follow these steps:

1. Develop the idea and write the protocol. Early in the development process, contact the DC²RT to discuss potential research topics to help refine the questions; focus the scope of the study; and determine whether the topic, design, and methodology are appropriate and/or feasible for theater implementation. A few restrictions apply. Research on detainees or prisoners of war may not be conducted. In general, no interventional research using investigational or unlicensed test articles necessarily regulated by the U.S. Food and Drug Administration is conducted. Coalition military personnel, civilian personnel, foreign nationals, and host nationals (inclusive of minors aged 0–17 years) may only be included in research protocols through prospective or retrospective chart reviews. Such persons cannot be involved directly in any research protocols.

2. Obtain appropriate signatures. Obtain the signatures of everyone directly involved and listed on the protocol, such as the principal and associate investigators, medical monitors, consultants, and research assistants as well as the in-theater military treatment facility (MTF) commander (CDR). Each of these individuals (excluding the MTF CDR) must have current CITI training and a curriculum vitae (CV). In addition, ensure that CVs and CITI training are maintained (i.e., renewed every 2 years).

3. Submit the protocol to the DC²RT. The DC²RT will review the protocol. If there are any comments, the protocol will be returned for revisions. This process may continue until the protocol is complete. Thereafter, the DC²RT director approves and signs the protocol. You may submit the protocol to the DC²RT prior to acquisition of all the signatures so



Back row (left to right): LTC Teri Hendrix, Capt. Bethany Edge, Col. Peggy McNeill, BG Joseph Carvalho, Jr., MAJ Amber Pocrinch, Lt. Col. Dave Tran, COL Petra Goodman; front row (left to right): Lt. Col. Claudia Sands, SFC Erin Trudden, LT Shad Deering



that the research team and the MTF CDR can sign the final draft of the protocol. However, all signatures must be obtained before the protocol is forwarded to the next level.

4. Submit the protocol for scientific review by the ISR and review by the Health Research Protection Program (HRPP) Institutional Official (IO).

Next, the DC²RT will forward the research protocol to the ISR for scientific review and to the HRPP IO (the MNC-I surgeon) for review. Again, if there are any comments from the HRPP IO, the protocol will be returned for revisions. Once the protocol is complete, the HRPP IO approves and signs the protocol. In addition, upon completion of the scientific reviews, you will

be required to respond to reviewer comments and revise the protocol as needed.

5. Submit the protocol to BAMC IRB for approval.

Finally, the DC²RT will forward the research protocol to the BAMC IRB for approval. The approval authority for all research studies conducted in the MNC-I theater is the BAMC IRB. An expected time frame for approval of a research protocol is outlined in Table 1.

The members of the DC²RT look forward to working with you and supporting your research. Please do not hesitate to contact us with any questions you may have! The current team was scheduled to redeploy in early March. You can contact the new

Deputy Director, LTC Lori Trego, at lori.trego@iraq.centcom.mil. ★

Step	Average Time
DC ² RT review	1 wk*
HRRP IO review	1–2 wk**
Scientific review	1–2 wk**
BAMC IRB	2–6 wk***
Total Time	13 wk

* This is only an estimate; the actual length of time may be shorter or longer depending on the quality of the protocol and the required revisions.

** These two reviews are often done simultaneously.

*** The review time by the BAMC IRB will depend on the type of protocol (e.g., exempt, expedited, or full board) and on the IRB's schedule.

Maj. Gen. Siniscalchi and Col. Sykes Join TSNRP Executive Board

TSNRP is excited to welcome Maj. Gen. Kimberly A. Siniscalchi and Col. Donnalee Sykes as the newest members of our Executive Board of Directors.

Maj. Gen. Siniscalchi is the new Assistant Air Force Surgeon General for Medical Force Development and Assistant Air Force Surgeon General for Nursing Services. She was promoted in December 2008 and pinned on her second star during a promotion ceremony on 4 December at the Bolling Officers' Club. As Assistant Air Force Surgeon General for Nursing Services, she creates and evaluates nursing policies and programs for 19,000 active duty, Guard, and Reserve nursing personnel. Before this assignment, she served as Deputy Command Surgeon and



Maj. Gen. Siniscalchi Col. Donnalee Sykes

Command Nurse, Air Force Materiel Command, at Wright-Patterson Air Force Base in Dayton, Ohio. She has extensive nursing and leadership experience, including 8 years commanding at squadron and group levels and serving Presidents George H. W. Bush and William J. Clinton as the Air Force nurse assigned to the White House Medical Unit. Her awards include two Legion of Merit

awards, the Defense Meritorious Service Medal, four Meritorious Service Medals, and three Air Force Commendation Medals. Maj. Gen. Siniscalchi is a well-respected leader who will influence the direction of military nursing research.

Col. Donnalee Sykes is the Chief of the Education and Training Division and Director of Air Force Nursing Services in the Office of the Air Force Surgeon General. She is the Surgeon General functional expert and oversees the nursing force structure, education and training, career development, staff utilization, and standards of nursing care and practice. Before this assignment, she was the Commander of the 437th Medical Group in Charleston, South Carolina. ★



TSNRP Resource Center Offers Enrichment Opportunities to Military Nurses Interested in Research

Every year, a new crop of military nurse researchers joins the ranks of nursing research scientists, thanks to the Grant Camp program of TSNRP's Resource Center. The magazine *Advance for Nurses* recognized the Resource Center as a researcher's resource in its 21 April 2008 issue.

Grant Camp is offered each summer to Nurse Corps officers in the Army, Navy, Air Force, and National Guard who profess interest in and enthusiasm for research. The Grant Camp application, usually posted on the TSNRP Web site (www.usuhs.mil/tsnrp) in November, helps the panel direct applicants to the course that would best serve their needs. Costs of registration, travel, housing, and per diem are sponsored by the Resource Center.

A basic course on Research Development is open to all eligible applicants as an introduction to research, including how to develop a research question. This program consists of 2 days of didactic and group work sessions and paves the way for nurses who complete this course to seriously consider including nursing research in their career trajectory. Naval Base Coronado, in San Diego, is the venue for this program, usually held in August.

Grant Camp 1 is designed for nurses with some prior research preparation and educational training. Many, though not all, participants are nurses prepared on a doctoral or master's

degree level. Other participants are in doctoral programs, getting ready to write their dissertations. Nurse officers enrolled in a doctoral or master's program financed through their military service are directed by their Corps Chief to participate in Grant Camp. The summer between the first and second year in graduate school is the recommended time for participation.

A research proposal with a clear statement of a military-unique or military-relevant research problem, supported by a well-researched literature review and meeting current research priorities established by the Corps Chiefs, is a requirement for Grant Camp 1. Proposal writers whose submissions meet these prerequisites, as determined by the review panel, are invited to attend.

This 5-day program takes place in May at the Uniformed Services University of the Health Sciences in Bethesda, Maryland, and consists of a combination of didactic lectures, group work, and one-on-one sessions with faculty members who are selected for their subject matter expertise and extensive research experience.

Grant Camp 2 invites participants who have completed Grant Camp 1 and made measurable progress in their proposal revisions. Activities include a mock scientific review of proposals and individual and group consultations with faculty to further refine the proposal. The session lasts 2 days and usually takes place at Naval Base Coronado in San Diego.

The Grant Camp application includes a disclaimer stating that attendance at Grant Camp does not guarantee funding of research proposals. Nonetheless, approximately 56% of Grant Camp graduates successfully submit grants for TSNRP funding, compared with a 38% funding

rate for all grant applicants (including both Grant Camp and non-Grant Camp participants).

An Evidence-Based Practice (EBP) Grant Camp was offered for the first time in 2008. The 2009 EBP Grant Camp has expanded to respond to the needs expressed by last year's participants. It will start with a 3-day session at Madigan Army Medical Center in Tacoma, Washington. Eligibility requirements are the same for EBP grants. The applicant must submit an EBP topic and state its relevance to the applicant's institution.

On occasion, an Advanced Researcher Forum is scheduled for seasoned researchers to share ideas, update their technological skills, and reconnect with fellow researchers.

The Resource Center's other projects include a publication workshop in conjunction with the Phyllis J. Verhonick Nursing Research Course offered every other year and the Karen A. Rieder Research/Federal Nursing Poster Session held each year at the AMSUS annual meeting. The Resource Center provides substantial support to the Pacific Institute of Nursing Conference and sponsors symposiums on military nursing research at national and international nursing conferences.

For an application to any of the Resource Center's events, please send an e-mail to TSNRP@usuhs.mil stating your request. To contact the Program Manager of the Resource Center, please send an e-mail to mburcroff@usuhs.mil. ★

TSNRP has a new Web site!

Please visit us at www.usuhs.mil/tsnrp



Searching for International Research Mentors

Col. John S. Murray, PhD, RN, CPNP, CS, FAAN

Each year a nurse researcher from one of the military services travels to Asia as an International Visiting Scholar to teach at the National Defense Medical Center University, Republic of China. Research topics taught range from proposal development and research methods to evidence-based practice and military and federal health research priorities. Previous visiting scholars have included COL (ret) Penny Pierce, PhD, RN, USAF, NC; Col. John Murray, PhD, RN, CPNP, CS, FAAN, USAF, NC; and LTC Deborah Kenny, PhD, RN, LTC, AN, USA.

Nurses at the National Defense Medical Center University have a keen interest in learning as much about nursing research as possible. Unfortunately, the number of doctoral-level nurses is very small within the academic institution. As a result, these nurses rely heavily on partnerships with other countries—primarily the United States, where many of the nurses receive graduate education.

A partnership currently under way is creating a list of research mentors who would be willing to consult and collaborate with nurses at the National Defense Medical Center University. Mentors are being sought with backgrounds in the following areas: critical care nursing, pediatric oncology nursing, high-risk neonatal care, medical-surgical nursing, health promotion, outcomes measurement/patient outcomes, and qualitative research methods.

If you are interested in being a research mentor to one of our international nursing colleagues, please send your name, rank, military service affiliation, and contact information (including e-mail address) to Col. John Murray at john.murray@med.navy.mil. ★

Newly Published Final Reports

TSNRP Final Reports are a programmatic requirement, and their publication is another step in research dissemination. These reports are not only for public access, but they also inform the citizens of the United States about how we spend public funds.

The TSNRP Final Reports listed below were assigned NTIS accession numbers and entered into NTIS and CINAHL databases with links on TSNRP's Web site. The PB number enables you to find the article quickly on NTIS.

Congratulations to the following two military nurse researchers for completing the Final Report process!

LTC (ret) Nancy Ryan-Wenger, AN, USA (2008). *Development of the Critical Care Air Transport Nurse Deployability Index (CCATT-DI)*.

TSNRP Study N05-015, NTIS Accession #PB2008-112238.

Col. Margaret McNeill, USAF, NC (2009). *Critical Care Performance in a Simulated Military Aircraft Cabin Environment*, TSNRP Study N06-P02, NTIS Accession #PB2009-107898. ★



Published Articles by TSNRP Researchers

2007

Estabrooks, C. A., **Kenny, D. J.**, Adewale, A. J., Cummings, G. G., & Mallidou, A. A. (2007). A comparison of research utilization among nurses working in Canadian civilian and United States Army healthcare settings. *Research in Nursing & Health*, 30(3), 282-296.

2008

Abbott, R. (2008). Geographic analysis of ambulance availability in Arkansas. *Family & Community Health Journal*, 31(1), 35-43.

Chung, M. L., Lennie, T. A., **de Jong, M.**, Wu, J.-R., Riegel, B., & Moser, D. K. (2008). Patients differ in their ability to self-monitor adherence to a low-sodium diet versus medication. *Journal of Cardiac Failure*, 14(2), 114-120.

De Jong, M. J. (2008). Impact of anxiety on cardiac disease. In D. K. Moser & B. Riegel (Eds.), *Cardiac nursing: A companion to Braunwald's heart disease* (pp. 533-542). Philadelphia: Elsevier.

De Jong, M. J., Martin, K. D., Huddleston, M., Spott, M. A., McCoy, J., Black, J. A., et al. (2008). Performance improvement on the battlefield. *Journal of Trauma Nursing*, 15(4), 174-180.

De Jong, M. J., Escalera, K., Coombs, V., Rempher, K., Obias-Manno, D., & Gordon, D. (2008). Patient management: Cardiovascular system. In P. G. Morton & D. K. Fontaine (Eds.), *Critical care nursing: A holistic approach* (9th ed., pp. 326-542). Philadelphia: Lippincott Williams & Wilkins.

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Publications, continued

(2008). Incidence of posttraumatic stress disorder and mild traumatic brain injury in burned service members: Preliminary report. *Journal of Trauma-Injury Infection & Critical Care Advances in Combat Casualty Care: Clinical Outcomes from the War*, 64(2), S200–S206.

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Hatzfeld, J. J., Cody-Connor, C., Whitaker, V. B., & Gaston-Johansson, F. (2008). African-American perceptions of health disparities: A qualitative analysis. *Journal of National Black Nurses Association*, 19(1), 34–41.

Jennings, B. M., Yoder, L. H., Heiner, S. L., Loan, L. A., & Bingham, M. O. (2008). Soldiers with musculoskeletal injuries. *Journal of Nursing Scholarship*, 40(3), 268–274.

Kurtzman, E. T., & **Jennings, B. M.** (2008). Capturing the imagination of nurse executives in tracking the quality of nursing care. *Nursing Administration Quarterly*, 32(3), 235–246.

Kurtzman, E. T., & **Jennings, B. M.** (2008). Trends in transparency: Nursing performance measurement and reporting. *Journal of Nursing Administration*, 38(7/8), 349–354.

McGhee, L. L., Maani, C. V., Garza, T. H. B. S., **Gaylord, K. M.**, & Black, I. H. (2008). The correlation between ketamine and posttraumatic stress disorder in burned service members. *Journal of Trauma-Injury Infection & Critical Care Advances in Combat Casualty Care: Clinical Outcomes from the War*, 64(2), S195–S199.

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awareness and skills to reduce health disparities in cancer. *MEDSURG Nursing*, 17(2), 114–121.

2009

Bridges, E. J., & Evers, K. (2009). Wartime critical care air transport. *Military Medicine*, 174(4), 370–375.

Hopkins-Chadwick, D. L., & Ryan-Wenger, N. (2009). Stress in junior enlisted Air Force women with and without children. *Western Journal of Nursing Research*, 31(3), 409–427.

Kane, M. A., Kasper, C. E., & Kalinich, J. F. (2009). Protocol for the assessment of potential health effects from embedded metal fragments. *Military Medicine*, 174(3), 265–269.

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Nelson, J. P., Pederson, L. L., & Lewis, J. (2009). Tobacco use in the Army: Illuminating patterns, practices, and options for treatment. *Military Medicine*, 174(2), 162–169.

Wu, J.-R., Moser, D. K., **de Jong, M. J.**, Rayens, M. K., Chung, M. L., Riegel, B., et al. (2009). Defining an evidence-based cutpoint for medication adherence in heart failure. *American Heart Journal*, 157(2), 285–291.

Zangaro, G. A., & Johantgen, M. (2009). Registered nurses' job satisfaction in navy hospitals. *Military Medicine*, 174(1), 76–81. ★

Know Your Specialty Leaders

Your 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 Council.

U.S. Army

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USNS *Mercy* Helps Provide a WWII History Lesson

LCDR Rose Abbott, NC, USNR, is a doctoral candidate at the University of Arkansas for Medical Sciences. She is scheduled to take her comprehensive exams in January 2010 and is actively moving through the process of selecting her dissertation topic. Right now she is planning to study the spread of tuberculosis in the Hispanic population using a computer modeling technique called geographical information systems (GIS), a melding of her two loves—nursing and forestry. Her ultimate goal is to teach and conduct research in environmental nursing.

Like so many military nurses, she has a rich and varied history that helped her develop nursing and patient care skills. Born in Brownsville, Texas, LCDR Abbott became enamored with the outdoors, World War II history, and nursing. She began her nursing career as a nurse's aide, then became a licensed vocational nurse. After receiving an associate degree in nursing, she went on to earn a BSN. As a nurse, she worked on medical-surgical, labor and delivery, critical care, and emergency department units.

LCDR Abbott is a dedicated outdoorswoman. While employed as a nurse in southern Illinois, she also worked full-time as a small business owner in grounds maintenance. She is as comfortable riding a tractor or driving a snowplow as she is starting an IV. She earned both a BS and MS in forestry at Oklahoma State University while she followed her military husband

from one assignment to another and continued to work as a nurse.

She spent 9 years on active duty and 2 years in the Reserves with the U.S. Air Force. In 1988, she left military service to raise her three daughters but returned in 2003, this time as a Navy Reserve officer. Currently, she is the training officer and health promotion coordinator for the Naval Reserve Operational Health Support Unit Pensacola Detachment J at the Little Rock Naval Operational Support Command. Her virtual unit is the Dallas Fleet Hospital Platform.

Last summer, LCDR Abbott was assigned to the USNS *Mercy*, the military sealift command hospital ship. She was deployed as part of the Pacific Partnership 2008, a humanitarian mission serving the people of Chuuk State, formerly known as Truk, in the Federated States of Micronesia. This opportunity allowed her to participate in a few field activities on both Truk Island and Papua, New Guinea. While in Micronesia, she was excited to learn firsthand about the significance of Truk Lagoon during World War II. This lagoon is a sheltered body of water almost 50 miles long by 30 miles wide surrounded by a protective reef. The Japanese acquired Chuuk from Germany in 1914 and were allowed to hold the islands under a 1922 mandate from the League of Nations, which forbids fortification of the lagoon. However, the Japanese were able to build Truk Lagoon into a major seaport in the South Pacific, and it became the operational home base for the Imperial Fleet. Truk was considered the most impregnable of all Japanese strongholds in the Pacific. In 1944, Truk Lagoon was the site of a major 2-day battle between

Japanese and American forces. The battle, named Operation Hailstone by the Americans, resulted in significant losses for the Japanese in both troops and equipment, including 270 aircraft and almost four dozen ships. The Japanese lost the base.

Ironically, it is the relics of these aircraft and ships that have secured some notoriety for the present-day Truk Lagoon among serious wreck divers the world over, who visit the Micronesian island to explore the 6-decade-old underwater mysteries of cruisers, such as the Akagi Maru and the Naka. The shallowness of Truk Lagoon makes it easy to explore its sunken treasures, some of which are partly exposed above water. The lagoon is considered a war grave, and there are strict rules against removing any artifacts. The Trukese hope to preserve their lagoon as an underwater living monument and museum of the war.

In summary, LCDR Abbott's reserve commission affords her the opportunity to serve her country and, at the same time, experience places that help her fulfill and feed her desire to learn about U.S. military history. ★



LCDR Rose Abbott

Awards and Honors

TSNRP Researchers Inducted as AAN Fellows

Congratulations are in order for TSNRP researchers **Col. Elizabeth J. Bridges, PhD, RN, CCNS, FCCM, FAAN, USAFR, NC**, and **Lt. Col. (ret) Joseph Schmelz, PhD, RN, CIP, FAAN, USAF, NC**. They have been inducted as Fellows in the American Academy of Nursing (AAN). This honor is one of the highest achievements in the nursing profession. Fellows include many of nursing's most accomplished leaders in education, management, practice, and research. They are nurses who have been recognized for their extraordinary nursing careers and are among the nation's most highly educated citizens; more than 80% hold doctoral degrees, and the rest have completed master's programs. As stated on the Academy's Web site, "Selection criteria include evidence of significant contributions to nursing and health care. Each nominee must be sponsored by two current Academy Fellows. Selection is based, in part, on the extent to which nominees' nursing careers influence health policies for the benefit of all Americans" (<http://www.aannet.org/i4a/headlines/headlinedetails.cfm?id=139&archive=1>).

Col. Bridges is a clinical nurse researcher at the University of Washington Medical Center and an assistant professor at the University of Washington School of Nursing in Seattle. She is a primary instructor for the U.S. Air Force Critical Care Air Transport Team program, director of the Critical Care Nursing Program at the Defense Institute for Medical Operations, and a core director for the international

course Trauma Systems and Disaster Response. She was an active duty critical nurse in the U.S. Air Force for more than 20 years and is currently serving in the Reserve component. Col. Bridges is an advisor to TSNRP; editor of the TSNRP-funded *Battlefield and Disaster Nursing Pocket Guide*; a co-editor of the textbook *Cardiac Nursing*, 5th edition; and a consultant for military nurse researchers and clinicians on numerous topics related to operational health care and international disaster response. Her clinical research focuses on the care of critically ill or injured patients in austere environments. She has studied patient care during aeromedical transport of military service members, interventions to prevent decubitus ulcer formation during aeromedical transport, integration of high-altitude hemodynamic monitoring, thermal stress, and body temperature maintenance in critically ill patients in field conditions. She also conducts educational research about the use of human patient simulation to prepare nurses for providing care in deployed environments.

Currently, Col. Bridges is an individual mobilization augmentee deployed to Bagram to stand up the research cell there.

Lt. Col. (ret) Schmelz is the director of the Institutional Review Board (IRB) at the University of Texas Health Science Center and an associate research professor in the Department of Acute Nursing Care at the University of Texas Health Science Center at San Antonio. The IRB governs research studies conducted throughout the university.

Dr. Schmelz is a retired U.S. Air Force lieutenant colonel. He conducts military nursing research and recently

co-authored the article "Military nursing research: Translation to disaster response and day-to-day critical care nursing" for the March 2008 issue of *Critical Care Nursing Clinics of North America*.

As reported in the Fall 2008 issue of *TSNRP news*, since 1998 Drs. Bridges and Schmelz have led the largest program of operational nursing research in the Department of Defense. The program, funded by TSNRP, focuses on nursing care provided under austere conditions (e.g., battlefield, aeromedical evacuation, and disaster response). Their work has led to better understanding of and improved care in hypothermia prevention, pressure ulcer prevention, and care of patients requiring in-flight mechanical ventilation or invasive hemodynamic monitoring. ★



Col. Elizabeth J. Bridges and Lt. Col. (ret) Joseph Schmelz



Awards for 2008 Karen A. Rieder Research/Federal Nursing Poster Session

Karen A. Rieder
Research Posters

First Place

“Compassion Fatigue in Comprehensive Combat & Complex Casualty Care Staff Caring for Wounded Warriors”

LTJG Erin Eickhoff, PHN,
RN, NC, USN

CAPT Jacqueline Rychnovsky,
PhD, RN, NC, USN

Second Place

“The Effects of Celox and Traumadex on Rebleeding”

Col. (ret) Arthur Don Johnson,
PhD, RN, USAF, NC

Brian Gegel, Civilian, U.S. Army

Third Place

“The Retention of Recalled Navy Nurse Reservists”

CAPT Catherine Wilson Cox,
PhD, RN, CCRN, CEN, CCNS,
NC, USN (RC)

Federal Nursing Posters

First Place

“Factors Associated with Adherence to Preventive Health Screening”

Capt. Angela K. Schloer, MSN,
MS, RN, USAF, NC

Maj. Gordon K. Ross, MSN, CDE,
CCRN, CEN, USAF, NC

Second Place

“Ethnic Differences in Posttraumatic Stress Disorder (PTSD) Following Musculoskeletal Trauma”

Allison E. Williams, Veterans
Affairs, PhD, ND

Wade R. Smith, Veterans Affairs, MD

Third Place

“Factors Associated with Multi-drug-Resistant (MDR) Acinetobacter Transmission Occurring in Traumatic War Injuries”

LCDR Jeremy Hawker,
MSN, RN, NC, USN,

MAJ Denise Moultrie, AN, USA

CPT Shannon Cole, MSN,
RN, CNOR, AN, USA ★

MAJ Steele Receives Combat Action Badge

MAJ Nancy Steele, AN, USA, was awarded the Combat Action Badge (CAB) on 27 April 2008 for actively engaging or being actively engaged by the enemy. The badge is in keeping with the spirit of the Warrior Ethos and provides special recognition to soldiers who personally engage the enemy or are engaged by the enemy during combat operations. The CAB is a silver badge, 2 inches in width, consisting of an oak wreath supporting a rectangle bearing a bayonet surmounting a grenade. The oak wreath symbolizes strength and loyalty. The bayonet and grenade are associated with active combat.

The CAB may be awarded by any commander delegated authority

by the Secretary of the Army during wartime or the CG, U.S. Army Human Resources Command. The award is announced in permanent orders. The badge is branch or MOS immaterial. Assignment to a combat arms unit or a unit organized to conduct close or offensive combat operations or performing offensive combat operations is not required to qualify for the CAB. However, it is not intended to be awarded to all soldiers who serve in a combat zone or imminent danger area.

TSNRP Is on the Move!!

TSNRP has launched a new Web site with innovative navigation components that help users easily access the information they need—from applying for a grant to browsing TSNRP’s funded studies or calendar of events. Our URL is still www.usuhs.mil/tsnrp. Be sure to stop by the new site and tell us what you think!

TSNRP’s office is moving in September 2009. An official moving date has not yet been set. Please watch our Web site for up-to-date contact information. Our e-mail address (tsnrp@usuhs.mil) will remain the same; so when in doubt, use e-mail to contact us.

LTC Kenny Shares EBP and Research Experience as Visiting Scholar

In December 2008, LTC Deborah Kenny, an expert on evidence-based practice (EBP) in nursing, spent a week as a visiting scholar at the School of Nursing of the National Defense Medical Center University in Taipei, Taiwan, teaching nursing faculty and graduate students about EBP theories, methods, and implementation models. What impressed her most was the Taiwanese nurses' fluency in English, their critical thinking abilities, and their enthusiasm in learning how to enhance their practice through the use of best evidence. These nurses were all military, and they were eager to know all about their U.S. military counterparts, including field exercises and combat training. In fact, they stated that they were interested in forming partnerships with American military nurses and learning about the similarities and differences between them.

LTC Kenny also had the opportunity to lecture at I-Shou University in Kaohsiung County, South

Taiwan, to a multidisciplinary audience about mixed-methods research. The lecture was well received and sparked much interest and many questions. She spent one-on-one time with many of the nurses, discussing interests and offering research advice.

The visit was not all work. LTC Kenny rode a high-speed train that took her 400 miles in 1½ hours. In addition, she visited the National Palace Museum, where many beautiful and famous treasures are displayed; Taipei 101, one of the tallest buildings in the world; the Chiang Kai-shek museum; and the night market, famous for its many Taiwanese wares and delicacies. It was here that the hosting nurses were able to talk her into eating chicken feet! This cultural exchange was an incredible opportunity for both the Taiwanese nurses and LTC Kenny to examine nursing practices and research opportunities. As an added bonus, lifelong friendships were made. ★



First row, middle: Dean Kwua-Yun Wang and LTC Deb Kenny with students at the School of Nursing of the National Defense Medical Center University in Taipei, Taiwan

Events and Deadlines

July 2009

EBP Grant Camp I

8–10 July 2009
Tacoma, Washington

FY 2010 Call for Proposals

published on TSNRP Web site,
13 July 2009

August 2009

Grant Camp II

3–4 August 2009
location TBD

Novice Research Development Course

5–6 August 2009
location TBD

September 2009

Letters of Intent FY 2010A Call

due 8 September 2009

EBP Grant Camp II

15–16 September 2009
location TBD

Post-Award Grant Management Workshop

21–23 September 2009
Potomac, Maryland

October 2009

Advanced Researcher Forum

15–17 October 2009
Bethesda, Maryland

November 2009

FY 2010A Call for Proposals

due 3 November 2009

January 2010

Letters of Intent FY 2010B Call

due 4 January 2010

February 2010

Grant Camp Submission

due 16 February 2010

Making Waves; Flying High

CAPT Janice Stinson, NC, USNR, adjunct professor, University of California, San Francisco, is working on a manuscript with **Lt. Col. (ret) Darlene Gilcreast** and **Col. (ret) Linda Yoder** for *Military Medicine*. CAPT Stinson continues to teach electronic fetal monitoring strip reviews for Alta Bates Summit Medical Center, where she practices nursing. In March, she began courses toward accreditation with the Association of Women's Health, Obstetric and Neonatal Nurses. CAPT Stinson deployed on the USNS *Mercy* during the Pacific Partnership 2008 cruise to Vietnam last summer. She served as the interim Commanding Officer of Operational Health Support Unit for Camp Pendleton last fall. She and her husband are just returning from a trip to the Everest Base Camp in Nepal.

Col. Karen Weis, USAF, NC, submitted the final chapters of a book she has co-authored with Dr. Regina Lederman entitled *Psychosocial Adaptation in Pregnancy: Assessment of Seven Dimensions of Maternal Development*, 3rd edition. Two chapters include results from Col. Weis' TSNRP-funded research project. The book has been published by Springer and is available for purchase.

Col. Weis has authored an instrument entitled the Weis Communication Assessment Tool. This instrument has been used at Eglin Air Force Base to address physician-nurse communication for staff satisfaction as a measure of staffing effectiveness. The Methodist System in Houston has asked for and received permission to use the instrument. Principals in the Methodist

System have approval from their Institutional Review Board to conduct a study in which this instrument will be administered to all nurses who want to participate in that health system.

Col. Weis writes that results from her 2002 TSNRP-funded study determined that first- and second-trimester anxiety impacted birth weight and gestational age. Pregnant wives of deployed service members had the greatest anxiety and more difficulty accepting their pregnancies and identifying with being a mother. These dimensions of adaption predicted satisfaction with motherhood at 6 months postpartum. From these findings, Col. Weis wrote a manual for the Mentors' Offering Maternal Support (M.O.M.S.) program entitled *Birth of a Mother*. Each chapter specifically addresses the dimensions of adaption. The manual has been used in guiding formal support groups.

Weis recently concluded the M.O.M.S. intervention for a randomized-controlled study sponsored by the Air Force Surgeon General's Modernization Directorate. She had 32 participants in the control group (normal prenatal care) and 29 participants in the formal support treatment group. The formal support groups met from 14 weeks after gestation to approximately 32 weeks, with a class every other week. The intent was for participants to finish the M.O.M.S. support group when the women would be attending birthing classes in preparation for delivery. The M.O.M.S. support group was exclusively for pregnant wives of deployed service members. Data analysis will be conducted in the near future.

Col. (ret) Mary Candace Ross, USAF, NC, is now the associate dean for faculty development at Florida

State University College of Nursing. She is working to further nursing research and evidence-based practice. Her current research focuses on the impact of deployment. She began data collection in March at several bases around the country. **Maj. Candy Wilson** and **Col. Elizabeth Bridges** have helped with the initial approvals from their institutional review boards.

Maj. Candy Wilson, USAF, NC, at Lackland Air Force Base, designed the Community of Practice on the Air Force Knowledge Exchange. The Web site provides basic information on research design and various methodologies and lists the interests and areas of research of Air Force nurse researchers. Military nurses who are interested in evidence-based practice or funding opportunities can seek answers to their questions through the site. Plans are under way for developing an expert advice component or columns on various research issues.

Recently Deployed

Lt. Col. Colleen Ryan is now directing the research cell at Balad, and **Col. Elizabeth Bridges** is directing the research cell at Bagram.

New Graduates

MAJ Jennifer Huxel, AN, USA, recently graduated from Clemson University with a master's degree in nursing. She is now a clinical nurse specialist in maternal, child, and adolescent health and is a nurse educator. She is on her way to Tripler Army Medical Center in Hawaii to be the head nurse of labor and delivery.

Also, congratulations to MAJ Huxel for her recent promotion from CPT to MAJ.



Kudos, continued

MAJ Felecia Rivers, NC, USA, successfully defended her dissertation on 25 March 2009 at the University of Tennessee, Knoxville. Her dissertation, entitled “Into the Unknown: Military Nurses’ Experiences in Disaster Response,” was funded by TSNRP. MAJ Rivers will now be the research nurse at Carl R. Darnall Army Medical Center at Fort Hood in Texas.

CDR Kathleen Putnam, NC, USNR, successfully defended her dissertation on 20 October 2008 and graduated from the Virginia Commonwealth University in December 2008. The title of her dissertation was “What Is the Relationship between Inner Strength

and Health Promoting Behaviors in Midlife Women and Their Effect on Quality of Life?” CDR Putnam is attached to the Operational Health Support Unit, Det S, in Portsmouth, Virginia.

Maj. Jennifer Hatzfeld, USAF, NC, successfully defended her dissertation, “Assessing for Health Disparities in the U.S. Air Force,” at Johns Hopkins University School of Nursing on 25 March 2009. She presented preliminary findings at the 2009 Preventive Medicine Conference. This conference focused on prevention, health disparities, and medical deployability in the U.S. Air Force. TSNRP funded her dissertation. ★

Post-Award Grant Management Workshop 2009

This year’s Post-Award Grant Management Workshop is being held 21–23 September 2009 in the Washington, D.C., metro area. We elected to delay the workshop to ensure attendance by those funded during the “C” call for proposals. Please contact TSNRP if you have not attended. This is a required course. ★



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Fostering excellence in military nursing through science