

# *Navy Medicine*



FALL 2012

Official Magazine of U.S. Navy and Marine Corps Medicine

**DROPS OF BLUE IN  
A SEA OF GREEN | 30**

**FORGING  
COLLABORATION | 10**

**THE ADVERSE EFFECTS  
OF BATH SALTS | 28**

**TRAINING WARFIGHTERS  
TO HELP OTHERS HEAL | 44**

# Navy Medicine

Official Magazine of U.S. Navy and  
Marine Corps Medicine

Vol. 104 No. 5 • Fall 2012

Surgeon General of the Navy  
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Deputy Chief, BUMED  
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Force Master Chief  
FORCM (FMF) Sherman E. Boss

Public Affairs Officer  
Capt. Dora Lockwood

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Managing Editor  
Paul R. Ross

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All articles must be present tense/active voice.

Photos must be minimum 300 dpi.

Photos showing action are preferred.

All photos must be accompanied by a caption and photo credit.

##### Subjects considered:

**Scuttlebutt:** Stories about activities at MTFs and the field.

**Photo Album:** Action shots from across Navy Medicine.

**Feature Articles:** Stories featuring interesting contributions of Navy

Medicine to military operations including everything from combat support to Humanitarian Relief/Disaster Response will be considered. Please contact Paul Ross (paul.ross@med.navy.mil) for current theme of issue in progress.

**R & D and Innovations:** Any new processes and/or research and development news.

**Quality Care:** Anything that improves the quality of care for our patients.

**IT, QA:** Any articles showing how Navy Medicine is utilizing the electronic age.

**Shipmates:** Anything interesting about our shipmates working in the healthcare field in the Department of the Navy.

All submissions must be accompanied by complete contact information for author. In the event there is more than one author please assign one author to be primary correspondent.

#### Feedback Welcome

NAVY MEDICINE Magazine  
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Communications Directorate  
7700 Arlington Blvd., Falls Church, VA 22042-5122

E-mail: BUMED-PAO@med.navy.mil

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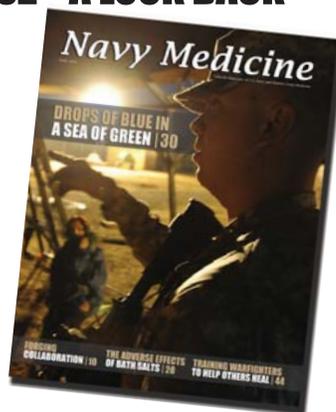
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### On the Cover

A Hospital Corpsman provides security at the entrance to the Naval Expeditionary Medicine Training Institute (NEMTI) field hospital aboard Camp Pendleton, Calif., during a Role 3 Kandahar training evolution in January 2012. The NEMTI Role 3 Kandahar Course, a two week training scenario incorporating classroom and practical applications and designed to bring the entire staff of the world's busiest trauma center together, is one of the several courses NEMTI hosts yearly. (Photo by Mass Communications Specialist 1st Class Bruce Cummins)

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# Navy Medicine Supports S

**A**ny day on which a Sailor or Marine takes their own life is tragic on so many levels. Suicide can be preventable and can be stopped if you have the right tools to do so. It is vital that we come together and stand watch for one another.

This month, we work together with the other military services and the Military Health System to recognize Suicide Prevention Awareness Month. Our goal

is to educate ourselves, shipmates, leaders, and families on the signs of suicide, where to get access to treatment and how to intervene.

Even one life lost to suicide is one too many. There is an immense need for all Navy Medicine commands to focus on suicide prevention. It is an all-hands effort.

Health care professionals tell us the biggest reason someone takes their own life is to “stop the pain and feelings of

anguish”. People feel there is no way out; but time and experience tell us that if we can hold on and get help, the feeling of desperation can pass. It is up to all of us to look for the helpless and more importantly the hopeless, and let them know there will be help and there is hope.

You know my philosophy – “Ship, Shipmate, Self.” Think of the ship as our mission. We must perform our mission, whether it be at sea, on land or on the



# Suicide Prevention Month

battlefield. We must perform our mission without fail, and we can't perform our mission without our people.

We must take care of our shipmates. If you see a shipmate, ask them how they are doing. They may appear fine on the surface, but many Sailors thinking about taking their own life may be in pain and may not want to talk about their depression. They may need help, so get involved. Ask, Care, Treat (ACT) is a tool you can use to help prevent a suspected suicide. You can ask how your shipmates are feeling, let them know that you care about them and if needed, get them treatment.

Above all we have a duty to look after one another. It is our moral obligation to seek professional guidance when our loved ones, co-workers, or friends manifest warning signs such as vocalizing an intention to harm their self, exhibiting social withdrawal, or otherwise showing uncharacteristic changes in behavior.

Take care of yourself. Within our greater military medical community as well, we need to be vigilant about taking care of ourselves. Taking care of others on a daily basis can take its toll on our own mental health, so it's important to check in with each other regularly. We can only provide quality care for others to the extent that we take good care of ourselves.

I am fully aware that many Sailors and Marines believe there is a stigma for seeking help from depression or stress.

This could not be farther from the truth.

It takes a lot of courage to come forward and reach out for help and in this enlightened day and age, I sincerely believe people respect a decision to seek help.

We need to come together to eliminate the stigma associated with seeking help so that those who need the resources can receive them.

Existing resources are available to enhance local suicide prevention programs

and inform service members of programs available to them. The DoD and VA have established a partnership dedicated primarily to providing education, counseling, and treatment in an allhands effort at suicide prevention; anyone can access this resource by visiting [www.suicideoutreach.org](http://www.suicideoutreach.org).

Additionally, organizations like Military One Source, Fleet and Family Service Centers, and your local commands offer robust resources toward identifying suicidal behaviors and offering pathways toward treatment. Additionally, the National Suicide Prevention hotline is immediately available to service members by dialing 800-273-TALK (8255) and choosing "1".

We're all in this together. We need to make sure we take care of those whose care we are charged with, we need to



take care of each other, and we need to take care of ourselves. As always, I am honored and proud to serve as your Surgeon General.

*--Vice Adm. Matthew L. Nathan*

**It takes a lot of courage to come forward and reach out for help and in this enlightened day and age, I sincerely believe people respect a decision to seek help.**

# Arming Navy Corpsmen in Combat

All war is deception.

This statement comes from the text, "The Art of War" by ancient Chinese military general Sun Tzu and, unfortunately, is extremely accurate when looking at the conflicts our military has been engaged in for more than a decade. Our enemies in Iraq and Afghanistan use deception to attack our forces overseas.

The enemy we face does not wear a uniform or name tapes. There is no rank on their sleeve or country name on their breast. They blend-in with the civilian population and fight using improvised explosive devices (IEDs), car bombs, and suicide bombers. They do not follow the guidelines of the Geneva Convention.

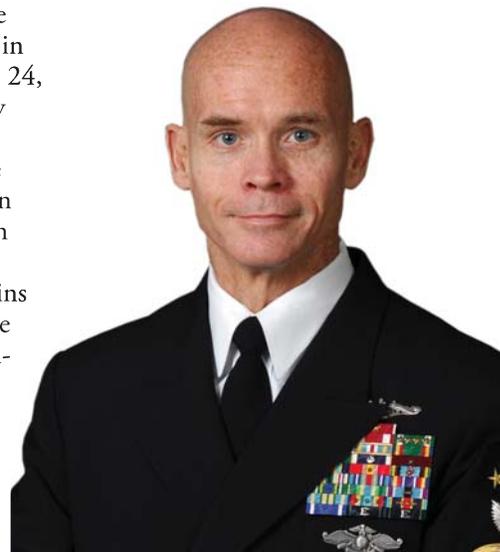
Recently there have been some questions regarding photos of Navy corpsmen holding M-4 rifles while deployed in Iraq and Afghanistan with Marine units. The issue is that according to U.S. Navy Regulation 1063, "While assigned to a combat area during a period of armed conflict, members of Medical, Dental, Chaplain, Medical Service, Nurse or Hospital Corps and Dental Technicians shall be detailed or permitted to perform only such duties as are related to medical, dental or religious service and the administration of medical, dental or religious units and establishments." This restriction is necessary to protect the non-combatant status of these personnel. But unfortunately, we are fighting an unseen enemy.

The Geneva Convention for the

Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, of 12 August 1949, Article 24, states, "Medical personnel exclusively engaged in the search for, or the collection, transport or treatment of the wounded or sick, or in the prevention of disease, staff exclusively engaged in the administration of medical units and establishments, as well as chaplains attached to the armed forces, shall be respected and protected in all circumstances."

Because our enemy does not adhere to the same practices and standards set forth by the Geneva Convention, military medical personnel are being specifically targeted. As a result, it is important that these service members are protected.

Navy corpsmen are permitted to be armed for the limited purpose of personal self-defense and/or defense of their patients pursuant to Article 22, GWS. They may not engage in combatant acts. If a corpsman does engage the enemy as a combatant they have not necessarily violated international law, or in particular the Laws of War, but rather have lost their protected status against direct attack and become Prisoners of War (POW) if captured. This means they lose the right to perform only medical duties and can be forced to work just as any other POW of similar rank. They also lose the right to early repatriation and can be detained for the duration of the hostilities. How the enemy would view such behavior is not known, however.

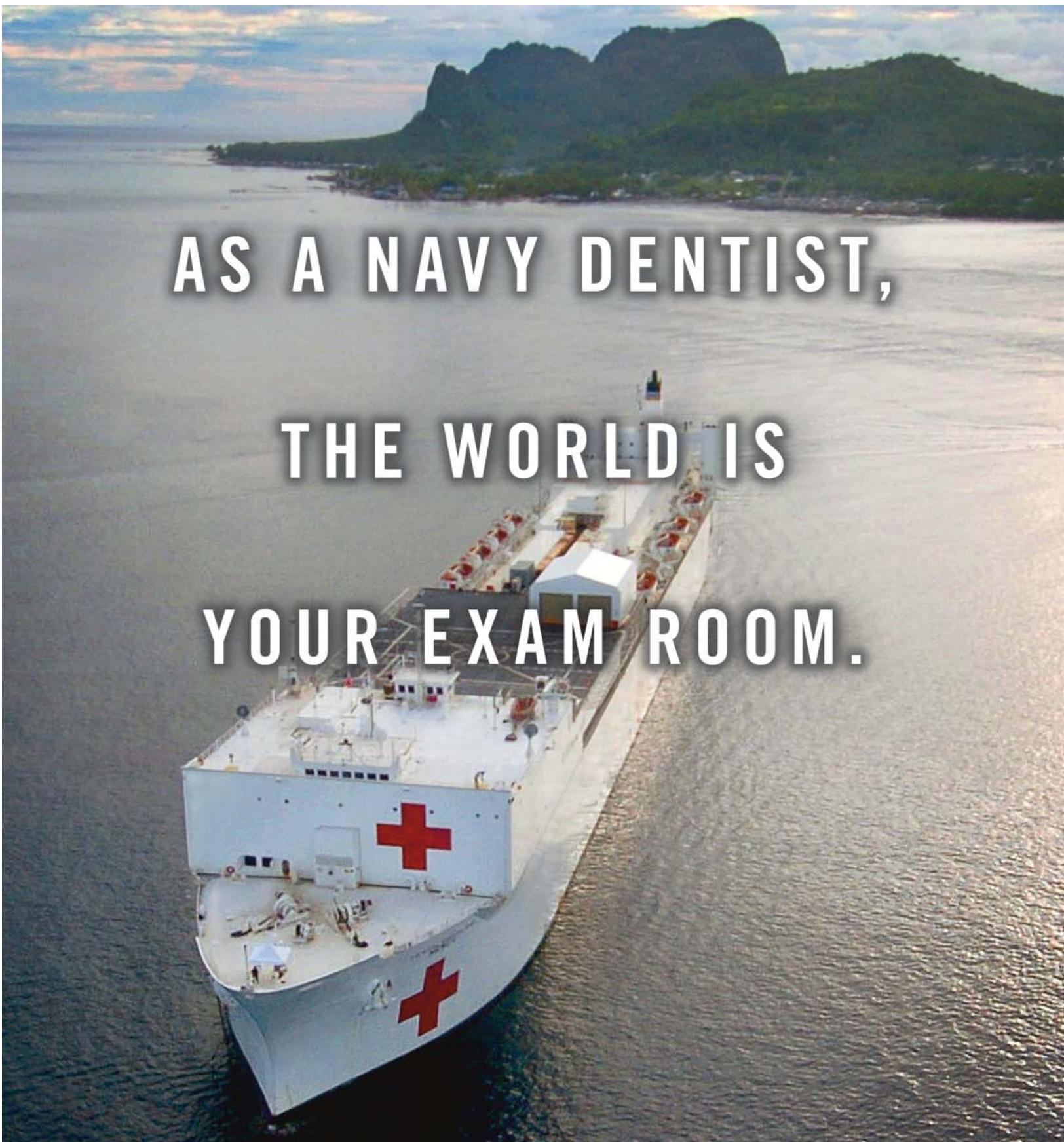


For tactical reasons corpsmen and medical personnel are outfitted with the same exact equipment and gear as the Marines or Sailors they are serving beside. This ensures that an enemy cannot pick out or specifically target the corpsman. Moreover, as long as they do not use their noncombatant status to gain an advantage over the enemy to then wound or kill that enemy, they have not committed the LOW violation of perfidy. Despite not wearing Red Cross arm bands, they are issued special Geneva ID cards identifying them as exclusively engaged in medical activities. This is not determinative of retained status, but rather provides evidence of their retained status should they be captured.

The bottom line is that because of the tactics of our enemies, medical personnel are being protected. By arming them and allowing them to blend into their unit, they will not be targeted simply for being the Sailor who is equipped to provide medical support to the rest of their unit. They are trained to only defend themselves or the lives of their patients. They do not act offensively, even if their unit does, because their main mission is to preserve the lives of those who are wounded or injured in combat.

-- Force Master Chief  
Sherman E. Boss

**Recently there have been some questions regarding photos of Navy corpsmen holding M-4 rifles while deployed in Iraq and Afghanistan with Marine units.**



**AS A NAVY DENTIST,**

**THE WORLD IS**

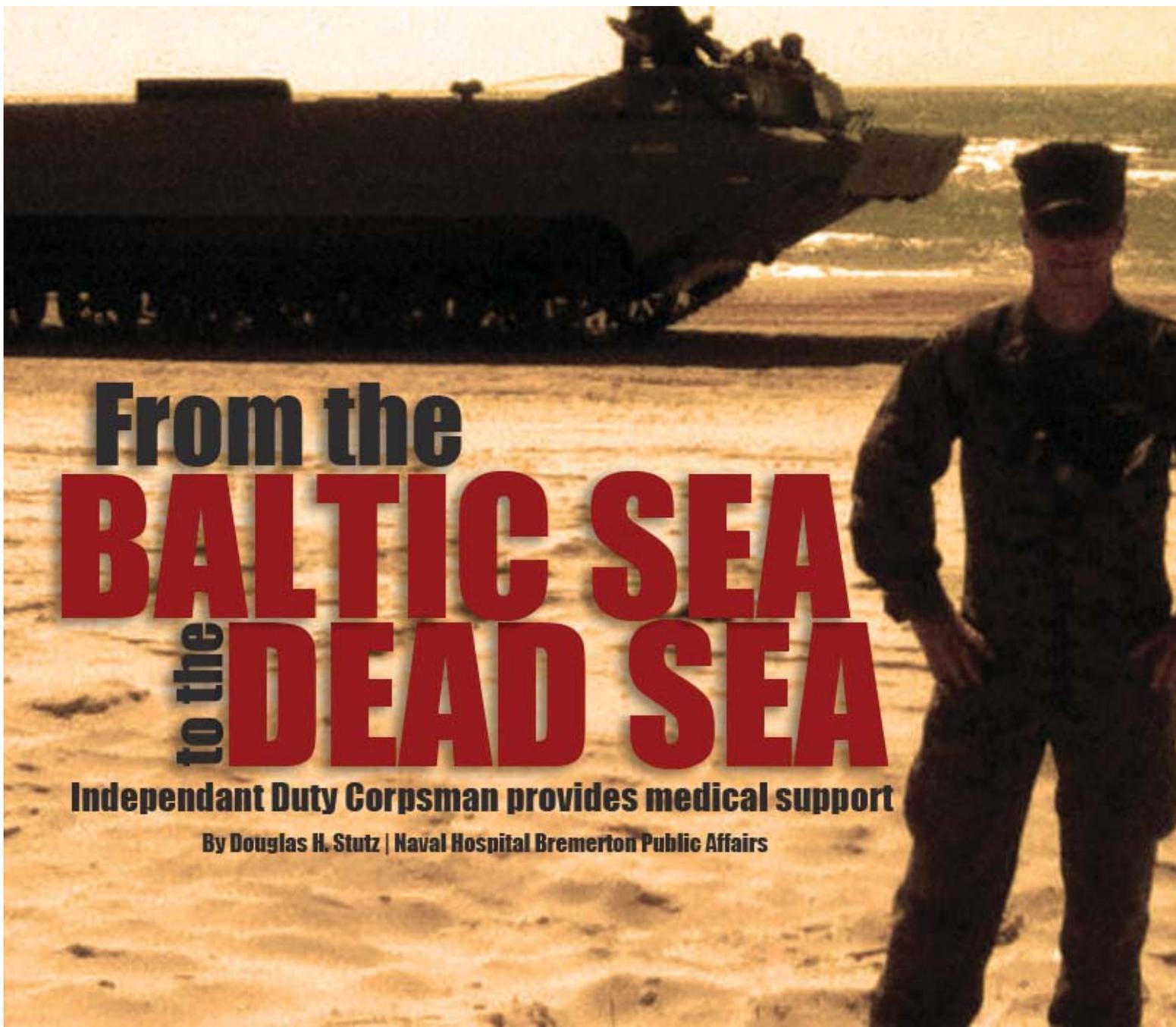
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# From the **BALTIC SEA** to the **DEAD SEA**

**Independent Duty Corpsman provides medical support**

**By Douglas H. Stutz | Naval Hospital Bremerton Public Affairs**

**F**rom the Baltic Sea to the Dead Sea, an Individual Augmentee assignment for a Naval Hospital Bremerton independent duty corpsman (IDC) lasting from February through August has taken him well away from traditional deployment settings.

Chief Hospital Corpsman Keith Davis has spent spring and most of summer with Black Sea Rotational Force (BSRF) 2012, part of approximately 350 Marine Corps and Navy Reservists operating as a Special-Purpose Marine Air-Ground Task Force. BSRF has handled crisis response capabilities from being forward deployed to the Black Sea, Balkan and Caucasus regions and

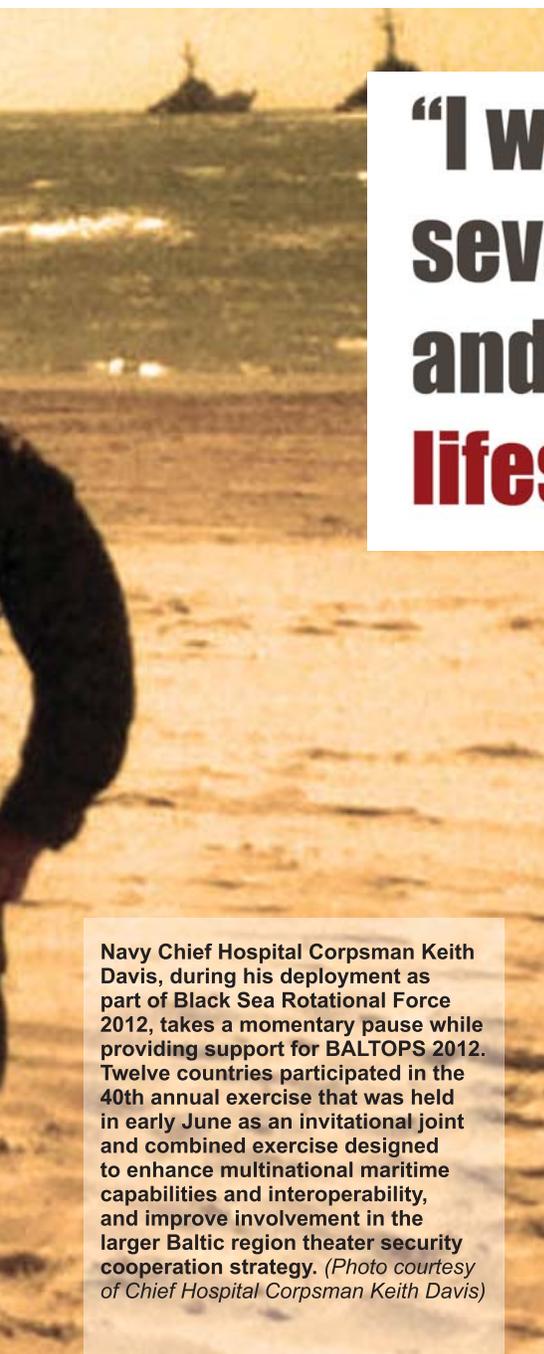
participate in security cooperation to build military capacity, provide regional stability and develop lasting partnerships with nations in the area.

Davis worked as the Task Force Senior Independent Duty Corpsman and Senior Medical Department Representative for the Ground Combat Element out of Mihail Kogalniceanu Airfield, near the southern Romanian coastal city of Constanta.

“After almost four years of submarine duty and not having served with a Marine unit since 2000, it was definitely a culture shock. I had to readjust to the Marine Corps way of life and procedures. But being able to keep Marines in the fight (training), from simply treating

cold symptoms in (Republic of) Georgia where it was below zero or treating a laceration on the Baltic Sea beach during the first ever Marine Amphibious Landing in that region has been gratifying,” said Davis, a Corvallis, Ore. native and 16-year Navy veteran, who has also coordinated medical coverage for combat training and live fire exercises and supervised and helped to instruct Combat Lifesaving techniques to Soldiers from seven different countries. He has also coordinated the Medical Contingent Plan for Medical Evacuations with various countries and acted as medical liaison with International SOS.

Along with further honing his IDC skills on deployment, Davis has also



# “I worked with **Soldiers** from seven different countries and trained them in **combat lifesaving techniques...**”

- Chief Hospital Corpsman Keith Davis

Navy Chief Hospital Corpsman Keith Davis, during his deployment as part of Black Sea Rotational Force 2012, takes a momentary pause while providing support for BALTOPS 2012. Twelve countries participated in the 40th annual exercise that was held in early June as an invitational joint and combined exercise designed to enhance multinational maritime capabilities and interoperability, and improve involvement in the larger Baltic region theater security cooperation strategy. (Photo courtesy of Chief Hospital Corpsman Keith Davis)

enhanced his knowledge by being completely immersed with multiple Marine and Navy reserve units, Active Duty units, and military assets from Romania, Azerbaijan, Macedonia, Armenia, Lithuania, Georgia, and Israel. “The biggest lesson I have learned on this deployment is understanding and patience. Contributing to the overall learning process with our junior reserve corpsmen on bringing strong leadership, experience, training and career development when deployed has been important also. Accomplishing our mission has taken the effort of all components working together.”

Never was the overall mission of Black Sea Rotational Force 2012 more on display that during such specific

missions as Exercise Agile Spirit 2012, Baltic Operations (BALTOPS) 2012 and Exercise Noble Shirley 2012. The three training evolutions gave Davis and others the opportunity to practice counterinsurgency and peacekeeping operations, communications, logistics, non-lethal weapon instruction, as well as intelligence and military decision-making processes, and non-commissioned officer development.

Agile Spirit involved more than 300 Marines with the Georgian Armed Forces in March to increase interoperability between the forces and exchange and enhance each other’s capacity in counterinsurgency and peacekeeping operations, including small unit tactics, convoy operations, and counter-Improvised Explosive Device training.

The annual Exercise Noble Shirley was held in July out of Tel Aviv, Israel, and was designed to exchange ideas, improve interoperability, understanding and cooperation between the Israeli Defense Force and United States military. “Visiting Jerusalem was definitely an opportunity of a lifetime,” Davis said.

BALTOPS 2012 was a memorable event for Davis. “Witnessing the first Marine amphibious landing in the Baltic Sea region was very surreal,” he said.

Twelve countries participated in the 40th annual exercise held in early June that was an invitational joint and combined exercise designed to enhance multinational maritime capabilities and interoperability, and improve involvement in the larger Baltic region theater security cooperation strategy. The amphibious landing highlight for Davis was on June 11, as he participated in the historical first of Lithuania having allied forces conduct a naval landing operation

on their seacoast as part of the multinational exercise, including air, naval assets and ground forces from seven NATO members - Lithuania, Estonia, Latvia, Poland, the Netherlands, Germany and the U.S.

“Overall, so far the coolest has been working with Soldiers from different countries, and exchanging ideas and lessons on combat, combat medicine and building relationships,” said Davis. “I worked with Soldiers from seven different countries and trained them in combat lifesaving techniques, such as teaching an Israeli paramedic how to conduct various medical procedures normally done by doctors but not corpsmen or medics,” said Davis. “I think the training both in combat and combat lifesaving will help save Soldiers’ lives of those countries we work with for example when they go into Afghanistan to help fight the War on Terrorism.”

Davis also volunteered for the Community Relations event ‘United Hands Across Romania,’ where he helped set up and provide medical screenings, clothes, and toys in the city of Corbu. “I evaluated 20 children for medical conditions ranging from common colds to allergies and dermatologic conditions,” he said.

Davis attests his time has been singular and certainly uncommon. “It has been a unique experience to visit Eastern Europe and see a part of the world that is rarely frequented by U.S. Sailors and Marines. Visiting a war-torn country like Georgia and training their Soldiers, then moving into Romania where we have trained multiple nations and then visiting Israel and seeing how a country under constant threat operates has made this an incredible deployment to say the least.” +

# FORGING COLLABORATION



# Navy Medicine plays key role in Pacific Partnership 2012

By Lt. Cmdr. Maria Lohmeyer | Pacific Partnership 2012 Public Affairs

# OPERATION



# R

the

reflecting on the completion of a mission to conduct humanitarian civic assistance (HCA) projects in Southeast Asia, the top Navy medicine leader for Pacific Partnership 2012 (PP12) thinks 'Partnership' missions represent the best deployments of future for medical specialists.



**Navy Lt. Thom Miller listens to the heart of a Cambodian girl during a medical civic action project (MEDCAP) at Hun Sen Cheungkor Primary School for Pacific Partnership 2012.** (Photo by Kristopher Radder)

Capt. Timothy Hinman, commanding officer of the Medical Treatment Facility aboard the Military Sealift Command hospital ship USNS MERCY (T-AH 19), said he is very proud of PP12 efforts to build upon previous missions with advanced collaboration through engagement with host nation academic communities, ship and shore-based surgical and medical exchanges, and laying the ground work for providing continuity between deployments via clinical follow-on activities.

Hinman stated that as forces draw down in other parts of the world, “these [partnership] missions represent the deployments of the future for our specialists, and they contribute to regional influence and stability.”

“The quality of relationships built and development of follow-on activities will also contribute to the longevity and sustainability of this mission, and that’s what it is all about,” repeating that the primary mission objective is to build and strengthen regional relationships.

Sponsored by the U.S. Pacific Fleet, Pacific Partnership has become the largest annual HCA mission in the Asia-Pacific region. This year, the PP12 crew sailed aboard MERCY to the host nations of Indonesia, Philippines, Vietnam, and Cambodia and conducted tailored medical and dental, veterinary, and civil engineering civic action projects (CAPs), as well as subject matter expert exchanges,

community service and cultural activities.

Despite astounding numbers of patients and animals evaluated and surgeries conducted, mission planners are looking for ways to provide continuity and maintain relationships in between ship visits.

Capt. Hinman explained, “If you have an ongoing presence between mission deployments, it would provide great insight to future missions based on stronger relationships with the host nation officials.”

“By using this type of approach, you are better able to meet the country’s needs with the mission plan,” said Hinman.

#### **Advanced Collaboration**

Navy Reserve officer Capt. Mike Radoiu, the PP12 director for Optometry who was on loan from Operational Health Support Unit Bethesda at the Walter Reed Military Regional Medical Center (MD), said “HCA missions have traditionally been designed to offer a one way flow of material and services from a donor nation to another in a time of need. The relationship, while well intended, all too often proved to be more paternalistic, unilateral in nature and narrow in scope.”

Furthermore, “these projects tended to be good at addressing the immediate needs that arose after a disaster, but seldom was there any coordinated effort to address the long term prospect of making the recipient nation more self-reliant and better



Hospital Corpsman 3rd Class Kevin Malone takes a blood sample from a Cambodian woman during a medical civic action project (MEDCAP) at Kandol Dom Primary School for Pacific Partnership 2012. (Photo by Kristopher Radder)

# “The emotional connections made were truly significant and humbling.”

- Capt. Tim Hinman, commanding officer of the USNS Mercy Medical Treatment Facility

able to both mitigate and/or minimize the effects of future disasters.”

Radoui points out that ‘Measures of Performance’ were all too often degenerated into an exercise in ‘bean counting’ which looked impressive on paper yet had little to no bearing on building capacity.

Now, seven years into the Pacific Partnership, there are examples of enhanced methods of conducting the mission that emphasize subject matter exchange and measure contact hours of engagement.

### It’s Not about the Numbers

With a multinational military and civilian NGO crew of more than 1,200, Pacific Partnership 2012 accomplished a great deal, including more than 900 surgeries and treatments or evaluations of more than 49,000 people at ashore MED-

CAPs. Veterinarians helped thousands of livestock and domestic animals with over 7,000 encounters, and civil engineers built or refurbished 13 school and health clinic buildings. The crew also engaged in more than 100 community service projects, including the delivery of almost 140,000 lbs of supplies requested by the host nations.

Conducting more than 900 surgeries in 56 day time-frame is just short of a miracle, mission participants

**Capt. Tim Hinman, commanding officer of the USNS Mercy Medical Treatment Facility, speaks to journalists following the arrival of Military Sealift Command hospital ship USNS Mercy (T-AH 19) to Joint Base Pearl Harbor-Hickam in support of Pacific Partnership 2012. (Photo by Mass Communication Specialist 2nd Class Daniel Barker)**





## “The language of medicine transcends services and nationalities.”

- Navy Cmdr. Brian Bloom, Pacific Partnership 2012 participant

**Hospital Corpsman 3rd Class Osei Tutu shows a Cambodian man stretches at a medical civic action project (MEDCAP) Aug. 3 during Pacific Partnership 2012.**  
*(Photo by Mass Communication Specialist 3rd Class Michael Feddersen)*

are quick to note that the real impact is not found in the extraordinary numbers, but rather deeper engagement.

“There are aspects of the mission that we’ve really tried to develop and push beyond previous missions,” said Hinman.

His long term vision is to see Pacific Partnership build out from a two-week ship visit and into advanced collaboration beyond basic MEDCAPs. Hinman said that there were great advancements this year with host nation collaboration.

“We linked with the academic communities which are huge in reaching host nation countries and having a demonstrable influence,” said Hinman. “We also focused on delving into surgeries off the ship, and exploring opportunities for follow-on activities to provide continuity between what we hope will be future ship visits.”

At the invitation of Indonesia, internationally recognized academics from top institutions within Jakarta flew thousands of miles to the province of North Sulawesi to meet the ship. Indonesian and Pacific Partnership doctors jointly conducted a symposium mission and local Ophthalmologists engaged on multiple levels and in forums on and off the ship. In one case 50 Indonesian Ophthalmologists attended a symposium. The mission also saw success with medical residents conducting side-by-side training onboard the ship and at a local university.

Linking to the academic community was critical for the mission medical personnel. In each host na-

tion, medical planners made contact with medical and nursing schools. It helped that the students understood the medical terminology and were good English speakers, which provided an outlet for teaching among the nurses, doctors, and dentists. In lieu of an interpreter, there was a genuine educational exchange going on with the future leaders of medicine.

Linking with academic centers opened doors for future collaboration with Navy medicine or NGOs associated with the mission, in order to maintain relationships with these countries.

There was notable progress with surgical exchanges and procedures being performed in host nation hospitals. The mission medical staff said that truly embedding with the host nation medical professionals and building collaborative relationships is an important step forward.

“The language of medicine transcends services and nationalities, but the experience is still enriched by exposure to the different dialects,” said U.S. Navy Cmdr. Brian Bloom of Quincy, Mass., “I greatly enjoyed working with Dutch, Australian, and Canadian colleagues and my host nation counterparts ashore.”

Capt. Hinman applauded his medical team, noting that he thought it took courage on the part of the surgeons to embed with their counterparts in host nation hospitals, exiting their comfort zone to conduct surgery in environments a little bit different from their norm.

“Just recently in Cambodia, we had a small surgical team perform surgeries with counterparts in the



military hospital. I got nothing but glowing reports from both team members and the Cambodian military leadership,” said Hinman. “I think we need to do more of these types of activities if we’re truly going to build collaborative partnerships in these nations.”

The surgical exchanges led to opportunities for mission leadership to explore future clinical activities. Exchanges in Cambodia and in Vietnam on Urologic, Orthopedic, Ear/Nose/Throat, Gastric Intestinal, and Cardiology procedures greatly increased understanding about nations’ capabilities and created true professional affiliations that were not there prior to the mission this year.

Clinical follow-on activities are a new and another collaborative aspect of the mission, working toward capacity building. The Partnership involved medical and hospital administrators, local military medical providers, civic leaders, local NGOs, and Department of Health officials as a holistic approach to relationship building and collaborative effort.

“Where we tried to break out and forge the future is on the creation of sustainment,” said Hinman. “The only way we’re going to create sustainment is by dove-tailing into existing host nation health initiatives. You can do that through ample use of local NGOs and also looking for follow on opportunities. We’ve actively looked at what’s in the

realm of the possible, and it’s very rich.”

Examples include follow-on clinical activities that can occur in several settings, including agreeing to lectures and symposia where bilaterally countries interact at some future designated date. Plans are already being reviewed to conduct a guest lecture series and rounds at San Diego’s Balboa Naval Medical Center, and a burn specialist is being considered for participation in a conference that will take place in Hanoi next spring.

The MTF commanding officer said that one of the greatest moments of satisfaction for him was receiving an invitation from the military hospital officials in Phnom Penh welcoming small numbers of physicians to practice in ongoing collaborative capabilities for one-to-six month timeframes. Similar invitations were received from the other host nations.

Overall the crew reports that the life changing impact that many of the surgeries or healthcare provided is one of the biggest rewards of the mission.

“In some ways it was very humbling that we can only do so much,” Capt. Hinman said. “Some of the patients have very chronic problems and you hope you can help them.” He also said that health care providers do not often see that type or level of gratitude in everyday practice anymore ... the emotional connections made were truly significant and humbling. +

**Hospital Corpsman 3rd Class Priscilla Saintcyr blows bubbles for a Cambodian boy before surgery aboard the Military Sealift Command hospital ship USNS Mercy (T-AH 19) during Pacific Partnership 2012.** (Photo by Kristopher Radder)



# SERVICE MEN

Naval Medical Center Portsmouth

Story and photo by Mass Communications Specialist 2nd Class (SW) Anna Arndt | Navy Medical Center Portsmouth Public Affairs

**N**aval Medical Center Portsmouth's own Hospital Corpsman 1st Class (SW) Maria Decena-Taylor was recently selected as the 2012 Navy Times Sailor of the Year.

The award was presented to her by Vice Adm. Scott R. Van Buskirk, Chief of Naval Personnel, in Washington D.C., with her daughter, husband and father present.

The recognition adds to Decena-Taylor's recent selection as NMCP Senior Sailor of the Year for 2011, and the July 31 announcement that she was selected to be a chief petty officer.

"I think what may have set me apart is that I never 'dropped my pack' and regardless of my wants or needs, I still tried my best to help everyone to the best of my capabilities," said Hospital Corpsman 1st Class (SW) Maria Decena-Taylor. "I just take care of Sailors and do the things I was supposed to do to be a good shipmate. Do what's right and treat people the way you want to be treated."

She was nominated by fellow first class petty officer Hospital Corpsman 1st Class Tiaira Williams after Decena-Taylor helped her transition into the

# MEMBER OF THE YEAR

## mouth Sailor wins prestigious Navy Times honor

first class community.

"I nominated HM1 Decena-Taylor because she does exactly what she says she is going to do," said Williams, who works in the Laboratory Department. "Her words are impactful. She always does the right things by her Sailors and the Navy's policy no matter what the circumstances are. She treats people with dignity and respect at all times. She is simply the epitome of the Navy's core values."

Decena-Taylor is the leading petty officer of the Directorate of Nursing Services and leads more than 450 Sailors who care for more than 15,000 patients per year. Within the command, Decena-Taylor is also a member of Morale, Welfare and Recreation, the Diversity Team, the Career Development Team, and vice president of the First Class Petty Officers Association.

"I never wanted to be the kind of Sailor to wait on my leadership and Sailors to tell me what to do, so I always try to exceed expectations before asked," said Decena-Taylor.

In the local community, Decena-Taylor has assisted in high school health fairs where she educated students about various health problems. She also led volunteers in providing medical coverage in the 2011 Oceana Air Show and participated in a suicide prevention walk.

"HM1 Decena-Taylor is an around-the-clock leader," Williams said. "She is accessible 24 hours a day for her peers, superiors and subordinates. No task is too great. Her impact on my life has been paramount. If I had to mirror anyone's leadership style, it would be hers."

She has served in Yokosuka, Japan;

Newport, R.I.; the now-decommissioned frigate Peterson and Expeditionary Medical Facility Kuwait. She is currently pursuing a Bachelor's Degree degree in General Studies.

"I'm very proud of her because she really does deserve it," said her husband, Hospital Corpsman 1st Class Sajata Taylor, an NMCP staff member who works in Staff Education and Training. "She loves Sailors; she is always there to help. The best thing about it was that she was nominated by a peer, a fellow first class. Not only is she helping junior Sailors, but she is also helping her peers."

Many Sailors credit her for their success in the Navy. She has helped junior Sailors gather study material and encouraged them to study for the advancement exam.

"She has a way of motivating her Sailors and making sure they do the right thing," said Hospital Corpsman 2nd Class Robert Payne, one of Decena-Taylor's junior Sailors who just advanced to 2nd class petty officer, making it possible for him to reenlist. "She has the answer to everything and she guides them in the right direction. She helped me a lot. She helped me pick up second and that's how I can be here reenlisting today. I owe it to her."

Much of Decena-Taylor's leadership style came from her father, Eduardo Decena, a retired chief hospital corpsman, who stressed the importance of always doing what is right.

"I make Sailors smile and show them by example that as long you do the right thing people will see you for the person you are," Decena-Taylor added. "At the end of the day, we're all here to

support the mission, and we're all here to help one another. I think if we do what's right and pay it forward, then in the end, everything's going to work out the way it's supposed to work out."

"This is a great honor for a job extremely well done," said Rear Adm. Elaine Wagner, NMCP Commander. "Each year, Military Times honors five "Everyday Heroes" – service members who demonstrate pride, dedication and courage beyond what is expected. These service members show concern for their fellow service members, their community and the country they serve. Winners are recognized online, in the Military Times newspapers and at a ceremony in Washington, D.C. The award was established in 2001 by Army Times Publishing Company (renamed in 2010, Gannett Government Media). The initial program highlighted exemplary achievement by a service member beyond the call of duty, but has since been expanded to include high level of professionalism, concern for fellow service members, and commitment to community service. HM1 Decena-Taylor's win is a testament to her commitment to service."

Decena-Taylor's biggest goal was realized when she was selected as a chief petty officer.

"Being selected to be a Navy CPO was a goal that I have finally accomplished," said Decena-Taylor. "My next goals are to continue inspiring Sailors, to impact more Sailors, and to do things that make my heart feel happy. I do feel a heightened sense of responsibility, because I don't want to let anyone down. I know a lot of people have put faith in me, and if I don't represent them in a positive light, that would let them down." +



Sailors with 2nd Medical Battalion, 2nd Marine Logistics Group examine a specimen during the Preventive Medicine Petty Officers course aboard Camp Lejeune, N.C. The duties of a preventive medicine technician include pest management, disease prevention and education, and environmental health, which covers testing the air, water and soil for contaminants.

## ‘Docs’ brush up on preventive medicine

Story and photos by Marine Corps Pfc. Franklin Mercado | 2nd Marine Logistics Group

Sailors with 2nd Medical Battalion, 2nd Marine Logistics Group participated in a Preventive Medicine Petty Officers’ Course, Sept. 18.

The course provided the attendees with an overview of preventive medicine and gave them an opportunity to expand their knowledge of preventive medicine roles and responsibilities.

“The intent is they expound on their knowledge of preventive medicine, and to be able to apply some or all of it later on down the road – confidently and accurately,” said Navy Lt. Michael Fisher, the commander for Alpha Surgical Company, 2nd Med. Bn.

Preventive medicine technicians are responsible for pest management, disease prevention and education and environmental health, which covers testing the air, water and soil for contaminants.

During the course, Sailors were taught about different species of insects and the diseases they can carry. Specimens were brought to the course to give the participants a firsthand look at some of the possible agents they could face while conducting their job.

Hospitalman Ray L. Daniels, 2nd Med. Bn., was one of many Sailors to participate in the event, although the course is designed for petty officers.

“The course is good no matter what



**A Sailor with 2nd Medical Battalion, 2nd Marine Logistics Group examines a specimen during the Preventive Medicine Petty Officers' course aboard Camp Lejeune, N.C.**

your rank,” said Daniels. “Your job doesn’t change as you pick up rank. The more you know, the better. I’m glad I came to the course. I thought it was going to be hard to pick up some of the material, but it wasn’t.”

Daniels also mentioned he’s glad the course isn’t restricted to just petty officers because any sailor can be called on to do a job at any given time.

Fisher said the Sailors attending the course will probably use this knowledge while on deployments in the future. He encourages more Sailors to take part in such training.

“I think it would be beneficial for other Sailors to cross-train and see what PMTs do on a daily basis,” Fisher said. “They can gain a better understanding of why we have and ultimately need and rely on preventive medicine [technicians]. They are often behind-the-scenes testing water, conducting food safety in-



**Sailors with 2nd Medical Battalion, 2nd Marine Logistics Group watch as Navy Lt. Michael Fisher, the commander of Alpha Surgical Company, 2nd Med. Bn., gives a class during the Preventive Medicine Petty Officers' course aboard Camp Lejeune, N.C.**

spections, providing guidance on [sexually transmitted diseases], monitoring heat conditions, conducting pest surveillance and control and so much more.”

In order to ensure the base’s environmental safety stays at an appropriate level, 2nd Med. Bn. hosts this training every quarter. +

# THE GREAT ESCAPE



Rob Gerardi and Angie Garritson are cuffed and blindfolded at beginning of the gameshow “The Great Escape.” The two credit their training and experiences as independent duty corpsmen for winning the summer television series. (Photos courtesy of Rob Gerardi and Angie Garritson)

Story from Naval Center for Combat & Operational Stress Control Public Affairs

A career in Navy Medicine often leads to many rewards after retirement, but usually it’s not a \$100,000 cash prize won on a nationally televised show.

That was the scenario for Angie Gar-

ritson and Rob Gerardi, who credit their training and experiences as independent duty corpsmen – plus a keen competitive spirit – for capturing the big money on “The Great Escape,” a summer series that aired on TNT.

The couple were a natural for the

series. This past spring, the show’s producers singled them out at a Tough Mudder event, a 13-mile obstacle course designed by British Special Forces. A year earlier, both had completed Ironman Arizona 2011.

The premise of “The Great Escape” isn’t nearly as physically demanding as the pair’s usual competitions, but it does require stealth and steady nerves. Here’s how it works:

Three teams of two contestants are escorted blindfolded to an undisclosed location – for Rob and Angie, it was an abandoned Titan Missile silo outside of Tucson, Ariz. Each team is locked in a zone that includes a hidden map. When the game starts, teams must find the map, free themselves from the zone and follow instructions through four stages

**THE FIRST TEAM TO COMPLETE  
THE STAGES AND ASSEMBLE  
AN ESCAPE KEY WINS  
THE \$ 100,000 PRIZE.**



**Rob Gerardi and Angie Garritson (dressed in green) and their fellow “The Great Escape” competitors are led into the Titan Missile Silo to begin the gameshow that aired this summer.**

– each of which requires solving a puzzle to advance. Throughout the game, teams must avoid detection by “guards”; if caught, it’s back to square one. The first team to complete the stages and assemble an escape key wins \$100,000.

In the episode that ran July 15, viewers saw a calm and cool Angie and Rob pitted against two teams whose members were considerably more vocal and excitable.

“The producers thought that as a couple we’d argue. I think that’s why they picked us,” says Angie. “But we didn’t, not once. We knew we needed to work together.”

“We’ve learned in our athletic competitions that when you do events, you’re competing against yourself,” Rob added. “You don’t worry about the competition. You don’t give them a thought. That’s how we approached this show.”

Their quiet but deliberate strategy

paid off. The pair didn’t make any puzzle-solving mistakes and they were not “captured” by the show’s guards.

Rob and Angie agree that the qualities that earned them the big money on “The Great Escape” are attributes acquired through their careers as independent duty corpsmen, one of the most challenging ratings in the Navy.

“As an IDC, you need patience, calmness under extreme pressure and quick decision making,” says Angie, who retired Oct. 1 as a chief hospital corpsman. She plans to pursue a master’s degree in public health.

“You have to be resilient to be a successful IDC,” Rob adds. “You’re often responsible for 350 people at sea by yourself with limited resources, no x-rays, no lab services and sometimes no communication with a doctor.”

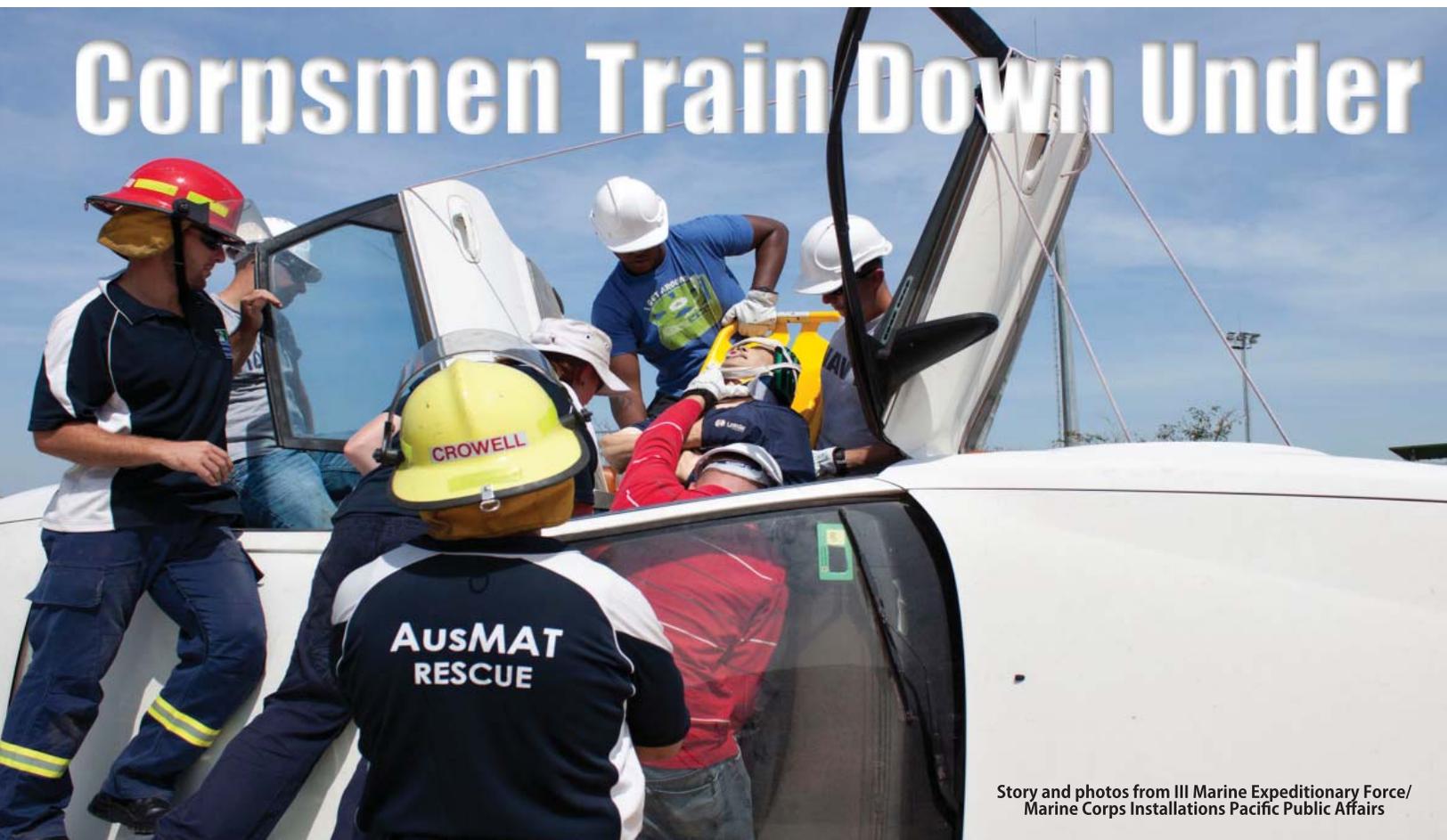
Resilience is a favorite theme for Rob, who retired as a master chief hospital

corpsman in 2009. Now a curriculum and outreach specialist for the Naval Center for Combat & Operational Stress Control, based at Naval Medical Center (NCCOSC) San Diego, he’s spearheading the center’s design for a Navy-wide resilience program under a BUMED directive.

“In outlining the NCCOSC program, the definition that we use for resilience is to adapt and to grow in the face of challenge and adversity,” Rob says. “That’s what it takes to succeed in today’s Navy and that’s what it took us to succeed on the TV show.”

There was another happy ending to this segment of “The Great Escape” story. In addition to winning a handsome sum of cash, Rob and Angie were married in September. They plan a November honeymoon in Mexico, where they will compete – no surprise here – in Ironman Cozumel. +

# Corpsmen Train Down Under



Story and photos from III Marine Expeditionary Force/  
Marine Corps Installations Pacific Public Affairs

**Navy Hospital Corpsman 3rd Class Ryan P. Kierce and Hospitalman Lilweti White extract a simulated car crash casualty during a vehicle-extraction drill as part of a remote pre-hospital trauma and disaster course at the Royal Darwin Hospital, Australia, Aug. 23. During the two-day course taught by a combination of Australian firefighters and medical staff, corpsmen received classes in a variety of medical skills including vehicle extraction, how to treat spinal injuries and fractures, and managing a remote mass-casualty incident.**

**E**yes widened as Navy corpsmen lined up with three damaged automobiles all with simulated victims inside. Across from them was a parking lot with a massive simulated wreck site.

The corpsmen with Company F, 2nd Battalion, 3rd Marine Regiment, 3rd Marine Division, III Marine Expeditionary Force, and shock trauma platoon, 3rd Medical Battalion, 3rd Marine Logistics Group, III MEF, participated in a remote pre-hospital trauma and disaster course Aug. 22-23 taught by a combination of Australian firefighters and medical staff.

The mock scene looked tragic; one car was upside down, apparently T-boned by another. The corpsmen faced the challenge of using their previous training to treat and extract all victims in less than two minutes.

After the chief firefighter yelled “Go!,” the corpsmen ran to their assigned vehicles and started working on saving the victims. The group assigned to the overturned car faced the biggest challenge: stabilize the car, find a way inside to treat the patient, and

find a method to extract the patient safely.

“It was new to me but really cool because a lot of us have never had any extraction training,” said Hospitalman Dylan Nelson, a corpsman with Company F. “The training application and classes were different from what we usually receive in the military, but I feel like what we learned is important for us to know and really makes us more efficient at our jobs.”

During the two-day course, the corpsmen received classes in practical airway and head injury management, pelvis and long-bone trauma, chest draining, vehicle extraction, spinal injuries, fractures and managing a remote mass-casualty incident. All the classes were followed by practical application, where the corpsmen were given scenarios to test what they learned.

U.S. Navy Lt. Gregory Monk, the medical officer with Company F, said he found out about the annual course through a medical orientation at the Royal Darwin Hospital. With the help of Bronte Douglas, a trauma nurse with the hospital’s national critical care and trauma response center, Monk was able to design a course specifically tailored to the skill set of military corpsmen.

“We were happy to get a chance to work with the guys and maybe teach them something new or



**Navy Hospital Corpsman 3rd Class Ryan P. Kierce and Hospitalman Lilweti White treat a simulated automobile accident victim during a vehicle-extraction drill as part of a remote pre-hospital trauma and disaster course at the Royal Darwin Hospital, Australia, Aug. 23.**

sharpen some skills they haven't used in a while," said Douglas. "I'm a reservist with the (Royal Australian) Air Force, so I understand there are different procedures and focuses when it comes to trauma care in the military."

"Our goal is to teach and offer them different techniques to help them become more skilled at their jobs," said Douglas.

According to Hospital Corpsman 2nd Class Steven Urquidez, Company F, the course also gave the corpsmen more appreciation for Australian emergency techniques and procedures.

"They were definitely well-educated," Urquidez said. "The amount of experience between our instructors, from the firefighters to the paramedic and medical staff, allowed us to connect their tactics to ours."

Douglas said she hoped to visit the corpsmen during bilateral field-training events to see what the students took from the course.

During the remaining weeks of its deployment to Australia, Company F, as part of Marine Rotational Force – Darwin, will conduct small-unit operations and other combat training in close cooperation with the Australian Army's 1st Brigade, based at Robertson Barracks. +



**Navy Hospital Corpsman 3rd Class Kameron Williams ties off a wrecked vehicle for stationary security during a vehicle extraction drill as part of a remote pre-hospital trauma and disaster course at the Royal Darwin Hospital, Aug. 23.**

# Navy Medicine training headquarters officially opens at Fort Sam Houston

By Mass Communications Specialist 1st Class  
Bruce Cummins | NMETC Public Affairs

Navy Medicine Education and Training (NMETC) officially opened the doors at the new San Antonio location during a Sept. 28 ribbon-cutting ceremony at Joint Base San Antonio-Fort Sam Houston.

NMETC, the Bureau of Medicine and Surgery's (BUMED) point of accountability for all Navy Medicine training, relocated to Fort Sam Houston after a July change of command ceremony at the establishment's former headquarters at Naval Air Station Jacksonville, Fla.

The ribbon cutting ceremony, which featured remarks from guest speaker Navy Deputy Surgeon General Rear Adm. Michael H. Mittelman, celebrated a milestone in Navy Medicine, something Mittelman said can only ensure

the unparalleled training and education U.S. Navy medical professionals receive will continue.

"We have the best-trained hospital corpsmen, nurses, doctors, allied health and other medical professionals in the world," he said. "This is a direct result of the very talented people who comprise Navy Medicine - those who manage and provide the training from our numerous training facilities located across the country and around the world.

Locating our education and training headquarters alongside the Army and Air Force headquarters builds on their great expertise and traditions and can only serve to further our Naval and joint mission - to ensure the men and women we train continue to save lives all over the world."

NMETC, focused on the education and training mission of preparing

personnel to perform in the garrison and operational environments, is headquartered at Fort Sam Houston with detachments in Jacksonville and Bethesda, Md.

The relocation stems from the Navy Surgeon General's vision of streamlining Navy Medicine into a more effective, efficient and responsive organization that improves accountability, and command and control.

The ceremony, hosted by NMETC commander, Capt. Gail L. Hathaway, also included a reception and facility tour, which followed the ribbon cutting.

Hathaway said the NMETC mission remains steadfast in alignment with Navy Medicine objectives and Chief of Naval Operations directives.

"Navy Medicine exists to save lives," she said. "Our priority is to support the men and women deployed on the



ground in combat and on ships, submarines and in the air. NMETC is ready to support this work by providing medical personnel education and training that supports readiness and is of value to the individual and the Navy."

Initially, 12 military and civilian personnel will be assigned to NMETC's new headquarters location with approximately 60 personnel remaining at the Jacksonville and Bethesda locations. The Navy Medicine Operational Training Center (NMOTC) in Pensacola, Fla., the Navy Medicine Professional Development Center (NMPDC) in Bethesda, Md., and the Navy Medicine Training Support Center (NMTSC) at Fort Sam Houston, Texas, are echelon four commands aligned to NMETC.

NMOTC is the premier training facility for operational medicine and aviation survival, and NMPDC provides post-graduate education programs, dental residency programs and leadership and professional development training to educate, train and support Navy Medicine personnel to optimize the health and readiness of the warfighter.

NMTSC provide leadership, professional development, operational and administrative support to assigned naval personnel and functional support to the Medical Education and Training Campus and other inter-service training programs in the San Antonio, Texas area.

The official opening of NMETC at Joint Base San Antonio-Fort Sam Houston serves as a hallmark in Navy Medicine, occurring a year after Hospital Corps School - the largest Navy 'A' School - relocated to Fort Sam Houston as part of the 2005 Base Realignment & Closure (BRAC) Commission order that consolidated and collocated enlisted medical education to Fort Sam Houston.

NMETC is part of the Navy Medicine team, a global health care network of Navy medical personnel around the world who provide high-quality health care to more than one million eligible beneficiaries. Navy Medicine personnel deploy with Sailors and Marines worldwide, providing critical mission support aboard ship, in the air, under the sea and on the battlefield. +



Navy Deputy Surgeon General Rear Adm. Michael H. Mittelman was guest speaker for Navy Medicine Education and Training Center's (NMETC) headquarters opening and ribbon-cutting ceremony at Joint Base San Antonio-Fort Sam Houston. (Photos by L.A. Shively)



Capt. Gail Hathaway, left, commander Navy Medicine Education and Training Command (NMETC), Command Master Chief James "Rusty" Perry, command master chief, NMETC, and Navy Deputy Surgeon General Rear Adm. Michael H. Mittelman, right, unveil NMETC's new logo during the headquarters opening and ribbon-cutting ceremony.

LEFT - Navy Deputy Surgeon General Rear Adm. Michael H. Mittelman, center left, and Capt. Gail Hathaway, center right, commander Navy Medicine Education and Training Command (NMETC), cut the ribbon during NMETC's headquarters opening and ribbon-cutting ceremony.

# EMERGENCY DEPARTMENT GRAND OPENING

*NMCS D makes improvements to increase patient care*

By Mass Communication Specialist 3rd Class Samantha Lewis | Naval Medical Center San Diego Public Affairs

**N**aval Medical Center San Diego (NMCS D) completed the fourth and final phase of the Emergency Department (ED) renovation project with a grand opening ceremony scheduled for Aug. 23.

The \$10.1 million four-phase project increased the number of beds, decreased wait times and includes new services like restaurant-style pagers for patients, allowing them the freedom to leave the waiting room. The ED was also revamped to be more efficient and have a more pleasant atmosphere.

“The main resource that our ED needed was more beds and that’s really what this project accomplished,” said Cmdr. John Love, chairman of the Emergency Department. “We now have a 41-bed ED between the fast track area and the main ED. Before, we only had 26.” Additionally, the 23,800 square-foot ED houses five triage bays, five high acuity beds, a resource room and locker room for providers, a state-of-the-art conference room, and \$650,000 of new equipment.

The newly-renovated ED is now optimized for efficiency and improved patient care.

“We want it to be a pleasant experience for the patients obviously, so when waiting does occur we have the restaurant-style pager system that [we give to patients] we are comfortable with leaving the waiting room. That way, we can call them back when it’s their time,” said Love. “Wait times, that’s really what we’re focusing on; our goal is to provide the most efficient and safe care possible,

and whenever possible we want to make it so that at check-in, you go straight to a bed.”

Also, while a patient is waiting they have more options for entertainment; the renovated ED boasts brand-new flat-screen televisions and free wireless internet.

The ED’s makeover has also brought improvements for hospital staff, providing a break room, a locker for every staff member, and a team station with enough computers for all staff, ensuring more efficient patient data processing and higher morale.

The previous ED opened in January 1988 at that time the department was designed to see 30,000 patients a year. Currently NMCS D treats more than double that number—anywhere from 66,000 to 70,000 patients per year. Love said he hopes the ED can one day treat 75,000 patients per year.

Phase one of the renovation project began November 2010, with the arrival of five trailers used as temporary patient care facilities for fast-track and rapid treatment and assessment while renovations were underway.

During phase two, fast-track patients were treated in the temporary trailers while the ED was freed up for remodeling. Patients with the most threatening conditions, or the most ill, were treated in portions of the ED that weren’t under construction. Meanwhile, those diagnosed with minor illnesses were treated in the fast-track trailers.

Phases three and four consisted of opening up the 14-bed fast-track portion for the least ill, and the 27-bed main portion for the most ill when renovations were completed June 11.

For more information on the Emergency Department renovation, visit [http://www.navy.mil/submit/display.asp?story\\_id=64590](http://www.navy.mil/submit/display.asp?story_id=64590) and <http://www.med.navy.mil/sites/nmcsd/Pages/News/news-20111229.aspx>. +





**“Wait times, that’s really what we’re focusing on; our goal is to **provide** the most **efficient** and **safe** **care** possible, and whenever possible we want to make it so that at check-in, you go straight to a bed.”**

- Cmdr. John Love, chairman of the NMCSD Emergency Department

Capt. Cliff Maurer, left, commanding officer of Naval Facilities and Engineering Command, Capt. (Dr.) Mark Kobelja, deputy commander of Naval Medical Center San Diego, Cmdr. (Dr.) John Love, Naval Medical Center San Diego Emergency Department Chairman, Lt. Cmdr. Accursia Baldassano, Naval Medical Center San Diego Emergency Department Senior Nurse, and Matt Lockwood, I.E. Pacific contractor, cut a ribbon during the grand opening of the newly-renovated Emergency Department. (Photos by Mass Communication Specialist 1st Class Phillip D. James Jr.)



Improvements to the emergency department include five triage bays, five high-acuity beds, \$650,000 of new equipment, and an increase from 26 to 41 beds. The 23,800 square foot department can treat more than 70,000 patients a year.

# The Adverse Effects of BATH SALTS



By Paul Ross | U.S. Navy Bureau of Medicine and Surgery Public Affairs

**Y**our heart beats rapidly as you continue checking your rear-view mirror. With each anxiety-filled pulse, your chest tightens. You press your foot hard on the car's gas pedal — a lead block accelerating you to unsafe speeds. But wrecking your vehicle is the least of your worries. You've got to get away from them.

Hallucinations and severe paranoia are commonplace for abusers of the synthetic drugs more commonly known as "bath salts." Bath salts are marketed as a safe and legal way to get high, but un-

fortunately for those abusing the drugs, neither definition is true.

"I often tell Sailors and Marines that using synthetic drugs, like bath salts, is playing Russian roulette with their health, career, future and possibly life," said Vice Adm. Matthew L. Nathan, U.S. Navy surgeon general and chief, Bureau of Medicine and Surgery. "Sadly, using bath salts is no different from the real game, where a round eventually chambers, and all is lost."

Bath salts, which go by many "street names" including "stardust" and "white rush," are marketed as a legal substitute

for ecstasy, cocaine, and amphetamines. They are powerful stimulant drugs that have been designed to avoid legal prosecution, and are commonly available on the Internet, specialty "smoke shops," and convenience stores.

"Bath salts are a class of designer drugs called synthetic cathinones," said Navy Lt. George Loeffler, chief psychiatry resident, Naval Medical Center San Diego. "They are degenerative compounds very similar to amphetamines."

The health effects from bath salt use can range from agitation, lack of appetite and delusions to kidney failure,

muscle spasms and sever paranoia.

“These substitute cathinones are dangerous compounds — both medically and psychiatrically,” Loeffler said. “Medically, we’ve been seeing patients coming to the emergency department with heart attacks, necrotizing fasciitis (flesh-eating bacteria) and various kinds of brain swelling.”

While the physical effects are certainly dangerous, Loeffler sees many of the drug’s adverse effects from the psychiatric perspective.

“People have described (the use of bath salts) as similar to the PCP (Phencyclidine) epidemic that came out a few decades ago,” Loeffler said. “The individuals who are abusing these compounds can be extremely violent. Sometimes they don’t seem to be aware of any pain that has been inflicted on them. They are agitated, angry and paranoid.”

According to the National Institute on Drug Abuse, The chemicals in bath salts affect the brain in the same manner as stimulant drugs — causing a high abuse and addiction liability. These products have been reported to trigger intense cravings similar to those experienced by methamphetamine users, and clinical reports from other countries appear to corroborate their addictiveness.

“These patients really crave the substance,” Loeffler said. “These are individuals who use the substance, are treated, and then go out and go right back to abusing it.”

In a survey conducted by TestCountry, a leading supplier of drug testing supplies and services, synthetic drugs such as bath salts are viewed as the third most dangerous drugs for kids in today’s society, behind only methamphetamine/crack and prescription drugs such as painkillers.

Loeffler says that bath salt users are normally admitted to the psychiatric ward for two reasons — depression with suicidal ideation or because they are in a state of severe psychosis.

“Many times they’re thinking that there are evil things or people out there that are trying to do horrible things to them,” Loeffler said. “What’s really concerning about these substances is that even after we get these patients to our inpatient psychiatric ward and we keep them for a couple days, they may stop seeing and hearing things that aren’t

**“Many times they’re thinking that there are evil things or people out there that are trying to do horrible things to them.”**

- Navy Lt. George Loeffler, chief psychiatry resident, Naval Medical Center San Diego

really there, but they continue to have these beliefs. The paranoid feelings don’t go away with the visions and sounds.”

When Loeffler was a third-year resident, he had a particularly startling encounter with a Sailor who was high on bath salts. The patient was brought to the medical center after being stopped by base security for trying to enter the compound with an assortment of machetes on the passenger seat of his car.

“I got a call in the middle of the night to go and treat an active-duty Sailor who had been admitted to the medical service,” Loeffler said. “I went up to see him and it became clear, pretty quickly, from reading the chart and speaking to him briefly, that he had been using these substances. He was paranoid. He didn’t trust me or anything going on.

The Sailor had moved out of his home due to the paranoid delusions he was experiencing.

“He had taken his girlfriend to a nearby hotel,” Loeffler said. “He believed that there was some secret agency that was watching him and wished to kill him. He saw them running around the roof of his house and trying to break into his apartment.”

Along with the paranoid delusions, another troubling aspect of this Sailor’s addiction was the severe anger that came along with his drug abuse.

“When I went to see him he was very agitated,” Loeffler said. “He wasn’t a big guy, but I was intimidated by him because he was very unpredictable.”

After Loeffler ended his interview with the patient, he announced that he would be admitting him to the psychiatric ward.

“There were probably four or five security guards to escort the patient to our inpatient psychiatric ward,” Loeffler

said. “I left to set up the admission with the charge nurse. The Sailor assaulted the security guards, set off the fire alarm a number of times and almost made it out the door of the fifth floor balcony — and we’re not sure what he would’ve done at that point.”

These substances can damage a service member’s health but they can also destroy a military career that took years of dedication and hard work to build.

“All synthetic drugs are violations of military rules,” said Mike Keleher, division chief, Naval Criminal Investigative Service general crimes directorate. “With the processes in place, service members will be separated for use or possession of these substances.”

The Navy Surgeon General has urged all commanding officers and others in positions of leadership to be fully engaged in their command’s implementation plan to continually communicate and educate all hands as to the Navy’s zero-tolerance policy on designer drug use.

“Each command’s aggressive awareness and education campaign should begin during indoctrination and be reinforced throughout the year,” Nathan said. “We cannot over-communicate this issue. Accountability for those who abuse these substances will help deter their abuse.”

Nathan affirmed that the Navy will continue to highlight the issue of synthetic drug use by delivering sustained and targeted messages throughout the Navy and Marine Corps.

“We will ensure every person representing our armed forces is fully informed of the dangers of synthetic drugs,” Nathan said. “I implore everyone to take care when making decisions about using synthetic drugs. It’s not healthy. It’s not legal. It’s not worth it.” ❖

# DROPS OF IN A SEA

Story and Photos by Mass Communications Specialist 1st Class  
Bruce Cummins | NMETC Public Affairs

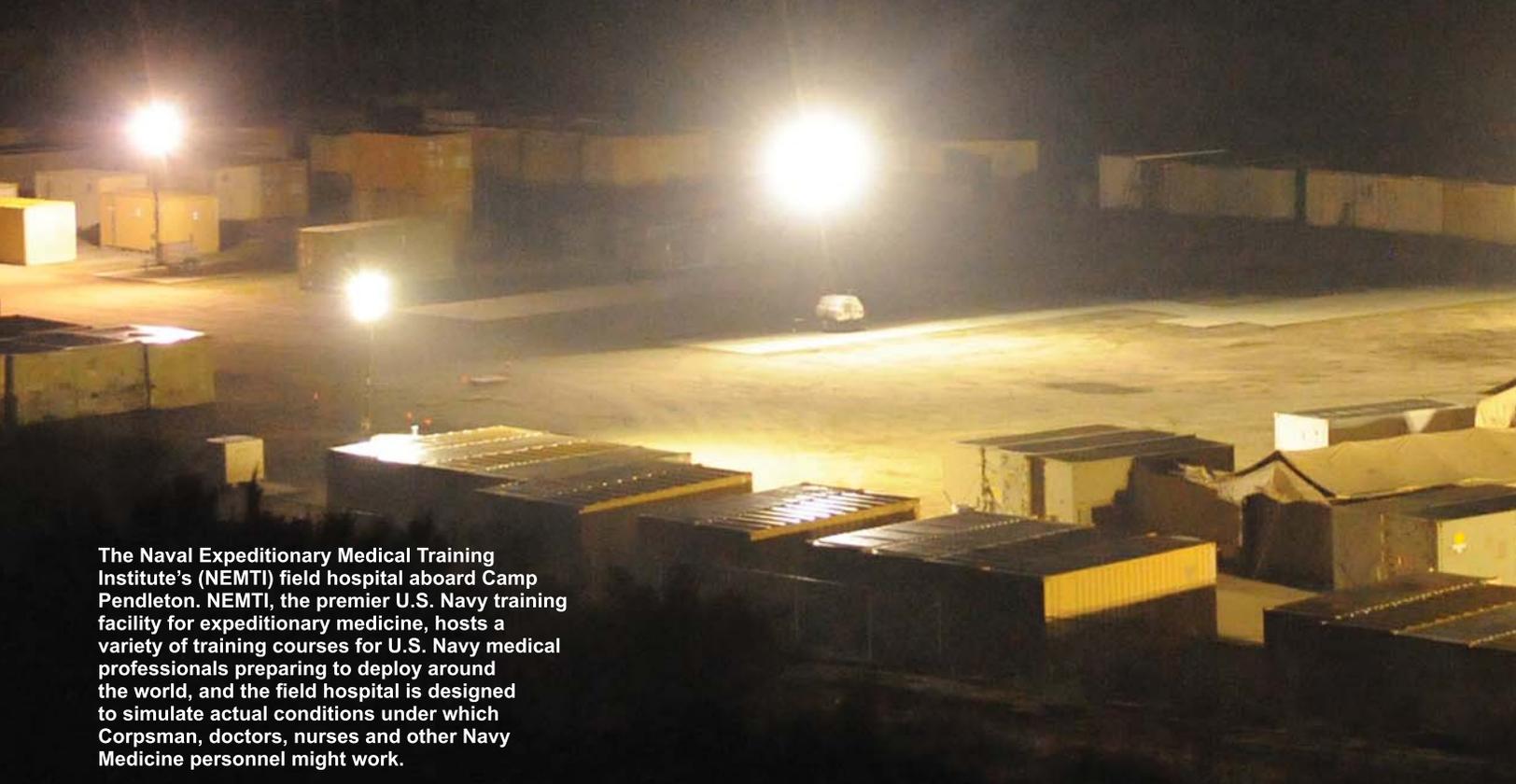
**F**or generations, deployments for U.S. Navy Sailors meant ships underway at sea, sailing waters far from wherever they might have called home and looking forward to a port of call in a land which they might never have heard of. But today, more than a decade after contingency operations necessitated a more robust approach to the role of U.S. Navy medical professionals, these Sailors are training, working and experiencing Navy Medicine in an environment far removed from what their predecessors might have imagined as they become -- dots of blue in a sea of green

On one of the world's largest military compounds, tucked away in a west coast sanctuary as rustic as it is functional, Sailors - U.S. Navy medical professionals, Seabees and support staff - man a facility designed to prepare service members to perform their expeditionary medical mission in adverse conditions, a task which has continually been refined as U.S. Navy medical personnel presence in military operations in contingency areas has significantly increased over the past decade.

The Camp Pendleton, Calif.-based Naval Expeditionary Medical Training Institute (NEMTI), the premier U.S. Navy training facility for expeditionary

medicine, is a detachment of the Naval Medical Operational Training Command (NMOTC), and is responsible for what NEMTI Officer-in-Charge Capt. Thomas Sawyer, MSC, said is imperative to the continued success U.S. Navy medical professionals employ around the globe.

"The Naval Expeditionary Medical Training Institute is here to train medical personnel prior to their deployment and our purpose - our mission - is to organize, equip and evaluate these deployers prior to them going into country," he said. "We do that in several different ways, primarily with classes we provide in TCCC, the curriculum we have to



The Naval Expeditionary Medical Training Institute's (NEMTI) field hospital aboard Camp Pendleton. NEMTI, the premier U.S. Navy training facility for expeditionary medicine, hosts a variety of training courses for U.S. Navy medical professionals preparing to deploy around the world, and the field hospital is designed to simulate actual conditions under which Corpsman, doctors, nurses and other Navy Medicine personnel might work.

# BLUE OF GREEN

train for the Role 3 mission and most recently the capability to train some Role 2 deployers.”

The term “role” describes the tiers in which medical support is organized, with Role 3 describing the capabilities of a theater-level hospital.

NEMTI has proven a vital stop in the pre-deployment training continuum for personnel deploying in support of Overseas Contingency Operations, Sawyer said. The facility’s mission is to provide training to active-duty and reserve Naval medical personnel, Construction Battalion (SEABEES) and other support staff on the assembly, disassembly, establishment of command structure,

and basic operations of a Naval Expeditionary Medical Facility Hospital ready for worldwide deployment and to serve as the Navy’s field test and evaluation center for deployable medical systems, equipment, and doctrine.

But NEMTI’s mission stems further still, enveloping a covenant not prescribed in the written curriculum and something Sawyer said has had an enormous impact on the unparalleled survivability success rate Navy Medicine professionals have created during the past decade.

A very important aspect is that NEMTI is able to bring these global assignments - these people, these provid-

ers, these experts - from different areas of the country to come together as a team,” he said. “It’s important that they work together, it’s important that they train together because they need to be able to be a coordinated unit the day they are boots on ground. Here, they’re able to come together and train so that they can perform immediately when they arrive in country, whether they are senior officers or junior enlisted. We bring their expertise together as one group and as one team.”

Service members participating in one of NEMTI’s courses maintain an extremely structured day, including morning and evening formations, regu-



"I truly feel that when they leave here they are a cohesive unit..."

- Navy Capt. Thomas Sawyer, NEMTI officer-in-charge



Naval Expeditionary Medical Training Institute (NEMTI) support staff and MOPP course instructor Builder 2nd Class (SCW) Rebecca Newman explains how to properly don MOPP gear, fit an M-40 mask and how to properly check the chemical, biological and radiological (CBR) protective gear during a MOPP familiarization course at the Role 3 Kandahar Course.

larly scheduled meal hours and berthing together in sea huts. Cleaning duties of common areas, including shower and toilet facilities, are a shared tasking, and liberty during the course is at a minimum, all efforts to prepare these future deployers for the operational level mission in which they will participate.

The curriculum and daily routine is a challenge to each of the deployers and also for the NEMTI staff. The diversity of the group creates difficulty that the staff sometimes faces with student's various levels of knowledge.

"It's professionally a challenge here because we have providers that are at a level of expertise as trauma surgeons, as specialists, all the way to the young corpsman coming in as a Hospitalman (E3)," he said. "So this is a challenge for us to match their requirements, their expectations, of what they hope to get out of NEMTI before they deploy."

Despite this difficulty, however, U.S. Navy medical professionals are continuing a trend which has seen unprecedented survivability rates from injuries sustained through contingency operations in both Iraq and Afghanistan, a decade of refining techniques which stem from

training NEMTI personnel receive.

"Through the training command here at NEMTI, I truly feel that when they leave here they are a cohesive unit, they will go out there and maintain that 97 percent survivability rate - that is our purpose, that is our job, to take care of these service members," Sawyer said. "It's convenient that we're located here, right next to the 5th Marines, those that are at the tip of the spear, because they're able to see the Marines up close and personal, and not just when they come through the ER doors. This works for the unit here and also for the Marines when they see their Sailors, the ones who could be providing care for them somewhere."

Students in the Naval Expeditionary Medical training Institute (NEMTI)-sponsored Role-3 Kandahar Course - a training evolution that fully develops a medical team scheduled to deploy in support of contingency operations around the world - have also been exposed to service members attached to Wounded Warrior Battalion West, an organization comprised of Sailors and Marines who have been injured in combat situations. NEMTI operational

project manager Cmdr. Kevin Beasley, said the opportunity to speak with these individuals has a profound effect on U.S. Navy medical professionals preparing to deploy, serving as a reminder of the important role expeditionary medical professionals play each day.

"Having wounded warrior interaction as part of pre-deployment training seals the importance of our mission as U.S. Navy health care providers," he said. "They provide the realism, reminding us of our own humanity, their sacrifices and why we continue to go forward, providing health care as long as they fight. The message is clear with them. They embody the honor and courage that ensures our commitment."

Lt. Cmdr. Miguel Gutierrez said the integration of the Wounded Warrior panel during his August 2012 Role 3 Kandahar Course at NEMTI offered a unique insight into the role of expeditionary medicine, something he said could have a profound impact on all students preparing to deploy.

"As a provider, having the Wounded Warriors incorporated into this curriculum lets all of us see the importance of what we do, and the end result, which is the Sailors, Soldiers, Airmen and Marines coming home and the impact that we all have on their journey."

Aside from various guest lecturers, all of whom have been deployed in support of U.S. service members directly engaged in contingency operations, Sawyer also said the NEMTI staff, 55 service members from varied enlisted rates and commissioned specialties, has proven ideal in maintaining the facility, providing instruction and offering insight into an operational level world some service members in a student capacity might not have experienced.

"We have a combined staff here at NEMTI. MSC, NC, Senior Enlisted, Corpsmen, and Seabees. All of those that are needed to keep the base operating services going in one of our EMF Facilities," he said. "This combination of a staff is ideal to be able to teach and instruct those active duty service members who will be deploying as well as those reserve units that will be going forward when they are tasked and assigned to complete their reserve mission."

One of NEMTI's latest offerings, the NEMTI-sponsored Kandahar Role 3



"They provide the realism, reminding us of our own humanity..."

- Cmdr. Kevin Beasley, NEMTI operational project manager

Students (left, center) at the Naval Expeditionary Medical Training Institute's (NEMTI) inaugural Role 3 Kandahar Course in January practice applying tourniquets to a training mannequin during a casualty exercise in January while instructor Hospital Corpsman 2nd Class (FMF) Brian McKenna observes.

Hospital course, is a two-week effort designed to foster teamwork and build and hone medical skills specific to what U.S. military medical professionals might expect while on a nine-month deployment to the Role 3 Hospital at Kandahar Airfield in Afghanistan. New this year, the course represents the first U.S. Navy-led course in the pre-deployment training pipeline for medical personnel, something Sawyer said is imperative for the continued success medical personnel have employed in contingency operations around the world.

The course, designed by the former Navy Medicine Support Command (now Navy Medicine Education and Training Command) in response to feedback received from previously deployed personnel including past and current commanding officers of the North American Treaty Organization-

run Role 3 Kandahar Medical Facility, includes a variety of medical training courses. These courses include Trauma Combat Casualty Care (TCCC) and the Trauma Nurse Core Course (TNCC) as well as other specific trauma team training and courses on the clinical computer systems used in theater. Sawyer said these courses - along with the opportunity for these service members to work alongside one another from the beginning of their training - represent a shift in expeditionary medicine training.

"This type of training is a return to the EMF medical training specific for the Role 3 mission," he said. "Previous years training concentrated on IAs (Individual Augmentees) and the Kuwait-specific mission, but this will integrate all members of the next staff of the Kandahar Role 3 hospital together for training."

Sawyer said that the programs offered at NEMTI are constantly evolving, shifting to meet the needs U.S. Armed Forces are requiring in combat situations. With Navy Medicine's increased role in expeditionary medicine, he said course offerings at NEMTI remain fluid, and each iteration of a course is critiqued and amended.

"The program here at NEMTI and the curriculum is improving class by class," he said. "The facilities here and the projects that we have planned are going to make it better for our deployers, are going to make it better for the training we provide. We're looking forward to the improvements that are scheduled for us in the next couple of years and we feel that our training is going to produce an even better medical professional in support of our warfighters." +



# NAVY SG VISITS WOUNDED SAILORS & MARINES

Story and photos by L.A. Shively | Joint Base San Antonio - Fort Sam Houston

**Vice Adm. Matthew Nathan, surgeon general of the Navy, visits with Andrew Knudson and presents him with a coin. Knudson was training in Navy dentistry when he became ill and plans to complete his training after he recovers. Nathan visited with wounded Marines, Sailors, and the staff of Naval Health Clinic Corpus Christi Detachment at the San Antonio Military Medical Center, Sept. 13, prior to visiting and encouraging Knudson.**

Focusing on their concerns, Vice Adm. Matthew L. Nathan, surgeon general of the Navy, spent Sept. 13 visiting with wounded Marines, Sailors, and the staff of Naval Health Clinic Corpus Christi Detachment at the San Antonio Military Medical Center, Joint Base San Antonio-Fort Sam Houston.

Nathan said he recognized what he coined as “nodes of excellence” – military medical centers across the country such as SAMMC – that provide critical care for those injured in combat; as well as tertiary medical facilities that treat illness, disease and non-combat injuries.

But, beyond the high standard of care they receive from these facilities, Nathan said he wanted to ensure Marines and

Sailors knew the Marine Corps and the Navy have not forgotten them in what is a traditionally an Army-Air Force environment here in San Antonio.

Nathan, also chief of the Navy’s Bureau of Medicine and Surgery, reached out on a personal note as well.

“Thank you on behalf of the people I work with back in [Washington] D.C.,” he said to the group of about 50 in the SAMMC auditorium.

The admiral discussed future changes planned within the Defense Department such as downsizing and a strategic refocus toward the Pacific region, Asia, Africa and South America for the Navy. Nathan also said that coalition forces were 99 percent out of Iraq and, though

not smoothly, relocating troops out of Afghanistan is continuing.

Nathan’s visit meant a lot to Marine Lance Cpl. Jonathan Stephenson who was wounded by a roadside bomb in March while he was on convoy in Helmand province, Afghanistan.

Stephenson, the turret gunner in a truck, was thrown 60 meters from his vehicle when it was struck. He said he doesn’t remember anything until he woke up at the Walter Reed National Military Medical Center in Bethesda, Md., two weeks later.

“It shows that somebody cares,” Stephenson said, “and that there are people looking out for our best interests.”

Questions on issues during the town



**Vice Adm. Matthew Nathan, surgeon general of the Navy, shares a joke during a visit with wounded Marines, Sailors and the staff of Naval Health Clinic Corpus Christi Detachment at the San Antonio Military Medical Center, Sept. 13.**

hall ranged from current global affairs to local staffing.

One Sailor presented a new challenge for the surgeon general to consider: how must a Sailor's weight be factored into the physical readiness standards when he or she has a prosthetic?

"It's important for the sailor, in case he or she has the option to return to active duty," explained Navy Hospital Corpsman 2nd Class Mark Foriska, a liaison with Detachment SAMMC, who posed the question. "It's also important if they continue to have treatment here at SAMMC."

Foriska said the subject came up during a class he was attending.

"Nobody had the answer, so I thought this was the perfect time to bring up the question."

Officials cite a 95 percent survival rate for battlefield injuries, where cutting-edge technology allows many

amputees and others with severe injury to recover, return to the same type of work, and even deploy again.

"We have people wearing prosthetic devices that can now get back into the cockpit, get back into the fight or continue to serve on active duty in a variety of ways; and be required to stay fit like everybody else," Nathan said.

The admiral's first step toward developing weight standards for service members with prosthetics will be to survey military personnel and medical facilities in order to find out what is being done currently; and then devise a formula for measurement.

Using the ratio of height to girth might provide an initial answer, he said, adding that he needs to do additional research.

After his town hall meeting, Nathan toured the newly-completed U.S. Army Institute of Surgical Research. Adjacent

to SAMMC, the facility is dedicated to advancing combat casualty care and providing state-of-the-art trauma, burn, and critical care.

Nathan also attended the chief petty officer pinning ceremony at the Fort Sam Houston Theatre, Sept. 14, during his visit. The pinning ceremony is a culminating event where Sailors are awarded anchors and allowed to don the uniform of Navy chief petty officer for the first time after proving their worth during an eight-week leadership course.

Unique to the Navy, the course tests the chief selectees' fortitude under duress.

"It's a thrill to get out in the field and see our Sailors, our corpsmen, our medical personnel, our patients, talk to them, hear what is on their minds," Nathan said, "and let them show off what they do, because they do so many things so well." +



# SHARED SERVICES ENHANCED CARE

By David Estep | Naval Hospital Beaufort Radiology Department

**David Estep, radiology technician at Naval Hospital Beaufort, prepares Staff Sergeant Erik Kunz, a Marine stationed at Marine Corps Air Station Beaufort, for his MRI. (Photo by Regena Kowitz)**

Over a decade ago, Naval Hospital Beaufort (NHB) entered into a partnership with the Ralph H. Johnson VA Medical Center (VAMC) in Charleston, S.C., to open a VA community based outpatient clinic inside of the naval hospital. Since 2001, the Beaufort Primary Care Clinic has been serving military veterans by offering quality health care through the cost-effective sharing of resources with NHB to include laboratory, radiology, and podiatry services.

Thanks to this partnership and joint incentive funds (JIF), which allow DoD and VA partners to purchase shared resources, NHB and the VAMC will also be sharing a new mobile Magnetic Resonance Imaging (MRI) scanner that will be open for business at the naval hospital this September.

“Both NHB and the VAMC have long recognized the importance of having access to MRI services,” said Lt. Cmdr. Brent Libby, staff radiologist at Naval Hospital Beaufort. “An MRI scan with its much better contrast resolution, can provide a more detailed image of the soft tissues than an x-ray. While an x-ray is still the appropriate test in many cases, there are often instances where an MRI is the better choice. This is particularly true in the evaluation of neurological and musculoskeletal injuries and disease.”

Orthopedic injuries are common among the hospital’s young active duty service members, particularly those in recruit training, and in the VA’s more aged population. For these patients, having access to MRI scans is vital to providing quality health care.

After both NHB and the VAMC had made unsuccessful attempts to purchase MRI’s on their own, the hospital’s commanding officer, Capt. Joan Queen, Libby and another staff radiologist,

Cmdr. Mark Travis, met with Mr. Paul Peart and Mr. Stafford Stinson from the VAMC in early 2011 to discuss the possibility of purchasing an MRI they could share. The hospital and the VA agreed that they had a better chance of gaining funding approval with a joint proposal that included a solid business plan focusing on how a shared MRI would improve patient care and produce cost savings. And they were right.

On Nov. 17, 2011, the Health Executive Council for Veterans Affairs and the Department of Defense (DoD) approved the JIF request in the amount of \$2.27 million dollars to cover equipment, staffing, and supplies.

Once the funding was granted, the work began in earnest to secure the MRI and a joint committee was established in Dec. 2011, to plan and coordinate the project. Members from the VAMC and NHB joined forces with the goal of selecting the equipment and a site for the MRI that would best meet the needs of both DoD and VA patients.

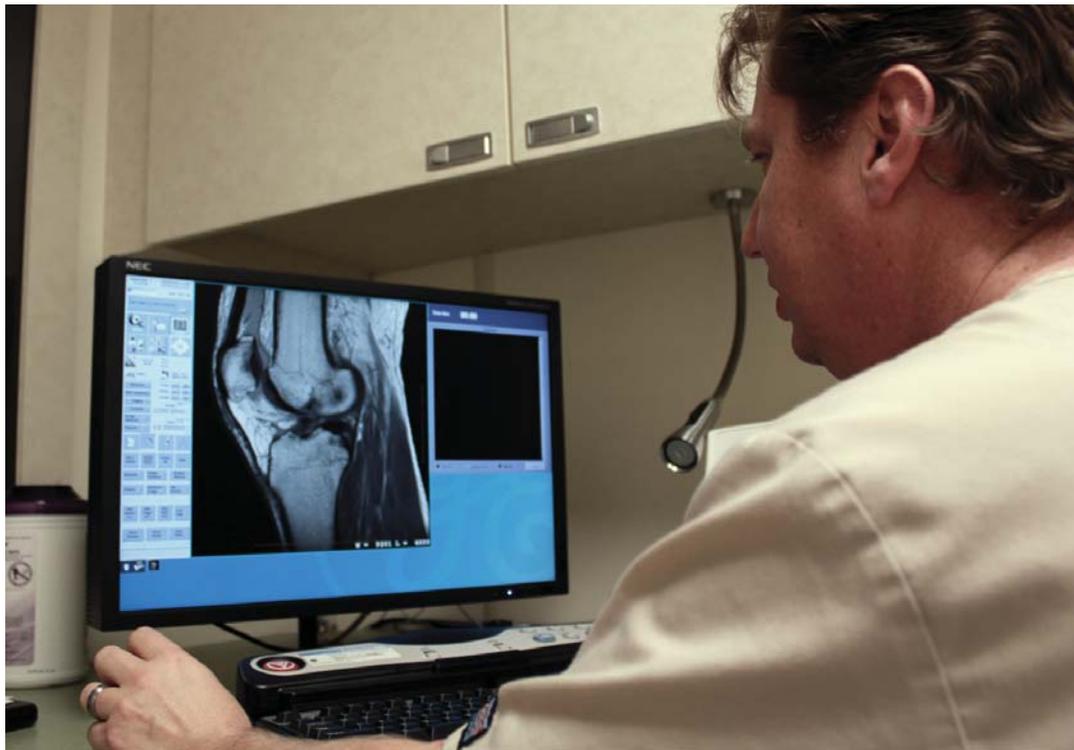
The committee decided on a GE Signa HD Excite 1.5 Tesla Magnet, a mobile MRI, and when Naval Medical Logistics Command (NMLC) solicited bids to purchase the equipment, that was the model that was chosen. One of the primary reasons this particular model was selected was because it was mobile, an important factor due to the major storm activity that the Lowcountry often experiences. Should a hurricane head for Beaufort, the MRI can easily be disconnected from its pad and transported out of state to a safe location until the storm passes.

Additionally, given the weight of the magnet as well as the structure and age of the hospital, which was originally constructed in 1949, building an addition was not an option. A site was selected that was close to both the VA outpatient clinic and the hospital's emergency room.

With the bulk of planning and preparation now completed, patients can expect to reap the benefits of having an onsite MRI at NHB by mid-September. The new mobile MRI will allow health care providers at the VAMC's Beaufort Primary Care Clinic and naval hospital to review results faster than the current system, which involves sending patients out to either the VAMC in Charleston or TRICARE network MRI services in the Beaufort area and awaiting results via mail or fax. Expediting results means patients will receive a diagnosis faster and appropriate treatment sooner. In addition to improving access to care, the new MRI will save money and increase patient satisfaction.

"The benefits of having an onsite MRI are infinite," said Jennifer Stokes, nurse manager and administrative officer for the VA outpatient clinic. "The most significant contribution will be veterans no longer incurring the cost or the pain of travelling to have this essential diagnostic procedure. Our patients will be seen and treated where they live, which is one of the essential goals of the VA."

Currently, all of the naval hospital's patients requiring an MRI use civilian services in the Beaufort area. For VA patients, if there is capacity at the VAMC, they are required to travel to Charleston for services, which means a 53 mile trip for Beaufort residents and over 80 miles



**David Estep, radiology technician at Naval Hospital Beaufort, views an MRI scan of a patient's knee. The MRI, which was purchased with Joint Incentive Funds and will be shared by DoD and Charleston Veterans Affairs Medical Center patients, will provide onsite services for patients who were previously sent to civilian providers.**

for VA patients who live in Savannah, Ga. In those cases, the VA reimburses patients for travel. When the VAMC does not have enough capacity at their facility, their patients are also sent to the network for MRI's. By providing MRI services at the naval hospital, those referrals to the network by both the VA and DoD will be reduced, generating an estimated cost savings of over \$500,000 for NHB and approximately \$435,000 for the VAMC annually.

"As the commanding officer of Naval Hospital Beaufort, it is my job to ensure that not only do we provide our patients with the very best care possible, but also that I am a prudent manager of the hospital and DoD resources that have been entrusted to me," said Queen. "The mobile MRI project allows me to easily do both."

For more than decade, Naval Hospital Beaufort and the Ralph H. Johnson VAMC have been building a solid partnership in the South Carolina Lowcountry, ensuring that service members and their families, retirees, and veterans receive the best health care possible. This enduring partnership is a testament to how sharing services and resources leads to enhanced patient care. +

## Partnership

The partnership between NHB and the Charleston VAMC was made possible by the National Defense Authorization Act 2003, Section 721, which authorized the Department of Defense (DoD) and the VA Health Care Sharing Incentive Fund. The purpose of this Act was to provide funding that allowed various local, regional and national entities to coordinate and share health care resources. The ultimate goal of this joint venture is improving access to quality and cost-effective health care for beneficiaries of both departments. Out of this initiative came the Lowcountry Federal Health Care Alliance, which is comprised of multi-service federal health care organizations across the Lowcountry all committed to offering shared services to improve access to care for DoD and VA patients. Current alliance members include Naval Hospital Beaufort, the Ralph H. Johnson VA Medical Center, Naval Health Clinic Charleston, and the 628th Medical Group.

# STANDARDIZING ELECTRONIC HEALTH RECORDS

Story and photos by Barbara Ware | U.S. Navy Bureau of Medicine and Surgery Clinical Informatics Directorate

**H**ealth care is becoming an intensely data-driven discipline, but even in today's digital age, paper-based processes predominate in the patient care arena. Until recently, important health information about service personnel and their families in the Military Health System (MHS) was spread across many systems that were not interoperable. Health care in the Navy, furthermore, has provided a unique challenge for patient care: beyond traditional bricks-and-mortar facilities, Navy Medicine provides care on ships and submarines and many other complex medical platforms and environments.

To meet this challenge, Rear Adm. Donald R. Gintzig recognized in 2010 Navy Medicine's need for standardized, secure, patient-centric, electronic health record (EHR) solutions to store and provide easy access to patient records and thus improve the Navy's health outcomes and patient safety.

Clinical informatics seeks to deliver more efficient and enhanced patient care by integrating health information technology (HIT), computer science, and knowledge management methodologies to optimize the processes and healthcare that Navy Medicine delivers. Under Rear Adm. Gintzig's leadership, BUMED's Clinical Informatics Directorate is continuing to lead the MHS effort to create the world's most innovative and powerful inpatient EHR system.

Essentris<sup>®</sup>, the DoD's inpatient clinical online documentation system, has established an unparalleled record for reliability and clinical satisfaction when it was first deployed at Navy Medical Center San Diego in 1987. Subsequently, in 2009, when the United States Department of Defense (DoD) later selected the Essentris<sup>®</sup> EMR<sup>™</sup> as the inpatient electronic medical record



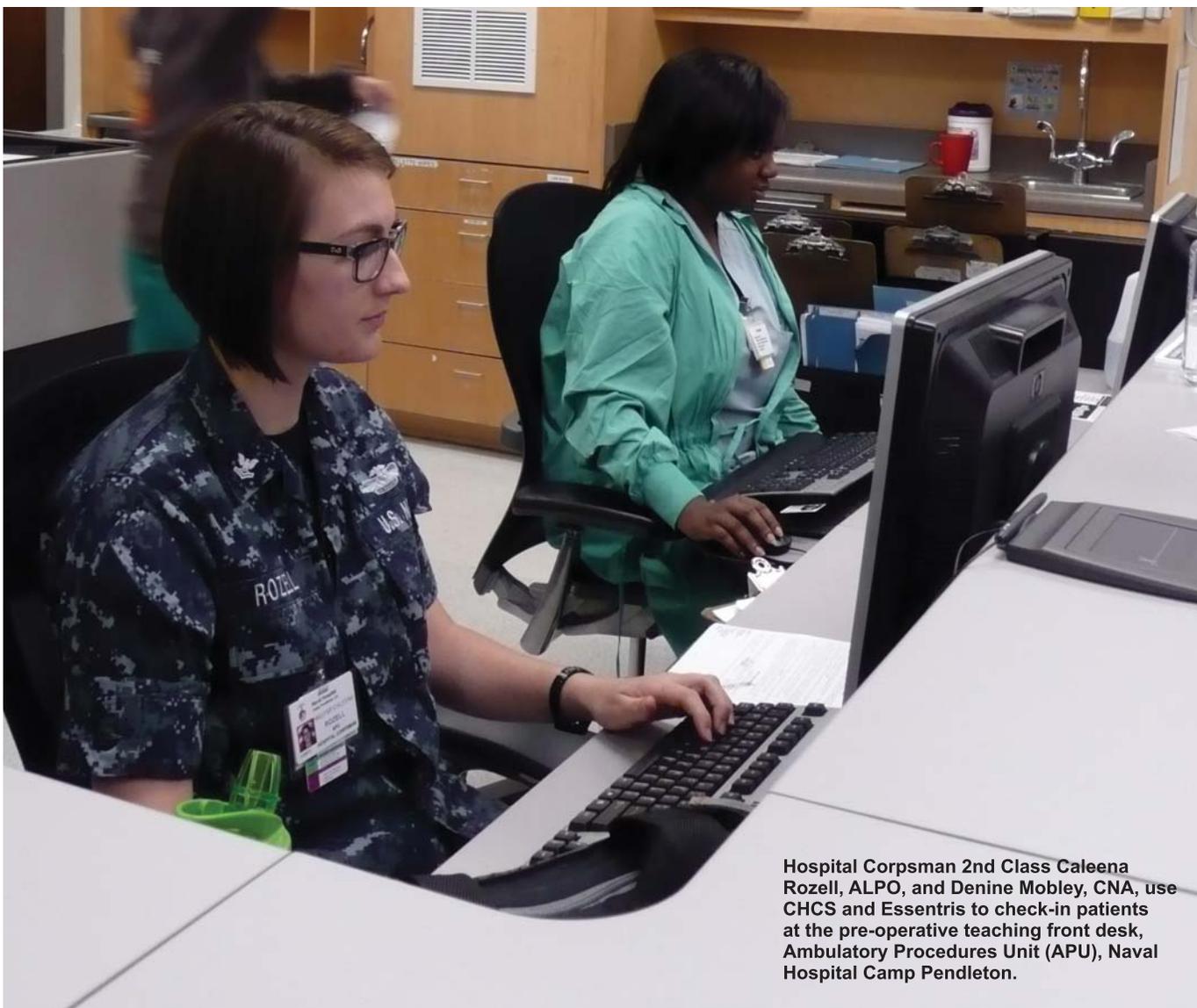
**Cmdr. Brad Lee Goeckner, department head, Main Operating Room, discusses the Navy's use of electronic medical records at NHCP with visitor U.S. Air Force Maj. Jade R. Alota, Operating Room informatics officer, David Grant U.S. Air Force Medical Center.**

for all its acute care medical treatment facilities (MTFs) worldwide. By 2011, Essentris<sup>®</sup> had been deployed in all 59 MTFs (19 Navy) across the MHS, and the effort to standardize and optimize electronic health record clinical content accelerated.

Today, more than 850 physicians, physician assistants, nurse practitioners, nurses, coders, medical technicians, corpsmen, dieticians, pharmacists, chaplains, lab staff, administrators, physical and speech therapists and administra-

tors participate in the Content Advisory Groups (CAGs) built around functional communities (e.g. medical/surgical, perioperative and laboratory communities). These CAGs work under the guidance of the Enterprise Optimization Team (EOT) to standardize and continuously optimize Essentris content and clinical workflows in all MTFs.

The Clinical Informatics Directorate, led by Capt. Lea Beilman, Director of Clinical Informatics, and Cmdr. Peter Park, Chief Medical Informatics Officer,



Hospital Corpsman 2nd Class Caleena Rozell, ALPO, and Denine Mobley, CNA, use CHCS and Essentris to check-in patients at the pre-operative teaching front desk, Ambulatory Procedures Unit (APU), Naval Hospital Camp Pendleton.

has become the center of the Navy's clinical enterprise optimization effort. The Directorate builds upon proven models for innovation and enhancement of clinical and evidence-based practices developed by health care leaders like Intermountain Health care, Geisinger Health System, and Kaiser Permanente.

Naval Medical Center San Diego focused on incorporating technology advancements and enhancements to help improve patient care when they recently renovated their Emergency Medicine Department. The department's redesign integrated technology directly into the floor plan. New electronic patient tracking boards and bedside computer work stations help staff better access their patient's EHR. Clinicians can document vital signs and carry out physician orders faster.

For Navy Medicine, as for all the Services, the Enterprise Optimization Team is a major endeavor: no private-sector health care system coordinates and de-

livers health care across the same broad spectrum of facilities and platforms from Kandahar, Afghanistan to Bethesda, Maryland and all points in between. Due to this scale, the acquisition and implementation of Essentris® has been a complex multi-year process. Moreover, beyond the initial rollout, its sustainment is complicated by the dynamic and rapidly growing nature of medical science, health information technology, and regulatory requirements. All of these aspects require the ongoing enhancement of Essentris' clinical configuration.

Working side by side, our clinicians and IT professionals are creating the common language that is essential for

successfully exchanging health information. Navy Surgeon General, Vice Adm. Matthew Nathan, cited the "increased use of health information technology and the need for Navy Medicine to adopt an integrated health record" as a key priority. As part of this mission, Navy Medicine is dedicating crucial assets and helping to plot the future course for the DoD and VA's inter-agency interoperable EHR effort. Navy Clinical Informatics is aligned with the other services in its vision and mission to deliver the promise of cost-effective, efficient, and reliable healthcare through collaboration efforts across the military enterprise. +

CLINICAL INFORMATICS SEEKS TO  
DELIVER MORE EFFICIENT AND ENHANCED  
PATIENT CARE BY INTEGRATING HEALTH  
INFORMATION TECHNOLOGY

# Taking Care of Families



Capt. Pius Aiyelawo, Commanding Officer, U. S. Naval Hospital Okinawa, poses with Daniel (left) and Joseph (right) Nandin in U. S. Naval Hospital Okinawa's Neonatal Intensive Care Unit. Air Force Staff Sgt. John Nandin, Angela Nandin, and their twin boys were patients at Camp Lester's Naval Hospital's OBGYN Clinic, Labor & Delivery Unit, Post Partum Unit, and Neonatal Intensive Care Unit, where they received the extra care they needed. (Photo by Brian J. Davis)

By **Brian J. Davis** | USNH Okinawa Public Affairs  
and **Airman 1st Class Brooke P. Beers** | 18th Wing  
Public Affairs

**T**he military likes to run on schedules. It allows for a streamline of production and quality control, but

babies do not follow those guidelines. Toss a few more factors into the mix like spouse deployments, health issues, and living thousands of miles from family support that people living stateside take for granted. Put it all together and the idea of having a baby in Okinawa can

seem complicated, daunting, and for some, downright scary.

U. S. Naval Hospital (USNH) Okinawa serves a military community where, due to the island's relative isolation, residents tend to look to each other to build support networks that serve as



# families

through Labor and Delivery and finally winding up at the Post-Partum Ward.

USNH Okinawa consistently delivers an average of 100 babies per month in the Labor & Delivery (L&D) Unit, a number that takes into account mothers from families assigned to Okinawa as well as those that traveled to the island for specialized care. With that kind of operating tempo, there's always something going on in the unit's five delivery rooms and two operating rooms. For the 16 nurses and 15 hospital corpsmen that work on L&D, down time is rare.

There is also a Neonatal Intensive Care Unit (NICU), staffed by the Air Force's 18th Medical Operations Squadron and an integral part of the hospital's fifth floor team. Within the NICU, a staff of four neonatologists, 13 medical technicians and 18 neonatal nurses take care of those babies that don't yet understand the concept of a schedule and tend to arrive early.

"We all are a team," said Capt. Don Henson, Neonatal Intensive Care Unit (NICU) nurse. "It's not just one baby and one tech. It's all of us helping."

An average of 1,000 babies are born a year on the hospital's fifth floor and about 200 newborns make a trip to the NICU due to being premature or ill. U.S. Naval Hospital Okinawa doesn't just serve the military community on Okinawa, either. Pregnant moms with complications or multiple births travel to the hospital from around the region, where they are put up at the Stork's Nest cottages behind the hospital and monitored closely throughout pregnancy, delivery, and recovery.

Every year, around 45 babies a year are transported to Okinawa from throughout the Pacific region for intensive care.

"I can't say enough about this staff," said Angela Nandin, first time mom and recent patient at the hospital. "Our care was phenomenal," she said.

Angela's husband, Air Force Tech. Sgt. John Nandin, 18th Mission Operation Squadron, was deployed less than a month after they found out Angela was expecting. For the majority of her pregnancy with their twin boys, John was gone. Shortly after returning to Okinawa he was injured in a skateboarding accident, finding himself under the care

of the hospital's Orthopedics Department. His injuries required him to travel to Hawaii for elbow surgery.

"During a period of time, we were all patients here," John laughed.

Angela remained behind in Okinawa. With the complications she was experiencing, her doctors considered it too risky for her to travel.

"Pregnancy was so emotionally draining because I was here by myself," said Angela. Throughout the course of her prenatal care, Angela recalls how heavily she relied not only on her friends, but also on one of her physicians, Cmdr. Elizabeth Tipton, for emotional support along with her prenatal care. "Dr. Tipton played the role of my mom," she said.

At any given time, around 500 women are under the care of the hospital's Obstetrics and Gynecology (OB/GYN) department. Along with the normal OB/GYN business of monitoring the health and development of normal pregnancies, the department also boasts a robust capability for handling complicated pregnancies and multiple births. Tipton, a Maternal-Fetal Medicine Specialist, finds herself in demand not only in Okinawa but around the Pacific as she periodically travels to bases in the region to provide care where her specialty isn't locally available. In fact, she was seeing to patients on an installation in mainland Japan when Angela went into labor. Over the course of Angela's prenatal care Tipton got to know the Nandins quite well, including both John and Angela's parents before they even left the United States to be in Okinawa with their children.

"I knew the extended Nandin family before they ever reached the island because of the support they were giving Angela during her high risk twin pregnancy coupled with the challenges she faced with having a deployed spouse," said Tipton.

"Two days after [John's] surgery, I went to my doctor's appointment," Angela said. "And my doctor told me that I was going into labor." Due to complications she was experiencing, the babies would arrive early and Lt. Cmdr. Kellye Hoffman, the physician handling the delivery, would need to perform an emergency cesarean section to save An-

their extended families. The caregivers at the hospital find themselves in the unique position of both providing a vital service and being part of the close-knit community they serve.

The entire fifth floor of U. S. Naval Hospital Okinawa on Camp Lester is devoted to the business of bringing new lives into the world. Activity on the fifth floor runs the gamut from prenatal care at the Obstetrics/Gynecology Clinic,

**“The NICU staff went over everything with us. They taught us how to be good parents.”**

- Angela Nandin, wife of U.S. Air Force Tech. Sgt. John Nandin



U.S. Air Force Tech. Sgt. John Nandin, 18th Mission Support Group, and his wife Angela, hold their sons Joseph (left) and Daniel (right) at Kadena Air Base, Japan, July 24, 2012. After being born five weeks early, the boys were patients at Camp Lester's Naval Hospital's neonatal intensive care unit where they received the extra care they needed in order to finally go home with their family. (U.S. Air Force photo/Airman 1st Class Brooke P. Beers)

gela and safely deliver her babies.

The day Angela went into labor, her pregnancy was at exactly 33 weeks and 1 day of gestation, a month short of what's considered a normal pregnancy of 37 weeks. Her blood pressure was way too high, and her doctors were worried.

Thinking about the twins, Angela was more than worried. She was scared.

Angela feared more for the lives of her babies than her own. As she was wheeled passed the nurse's station, a radio, tuned to the local AFN station, was playing Luther Vandross' "Here and Now." It was John and Angela's wedding song.

Taking that as a sign, Angela looked at Hoffman and said, "I trust you."

The Nandins and Hoffman had found themselves becoming more attached at every appointment. "Being pregnant without family support is difficult, especially when you are overseas," said Hoffman. "I try to care for all of my patients as if they are family," she said.

"If we had had a girl, we would have named her after Dr. Hoffman," said Angela. "She saved our lives."

With the support of the Labor & Delivery staff Angela remained calm while she waited on her husband's arrival. Present throughout the delivery was Lt. Sarah A. Jagger, a labor & delivery nurse. Her attachment to Angela gradually developed throughout Angela's previous visits to the unit for evalua-

tion when it was thought labor might be imminent. It was her day off, but she wanted to be in the room to provide additional comfort for Angela and her family. "I came in for the delivery, and Angie did wonderful," said Jagger.

"She held my hand," said Angela.

John managed to return to Okinawa in time to attend the delivery. Twenty-four hours after he arrived at the hospital, Angela gave birth to their two sons, Joseph and Daniel.

The Nandins are quick to point out that in a normal pregnancy, parents get to take their children home soon after the delivery. But due to their boys being born five weeks early, the twins were ushered to the NICU to be given a little

extra care while new mother Angela went to the hospital's Post Partum Unit to recover—without her babies.

"Normally, moms and babies go over to the couplet care unit together," said Cmdr. Alison H. Castro, assistant director for Nursing Services at the hospital. "When you're not able to have your babies by your side, it causes additional anxiety along with the normal hurdles you have to endure just to recover from a c-section. Our Couplet Care staff provided the care and extra emotional support necessary to allow her to recover and visit her babies as often as she wanted."

The NICU has 14 beds ready for the tiny patients but they could potentially care for as many as 24 babies. Even though that may be a lot of running around the staff still takes their time in giving their patients and parents the time and care they need.

"We provide a lot of education to the new parents," said U.S. Air Force Capt. Rabekah Carlisle, NICU nurse. "We try to let the parents do as much as possible."

"The NICU staff went over everything with us. They taught us how to be good parents," said Angela. Taking care of the family remained a team effort as Castro and OB/GYN nurse Lt. Colleen Blosser, both Certified Lactation Educators, provided lactation support and followed up with Angela and her babies—all three new to the art of breastfeeding—to make sure everything was going okay. "They were here every day," said Angela.

Soon, Joseph and Daniel were strong and healthy enough to be released from the hospital, and according to plan, went home with their parents where they are currently settling into their new routine.

The Nandins attribute their story's happy ending to not only the quality of the medical care they received, but also to the caring and support of the entire fifth floor. "I could give you one hundred names," Angela said. "Even the Commanding Officer came up to see us personally."

Sometimes caring for patients involves more than just providing medical services. A personal touch and a



**The Nandin family poses with USNH Okinawa staff. From Left: Donna Nandin; Air Force Staff Sgt. Deanna Haxton, USNH Okinawa Neonatal Intensive Care Unit; John Nandin, Daniel Nandin, Capt. Pius Aiyelawo, USNH Okinawa Commanding Officer; Air Force Tech. Sgt. Joseph Nandin; Angela Nandin; Sam Micco, Angela's father; and Maj. Karen Larry, USNH Okinawa Neonatal Intensive Care Unit. The Nandins and their twin boys were patients at Camp Lester's Naval Hospital's OBGYN Clinic, Labor & Delivery Unit, Post Partum Unit, and Neonatal Intensive Care Unit, where they received the extra care they needed. (Photo by Brian J. Davis)**

relationship can be just as important as medical skills to patient care.

"It's a privilege to assist families who are experiencing a complicated pregnancy, and it is especially rewarding to work with women who are so committed to giving their baby the best start possible," said Tipton.

"It was a pleasure to be Angela's OB physician," said Hoffman. "Each appointment with Angela was always a new surprise, and I was overjoyed to be able to take those steps in her pregnancy with her. I feel blessed to have been able to meet the Nandin family and bring Joey and Danny into this world. They are beautiful babies."

"It was overwhelming and we have been so lucky with all of the support we had," said Angela recalling her experiences. "I want the world to know that if you are ever stationed here [in Okinawa], this is the best place you can be."

"I truly believe that military medicine takes excellent care of our military family," said Hoffman. "The Nandin family is a shining example of military medicine at its finest."

Scheduled to move into a new state of the art facility on Camp Foster in early 2013, the hospital will continue to provide quality and family centered care to our operational forces, their families, and others entrusted to us, said Capt. Aiyelawo, commanding officer, USNH Okinawa. The new hospital complex will have a new Mother-Infant Care Center with 14 state-of-the-art Labor, Delivery, Recovery, and Postpartum (LDRP) rooms, professionally decorated with private baths and updated furnishings to provide an improved birthing experience for expecting mothers and their families.

U. S. Naval Hospital Okinawa is the largest overseas medical treatment facility in the Navy, serving a beneficiary population of 55,000 active duty personnel, family members, civilian employees, contract personnel, and retirees. The facility also provides referral services for over 189,000 beneficiaries throughout the Western Pacific.

For more news and information about U. S. Naval Hospital Okinawa, visit [www.navy.mil/sites/nhoki](http://www.navy.mil/sites/nhoki). +

# TRAINING WARFIGHTERS | TO HELP OTHERS HEAL

By Anna Hancock | Naval Hospital Camp Lejeune Public Affairs

**N**aval Hospital Camp Lejeune (NHCL) achieved a milestone in a one-of-a-kind initiative that trains war fighters to help others heal. NHCL is the first Navy Medicine command to successfully train and hire a qualified wounded, ill and injured Marine through the Bureau of Medicine and Surgery's (BUMED) REACH program into a part-time health care career Aug. 27. NHCL introduced the program in Nov. 2011.

REACH stands for Reintegrate, Educate and Advance Combatants in Health Care and targets Marines and Sailors with a strong likelihood of receiving a 30 percent or more disability rating based on DoD or VA standards. It is founded on mentorship, and fosters training, education advising, career

coaching, and career experience through part-time employment.

NHCL's leadership and staff strongly believe in the program. The hospital's 22 civilian and active duty staff members collectively volunteered more than 10,000 hours mentoring REACH students since the program's implementation in Oct. 2011. NHCL has 24 REACH program participants, or students, currently enrolled, and the numbers are steadily increasing. NHCL offers opportunities to train in almost every area of the hospital.

Ultimately, the program offers wounded, ill, and injured Marines and Sailors, such as Felix Rivera, Navy Medicine's first part-time employee hired after being medically retired from the Marine Corps, a new beginning.

## Felix's Story

In March 2009, Gunnery Sgt. Felix Rivera was the platoon sergeant for the Third Battalion, Eighth Marine Division (3/8), stationed in Helmand Province, Afghanistan. While leading a team of Marines at an Entry Control Point (ECP) they established within an Afghan National Police (ANP) compound, a stolen ANP truck approached the checkpoint. A suicide bomber hid explosives inside the truck, and detonated it. The bomb killed one Marine, 12 civilians, six Afghan National Policeman, and injured many.

Rivera, standing only 30 feet away, was thrown several feet by the explosion. His body was wounded from shrapnel and his face was severely injured. "They medevac'd [medically evacuated] me to Kandahar because

the blast took off the side of my nose," explained Rivera. "After a month undergoing surgeries and repairs, I somehow talked my way back to the field. I wanted to leave with my Marines."

Rivera noted how shortly after, he kept dropping the ball on small tasks and forgetting things. Rivera's commanding officer took notice and medically evacuated Rivera to Walter Reed National Military Medical Center at Bethesda. It was here that Rivera was diagnosed with Traumatic Brain Injury (TBI), Post-Traumatic Stress Disorder (PTSD), and a long list of additional medical conditions related to the blast such as insomnia, migraines, nightmares, neck and back injuries. Upon his return to his command in Camp Lejeune, N.C., he was reassigned to the Wounded Warrior Battalion East (WWBnE) awaiting discharge from the service.

"It was a really long process to get discharged – a little over three years," said Rivera. "I was sent back to Bethesda, the veterans hospital in Tampa...I didn't feel like I was making any improvements. It felt like a dark cloud for a very long time."

Rivera and his wife first learned of the REACH program from a recovery care coordinator at WWBnE.

"My wife told me I was doing it," Rivera said. He continued to explain his fears about transitioning back into civilian life, trying to hold a job with TBI, and possibly going back to school after more than 20 years.

"I guess I didn't have confidence in myself. But then I thought - what do I really have to lose? Going to school? Possibly getting a job at the naval hospital? I chose mental health because I wanted to help other Marines."

The program is co-sponsored by BUMED's Total Force and Wounded, Ill and Injured programs, and was launched

Naval Hospital Camp Lejeune's (NHCL) Psychiatric Technician Esperanza Franco trains Felix Rivera, a student-trainee health technician recently hired by NHCL, on how to proctor and score a frequently used personality test administered to mental health patients. NHCL hired Rivera through the Reintegrate, Educate and Advance Combatants in Health Care (REACH) program – a Navy Medicine-wide mentorship-based program for wounded, ill, or injured service members. (Photo by Anna Hancock)

*Navy Medicine*



in May 2011. Within the year, it was implemented within three naval medical centers and one additional naval hospital.

“REACH is designed to provide support to the wounded, ill, and injured service member throughout each step of the member’s separation from the military and reintegration into civilian life,” said Kevin Kesterson, NHCL’s REACH program career coach. “The program is all about gaining skills and gaining experience and going to school. Many view it as their way to help other Marines and Sailors they fought next to.”

Each program site has a coordinator, career coach, and mentors who work one-on-one with each Marine or Sailor who is referred to the program. The coach meets with the service member, or REACH program candidate, to discuss the details of the program, and determine if he or she meets the qualifications to enroll. If eligible, the coach works with the candidate’s chain of command to officially get the candidate enrolled as a REACH program student.

“I sit down with all my students and talk about what they want to do when they transition out of the military,” noted Kesterson. “We make a career plan together, and I work with the department heads and mentors to place the student in an area they can job shadow their mentor for six to 10 hours per week.”

The program’s unique design also fosters academic learning. The coach assists the REACH program student to choose a school and field of study that would prepare them to qualify for a part-time Federal civil service job in their desired career field while attending school. Since the students are on active duty or recently separated from the military, they are able to fund their education using tuition assistance or their veteran’s benefits.

Extending even beyond active duty service, it is designed to continue working with service members after separating from the military, until the member graduates from their chosen academic program. Then assist the former Marine or Sailor with applying for full-time Federal health care careers.

### **The Program’s Success**

About a year after entering the REACH program and medically retiring, the naval hospital hired Rivera as a part-time student trainee health techni-



**Hospital Corpsman 2nd Class Edwin Manansala, radiology technologist and REACH program mentor (left) and Hospital Corpsman 2nd Class Anthony Boswell, advanced radiology technologist (right back) teach REACH program student Lance Cpl. Brandon Pendergrass how to properly X-Ray a patient. (Photo by Hospitalman Lauren Robshaw)**

cian with the Mental Health Department. He proved successful throughout his volunteer career experience in the clinic, and he began a bachelor’s degree program in psychology. His career goal is to obtain a full-time psychology technician position within the naval hospital, and ultimately become a psychologist or psychiatrist. He attributes the program to completely changing his life and improving his self-confidence.

Rivera’s REACH program mentor Hope Franco, psychiatric technician with the Mental Health Department recalls, “Many Marines think ‘Oh no! What am I going to do with this diagnosis?’ Well, we can show Marines that they do not become the diagnosis, they can still live. Felix is a true example of this.”

Franco volunteered more than 250 hours mentoring REACH students and encourages other naval hospital staff members to do the same.

“The Marines coming through [REACH] have been a blessing to me too. I’ve learned a lot about myself and my future career goals. I want to be more like Felix!” she remarked of his high career aspirations and goals.

NHCL’s program is gaining momentum. Kesterson believes there are no limits to the successes for the individuals who enroll, or the benefits the mentors gain from working with the Marines and Sailors.

“We used to say we [the program] will support them through recovery. Now I believe it is part of their recovery. It gives them hope,” said Kesterson. +

# Idaho twins unite in combat zone

Story and photo by Marine Corps Sgt. John Jackson | Regional Command Southwest

**W**hile Marine Corps Sgt. David Haines and Navy Hospital Corpsman 2nd Class Michael Haines do not necessarily compete against one another, the 24-year-old twin brothers often wrangle back and forth as if they are teenagers fighting for a PlayStation controller. Whether they are trash talking about the others military branch or arguing about dates of events, the brothers playfully interact like adolescents still living together on a daily basis.

Growing up, the Haines brothers had different interests. Michael ran track, worked and even spent the better part of a year living in Italy with his sister. David spent his free time practicing the piano, playing in a jazz band and taking drama classes at the local college. However, the brothers have always remained close.

The two graduated from Moscow Senior High School in Moscow, Idaho, during June 2006. After spending a few months out of school, David knew he wanted something different.

“I needed a change of pace,” David said. “My brother-in-law was trying to talk me into the Navy, but the Navy didn’t really interest me. The Marine recruiter was right next door and totally sold me.”

During January 2007,

David left Idaho to become a Marine, and his twin brother was thinking about doing the same.

“I always wanted to join (the Navy),” Michael said. “I had gotten married right out of high school. When we found out that my wife at the time was pregnant, I knew I needed to take care of my family, and I could finally do what I wanted.”

For the past five years, Michael and David have shared two duty stations. However, they have not been stationed together at the same time. The brothers have both been assigned to units in Okinawa, Japan, and are both currently assigned to units at Camp Pendleton, Calif.

David, the Afghan National Army development chief, Afghan National Security Force Development, I Marine Expeditionary Force (Forward), deployed from Camp Pendleton to Afghanistan during February 2012. His brother, who is a Navy corpsman, checked into his current unit, 1st Battalion, 1st Marine Regiment, during April 2012 and deployed to Afghanistan during the summer of 2012. This is the first time the brothers have deployed to a combat zone and the first time they have been together in five years, except for a few days during Christmas leave.

“It’s pretty interesting,”

**“It makes it a bit different tracking those things, especially having your twin brother out there.”**

- Marine Corps Sgt. David Haines



Sgt. David Haines, left, the Afghan National Army development chief, Afghan National Security Force Development, I Marine Expeditionary Force (Forward), and his twin brother Hospital Corpsman 2nd Class Michael Haines, a corpsman with 1st Battalion, 1st Marine Regiment, reunite at Camp Leatherneck, Afghanistan.

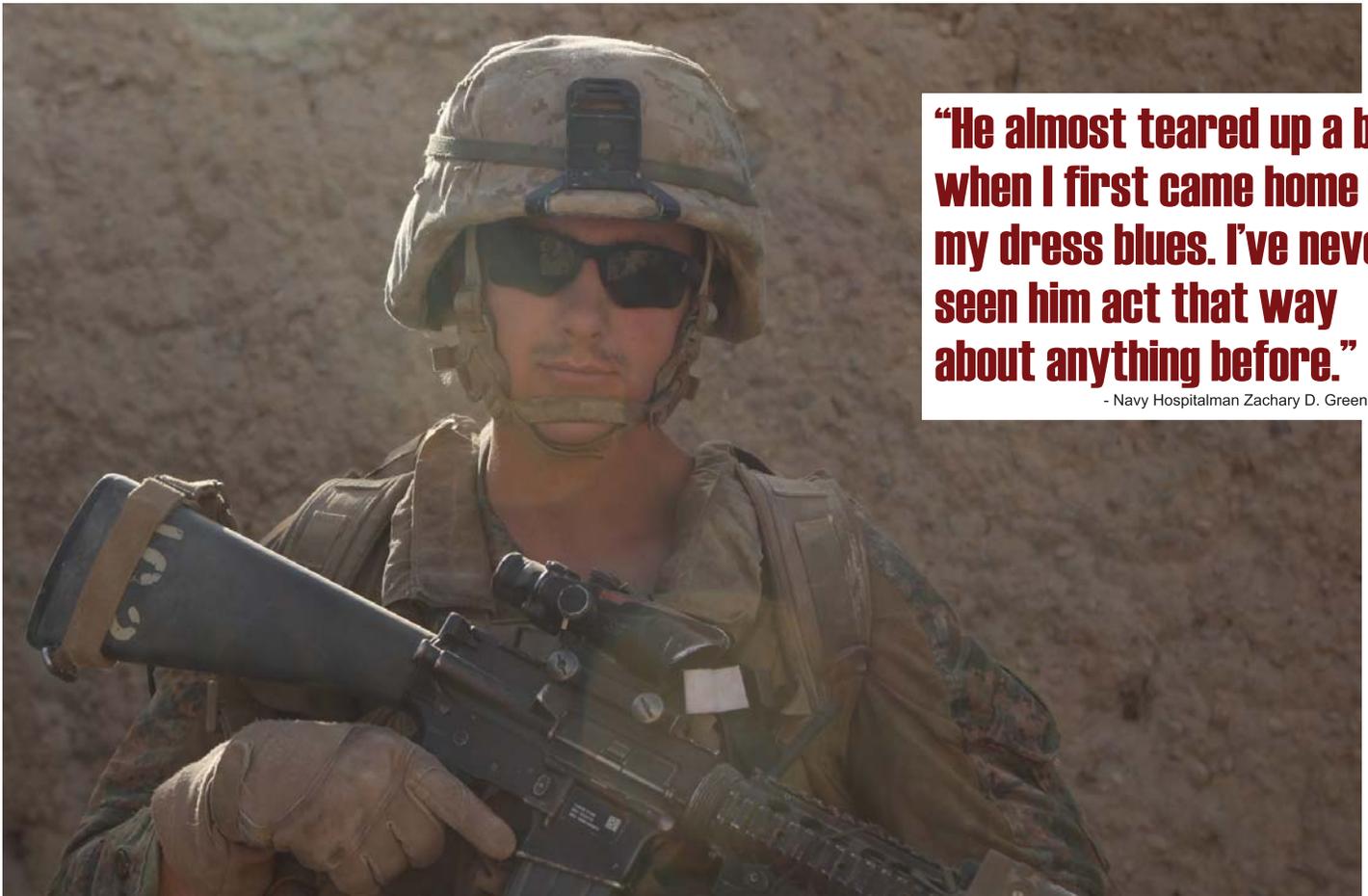
Michael said. “We always kept missing one another at our previous duty stations. It’s pretty cool that we are here together though.”

Although being deployed in the same area is nice for the brothers, David has found himself on the edge of his seat the past few months.

“I was really looking forward to (Michael) getting here, but to be honest it has made me a bit anxious,” David said. “Being a part of the MEF and knowing about the kinetics in the area and seeing casualty reports, I was always making sure it wasn’t my brother or his unit that was getting hit. It makes it a bit different tracking those things, especially having your twin brother out there.”

Michael is wrapping up his approximate 90-day deployment and will be headed back to Camp Pendleton in the coming days. However, until he redeploys, the brothers look forward to spending some time together.

The two enjoy being a part of the U.S. Armed Forces, and both are thinking about pursuing an officer career in their respective branches. With 15 or more years remaining in the military, it may mean many long waits before uniting again, but the brothers will always remain close. The twins will take whatever opportunity they have to talk to one another, even if it is on the other side of the world in a combat zone. +



**“He almost teared up a bit when I first came home in my dress blues. I’ve never seen him act that way about anything before.”**

- Navy Hospitalman Zachary D. Greenberg

Hospitalman Zachary D. Greenberg is currently deployed to Afghanistan with 1st Battalion, 1st Marines, Regimental Combat Team 6. The Woodenville, Wash., native’s family has a rich history in the Navy. A great grandfather, grandfather, uncle and a brother have all taken the oath of service before him.

## Sailor of the Sands provides care in Afghanistan

Story and photo by Marine Corps Cpl. Anthony Ward Jr. | Regional Command Southwest

**W**ith a deep-rooted family history of service in the Navy, Hospitalman Zachary D. Greenberg chose to continue to follow that tradition.

The 21-year-old from Woodenville, Wash., made his decision to join a year ago.

My brother was in Afghanistan in 2010, and before he came home I had already been talking to the recruiter,” said Greenberg. “I joined because I wanted to serve like my brother, and I thought the military would be a good fit for me.”

Greenberg’s Navy roots extend deep into his family tree. His grandfather and an uncle were both Sailors too.

“My Grandpa Bob was a telephonic radio communications 2nd class in the

1950s,” said Greenberg. “He served on a carrier for a deployment. My Uncle Morris, he was an electrician’s mate. He served for six to seven years.”

Greenberg, a third generation Sailor, has yet to serve on a ship, which is a running joke with his grandfather.

“My grandpa was a Sailor of the seas and I’m a Sailor of the sand,” laughed Greenberg.

With such a deep family history in the Navy, it is no wonder why the “Sailor of the sand” joined up. He said he remembers fondly the day his Grandpa Bob saw his in uniform.

“He almost teared up a bit when I first came home in my dress blues. I’ve never seen him act that way about anything before,” said Greenberg.

Greenberg made it through all the courses and schools he needed to become a hospital corpsman and to pro-

vide Marines and sailors with the care they need.

Finishing as one of the highest graduates in his class, he was offered orders to anywhere in the world and chose to serve with the Marines.

He received orders to 1st Marine Regiment, 1st Marine Division. He is now deployed with the unit in Helmand province, Afghanistan as part of Regimental Combat Team 6.

“(My parents) weren’t too ecstatic about my orders to go to 1st Marine Division,” he said. “I’m a good corpsman, and I just felt Marines deserve good corpsmen.”

“I’m not doing it for the glory or anything,” said Greenberg. “I just want to make sure I’m there for my guys when they need me because they’re my guys. I just want to do my job and know I did it well.” +

# NAMRU-3 Provides Malaria Support

From NAMRU-3 Public Affairs

CAIRO—The U.S. Naval Medical Research Unit No. 3 (NAMRU-3) plays an important role in U.S. force health protection efforts in the region through malaria outbreak support, vector control efforts and training for malaria prevention and diagnostics.

Following the 2010 death of a U.S. service member in Liberia due to malaria and identification of other cases, NAMRU-3 provided key on-site outbreak assistance with infectious disease, entomology and epidemiologic support in collaboration with the U.S. Army Public Health Command – Europe (USAPHC-Europe). USAPHC-Europe provides comprehensive military public health programs in support of garrisons, training areas, and contingency and combat forces operating in the area of responsibility (AOR) to sustain force health protection and readiness. NAMRU-3 provided an extensive report of findings and recommendations to the U.S. Africa Command (AFRICOM). This report was presented to a multi-agency panel of malaria experts resulting in policy changes to improve training for deployed medical assets. AFRICOM is responsible to the Secretary of Defense for U.S. military relations with 54 African countries.

NAMRU-3 has subsequently led vector control efforts in support of Operation Onward Liberty and has begun



Dr. Alia Zayed, NAMRU-3 entomologist, demonstrates larval collection during field training. (Photo courtesy of NAMRU-3 Public Affairs)

collaboration with the Liberian Institute for Biomedical Research (LIBR) to develop a comprehensive strategy for identifying, monitoring and controlling *Anopheles gambiae*, the main vector of malaria in the area. Operation Onward Liberty is an AFRICOM program aimed at rebuilding the Armed Forces of Liberia.

NAMRU-3 has also provided laboratory assistance to support the diagnosis

of malaria in U.S. service members in Comoros and Uganda and has developed an on-site malaria diagnostics training program for isolated medical assets within the AOR.

NAMRU-3 vector surveillance projects in Djibouti have led to modification of the force health protection plan for malaria prevention in the area. The lab also developed the first vector map for three main districts in Djibouti. Information of the malaria vector distribution and abundance in Djibouti has been reported to the Horn of Africa and Camp Lemonnier. Camp Lemonnier is home to the Combined Joint Task Force – Horn of Africa of the AFRICOM. Camp Lemonnier is the only U.S. military base located in Africa supporting operations geared toward building security and stability in the region.

NAMRU-3 conducts infectious disease research and surveillance in the Middle East, Southwest Asian, Africa and Eastern Europe. Current studies also focus on influenza-like illness, acute febrile illness, diarrheal diseases, hemorrhagic fever, HIV and infection control. +

**Following the 2010 death of a U.S. service member in Liberia due to malaria and identification of other cases, NAMRU-3 provided key on-site outbreak assistance ...**



## The Physical and Cognitive Research Environment at NHRC

From NHRC Public Affairs

The Warfighter Performance Laboratory at the Naval Health Research Center (NHRC) in San Diego focuses on maximizing operational performance and enhancing warfighter resilience as well as improving assessment, diagnosis and advanced rehabilitation strategies. One of the functional research groups within the Warfighter Performance Laboratory is the Physical and Cognitive Research Environment (PhyCORE) research team. PhyCORE research focuses on physical and cognitive performance factors of healthy and injured warfighters. The Computer Assisted Rehabilitation Environment (CAREN) is a multifunctional system, including a 6-degrees-of-freedom motion platform, 12 cameras for 3D motion capture, a dual-belt treadmill, embedded force plates, a 180-degree 10-foot-tall panoramic screen, and realistic sounds and scents.

The NHRC CAREN, one of four in the Department of Defense, allows for the assessment of kinetic and kinematic measurements in a fully immersive virtual environment. Cognitive activities with physical tasks can also be implemented.

With research focused on warfighters who have suffered traumatic brain

injury and/or amputation, the PhyCORE research team strives to improve rehabilitation programs and techniques, enabling the injured warfighters to regain autonomy and independence in the community through improved rehabilitation practice and patient care.

The PhyCORE research team has several active protocols in place to establish baseline standards of performance in novel immersive virtual environments using CAREN for both healthy and injured populations (e.g., Development of a Database for Able-Bodied Ambulators and Development of a Database for Lower-Limb Amputees). Measurements of gait, muscle activation, biomechanics, and body composition are collected and used for assessment.

In collaboration with the Naval Medical Center San Diego, the PhyCORE research team is studying the performance of wounded warriors with vestibular dysfunction and/or amputation through protocols such as Improved

Training Method for Rapid Rehabilitation of Amputees and Balance Training in Patients with TBI.

Preliminary results suggest that volunteers under some circumstances perform differently in the virtual environment compared to the traditional laboratory setting. However, training programs conducted in the virtual environment lead to improvements in physical and cognitive tasks in both healthy and injured populations.

While research findings are presented to sponsors and to the medical and scientific communities, the PhyCORE research team is also actively collaborating with the other DoD CAREN facilities to augment treatment regimens for wounded warriors. In addition, the PhyCORE research team participates in the CAREN work group, an international group of CAREN facilities sharing ideas and experiences to push the field of virtual environment therapy to new levels of success. +

## The PhyCORE research team strives to improve rehabilitation programs and techniques, enabling the injured warfighters ...

## NAMRU-2 Collaborates with Vietnam on Infectious Disease Research

From NAMRU-2 Public Affairs

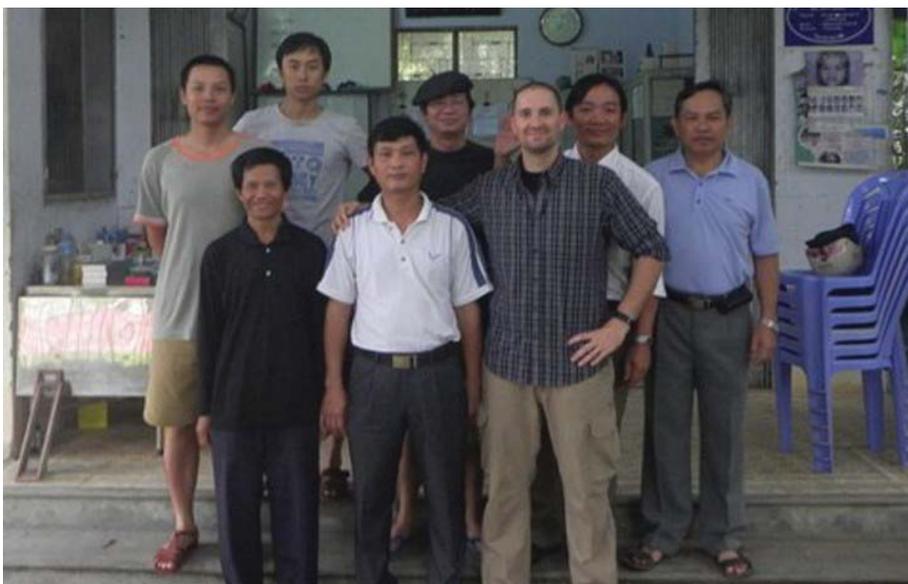
The U.S. Naval Medical Research Unit No. 2 (NAMRU-2) joined a research collaboration with the Vietnam People's Army (VPA) Military Institute of Hygiene and Epidemiology (MIHE) as part of the long-established relationship between the VPA and the Australian Defence Force Military Malaria Institute.

NAMRU-2 hosted a delegation of Vietnamese military officers at the unit's current location in Pearl Harbor, Hawaii in July. During the visit, Capt. George Schoeler, NAMRU-2 commanding officer, provided a short history of NAMRU-2 followed by a presentation on current research being done in Southeast Asia, including febrile illness surveillance studies in Cambodia, Laos and Singapore. The delegation was in Hawaii as part of the Rim of the Pacific 2012 Exercise.

The Vietnamese delegation was very interested in NAMRU-2's new activities in Vietnam, said Schoeler. One of the studies we are doing is monitoring resistance to anti-malaria medication currently used in Vietnam. We are also engaged in entomological studies to conduct surveillance, identification and screening of mosquito vectors of malaria in the study areas. NAMRU-2 has also initiated a respiratory surveillance study with the Vietnamese Military Institute of Hygiene and Epidemiology.

A study is focusing on clinical trials to monitor resistance to anti-malarial medications. Two clinical trials in the Phuoc Chien Commune (PCC) of Nhan Thuan province will monitor how effective the commonly used anti-malarial medications are in treating patients in Vietnam. The first clinical trial will determine the effectiveness of two medications (Artesunate and Artemether-Lumefantrine) on the type of malaria most likely to cause severe disease (*P. falciparum*).

The second clinical trial will determine the effectiveness of the medication chloroquine in treating the most common malaria parasite (*P. vivax*) in Vietnam.



**Lt. Ian Sutherland (front right), NAMRU-2 entomologist, with colleagues from MIHE and IMPE in the remote Phuoc Chien Commune.** (Photo courtesy of NAMRU-2 Public Affairs)

Current entomological studies focus on surveillance, identification and pathogen screening of mosquito vectors of malaria in the study areas. Recent activities include the successful first-phase field studies at village and mountain sites at PCC and initial entomology team collaborations between MIHE, NAMRU-2, and the Vietnamese Institute of Malaria and Parasitology Epidemiology. This is the first U.S.-Vietnam direct military-to-military entomology field survey and vector biology study of malaria vectors.

So far, data obtained suggest the highest risk for malaria transmission and maintenance is in a forest malaria cycle in mountainous areas, said Schoeler.

Additional entomological activities include mosquito surveillance and testing at PCC, with particular attention to further development of the mountain field sites, including landing/biting counts, larval surveys, layered baiting/trapping techniques, human malaria seroprevalence testing, and surveillance activities conducted during the upcoming dry and rainy seasons.

When asked about the field assessment, NAMRU-2 entomologist Lt. Ian Sutherland said, There is nothing like the challenge and camaraderie of getting out of the lab or office and working in the field. I was very happy with the im-

mense spirit of teamwork and cooperative effort from everyone on the team. This mission was a foundational success at building a strong joint MIHE and NAMRU-2 partnership.

Another epidemiologic research effort will determine the causes of fevers that constitute the major disease burden for many developing countries.

With enthusiastic support from the VPA's Military Medical Department, epidemiologic research will focus on the infectious disease causes of fevers, which will assist in proper diagnosis and appropriate treatment for febrile patients, said Schoeler. The results from this study could impact clinical treatment guidelines of febrile illness in Vietnam.

According to Schoeler, these research studies are funded by the Global Emerging Infections Surveillance and Response System through the U.S. Department of Defense Armed Forces Health Surveillance Center.

NAMRU-2 conducts infectious disease research and surveillance in South Asia and Southeast Asia. Current studies include respiratory disease surveillance, malaria drug resistance, novel vector control measures and dengue cohort monitoring. The goal is to study tropical diseases where they occur and where new preventive measures and treatment may be tested and evaluated.+

# WRAIR and NMRC Recognize 2012 STEM Student Interns

From NMRC Public Affairs

An awards ceremony for science, technology, engineering and mathematics (STEM) students was held at the Walter Reed Army Institute of Research (WRAIR) and Naval Medical Research Center (NMRC), August 9. Middle, high school and college students come to WRAIR/NMRC each year during the spring and summer months to intern and gain hands-on experience as a potential researcher. This is a great chance for students who are interested in a career in one of the STEM fields to hone their skills.

The awards ceremony was coordinated by Swati Ramadorai, the student program coordinator from WRAIR, with Lt. Mario Guerrero, NMRC student pro-grams coordinator

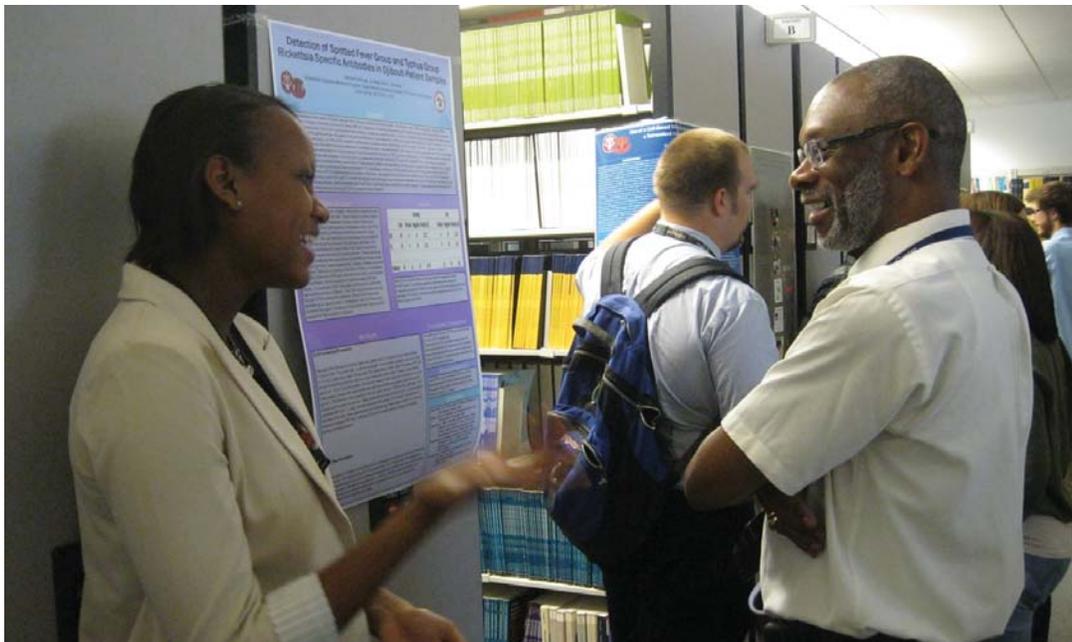
WRAIR's executive officer, Col. Shanda Zugner, said she was honored to be there. Former NMRC commanding officer, Capt. Richard L. Haberberger, Jr., was also there to support the students and mentors during the award ceremony.

It's important for science and technology to be advanced. I am impressed by the quality of work done by the students, Haberberger said.

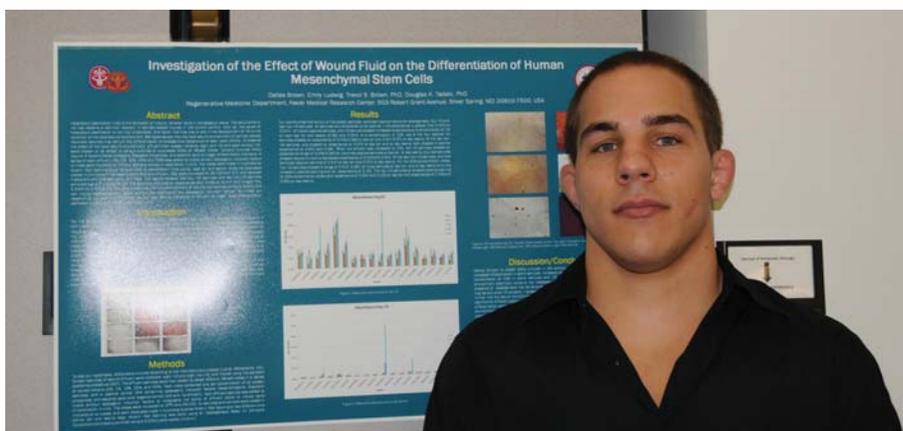
This year, over 100 students participated in several internship programs at WRAIR/NMRC. The programs—Science and Engineering Apprentice Program (SEAP); Naval Research Enterprise Intern Program (NREIP); College Qualified Leaders Program (CQL); and Gains in the Education of Mathematics and Science Program (GEMS)—allow students to be paired with military and civilian researchers as their mentors.

In the past, NMRC has highlighted the benefits of a student-mentor relationship. The students are given the opportunity to do their own research and develop a poster, which allows them to showcase their passion and interest towards a subject that could potentially lead them towards a promising STEM career.

Jasmine Mutunga, a student from Northwest High School in Germantown, Md., did her research on the Detection of Spotted Fever Group and Typhus Group Rickettsia Specific Anti-



**Jasmine Mutunga (left), Northwest High School, Germantown, Md., discusses her research project during the award ceremony with Dr. Kevin Porter, NMRC researcher. (Photos courtesy of NMRC Public Affairs)**



**Dallas Brown, University of Maryland-College Park student, and his poster presentation at the STEM awards ceremony.**

bodies in Djibouti Patient Samples. Her mentors were Dr. Allen Richards and Dr. Ju Jiang, both NMRC researchers. Mutunga's research looks at Rickettsial diseases, which are a threat to people from various countries across the globe, including the United States.

My mentors gave me a lot of assistance throughout the duration of the program, Mutunga said. I had absolutely no experience working in a lab before working at NMRC, and Dr. Ju Jiang taught me the basics. She taught me how to work with pipettes and how to run the ELISA titer and screening procedure. She and Dr. Allen Richards

really helped me put together my poster and gave me feedback on what needed to be improved.

Another student, Dallas Brown of the University of Maryland-College Park, was mentored by NMRC researchers Dr. Trevor Brown and Ms. Emily Ludwig. Brown's research was on the Investigation of the Effect of Wound Fluid on the Differentiation of Human Mesenchymal Stem Cells and looked more closely at heterotopic ossification (HO), the formation of mature, lamellar bone in nonosseous tissue, which has become a common problem in combat-related injuries. +

# Under the Lantern Light

## *Navy Medicine in the War of 1812*

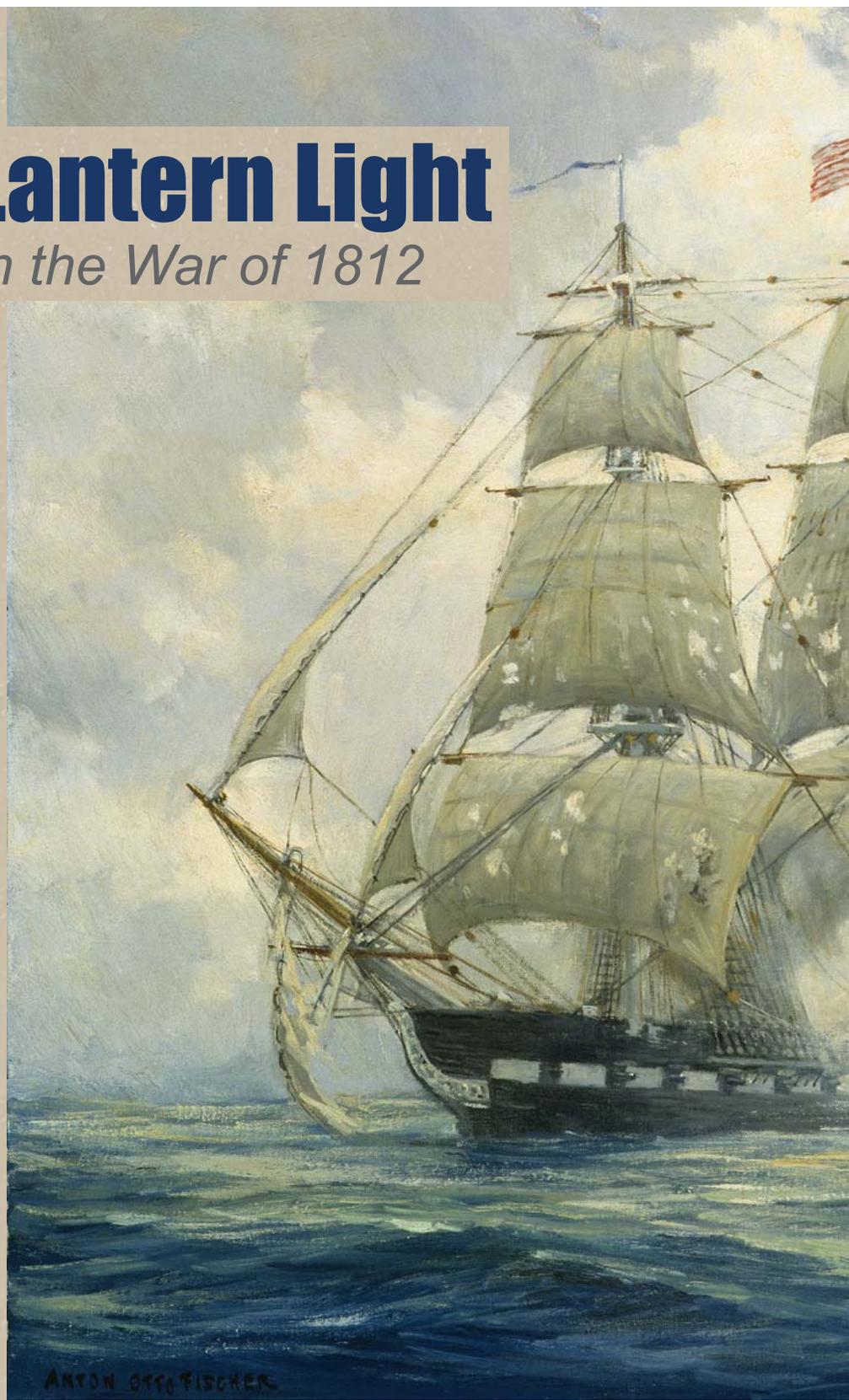
By **André B. Sobocinski** | U.S. Navy Bureau of Medicine and Surgery Historian/Publications Manager

June 1, 1813. Twenty-five miles off the coast of Boston. Surgeon Richard C. Edgar<sup>1</sup> and Surgeon's Mate John Dix had more than their share of patients to attend to in the cramped, dimly-lit cockpit hidden in the depths of USS Chesapeake. Out of the ship's 379 crewmembers, 85 were wounded and 61 were killed outright or died soon after the 15-minute melee with HMS Shannon. In what may be termed as a "master class" of early nineteenth century war medicine, Drs. Edgar and Dix dressed wounds, applied tourniquets, sawed off limbs and cauterized stumps with "hot pitch." Their most notable patient that day, CAPT James Lawrence, suffered from musket wounds to the right leg and intestines. His leg could be amputated, and he could be given laudanum for his pain, but the intestinal wound was fatal. In his anguished state, Lawrence is said to have cried out to his doctors to "keep the guns going" and, repeatedly, "Don't give up the ship!" Lawrence would linger another three days before succumbing to his injuries. His final words, first spoken to Drs. Edgar and Dix, would survive to this day as a motto of the U.S. Navy.

In this bicentennial of the War of 1812, we look back to see the U.S. Navy Medical Department in its true infancy and a time when the fields of medicine and surgery had not yet caught up with the well-meaning intentions of the medical providers. Even without warfare, saving lives in the early nineteenth century was goal few could meet. When war began on June 18, 1812, medicine was still in its "heroic age"—there were no antibiotics, no anesthesia, no knowledge of germ theory, no professional nurses, no triage, no treatment of mental illness, very little clinical training available at American medical schools, and dental care existed only in a very crude form. Navy surgeons and surgeon's mates practiced their "healing craft" with ample supply of antiquated knowledge and

almost sheer will. Bloodletting, blistering, and purging were still in common practice. Shipboard medical kits contained the usual assortment of anodynes, antiarthritics, astringents, cathartics, emetics, diaphoretics, diuretics, rubefacients, stimulants and tonics—some of which was perfectly equipped to induce

a host of iatrogenic disorders. Calomel (mercury chloride) and jalap (a poisonous root) were commonly used to stimulate the intestinal tract and rid intestinal irritation. Peruvian bark (later known as quinine) was used in the treatment of malaria and other malignant fevers. Potassium acetate was used to increase





**A painting of the Constitution engaged in battle with HMS Java, December 1812.**  
*(Photo courtesy of Navy Art Museum)*

secretion and flow of urine. Opium and laudanum were used to relieve pain and induce sleep. Teas and tonics were commonly used to settle digestive complaints.

During the war, Navy medical personnel (numbering 26 surgeon's and 26 surgeon's mates in 1812 and 44

surgeons and 47 surgeon's mates by the end of the war) served aboard the full spectrum of warship—frigates, sloops-of-war, schooners, brigs, and gunboats. Back on shore, Navy medical personnel also served ashore at Marine hospitals (equivalent to Public Health Service hospitals), Navy medical hospitals, and

Navy and Marine Corps Rendezvous (equivalent to recruiting stations). Permanent Navy hospitals were still over a decade away; all Navy hospitals at the time were makeshift and temporary facilities located on or near Navy yards in Brooklyn, N.Y., Charleston, S.C., Erie, Pa., New Castle, Del., New Orleans,

# Loss of limb in combat is nothing new; but with the advances in prosthetic research and design, artificial limbs have become less so for amputees.

La., Newport, R.I., Norfolk, Va., Philadelphia, Pa., Portland, Maine, Sacket's Harbor, N.Y., Savannah, St. Mary's and Sunbury, Ga., Washington, D.C., and Wilmington, N.C.

For our Navy physicians in the War of 1812, operational medicine meant repairing damage caused by cannon balls, grape shot and musket fire as well as attending to those suffering from the shipboard occupational injuries and diseases of the day. The medical trade called for amputation, application of tourniquets, bandaging removing splinters, and cleaning wounds (i.e., removing musket balls, metal and wood from open wounds). Location of the wound was key—there was nothing a Navy surgeon could do for injuries to the abdomen and thoracic cavity other than administer opium for pain relief. Most surgeries were performed under lantern light in ship cockpits (or junior officer's quarters) located in the depths of the orlop deck. Ambulatory patients were allowed to return to shipboard duties or given menial tasks. Those needing more time to recuperate rested in their hammocks located in the berth decks (directly below the gun deck!) as the ever-malodorous smells of dry rot, dead rat and bilge water wafted through the compartments. Patients requiring con-

tinued medical care were kept shipboard until they could be transferred to the nearest Marine or Navy hospital.

From the perspective of 21st century military medical care it is easy to look back and marvel how anyone—patient and medical practitioner alike—survived disease and injury in the War of 1812. If the ailment did not kill you the “heroic” measures of doctors possibly could. Navy Medicine has come a long way in 200 years. Injured Sailors and Marines who would have been deemed hopeless causes are now being saved on a regular basis through the advances in wound management and internal hemorrhage control. The frontline medical care and rapid evacuation to higher echelon medical facilities have made every bit the difference between life and death in the wars in Afghanistan and Iraq. Loss of limb in combat is nothing new; but with the advances in prosthetic research and design, artificial limbs have become less so for amputees. And like never before, military members with traumatic brain injury and post-traumatic stress disorder are receiving the medical attention they deserve. If present-day science had been available to the early Navy physicians, Capt. Lawrence may have survived martyrdom and his impassioned plea would have been forgotten long ago. +

## Footnotes

1. Dr. Richard Clarke Edgar of Maryland was commissioned in the Navy in 1809 at the age of nineteen. He died of yellow fever at the Navy's first base in Florida (Thompson's Island, later known as Key West) in June 1823.

2. Dr. John Dix of Massachusetts was commissioned as a Surgeon's Mate in the Navy in 1813. Dr. Dix died of yellow fever off the coast of Africa in April 1823.

3. Hot pitch or asphalt was commonly applied to wounds and stumps to control hemorrhaging.

4. Common medicines in the War of 1812: anodynes (e.g., Laudanum, opium), antiarthritics (e.g., Epson Salts, Peruvian Bark), astringents (Goulard's Extract, alum), cathartics (e.g., Glauber's Salts, Plummer's Pills, ipecac), emetics (e.g., Tartar emetic), diaphoretics (e.g., Dover's Powder), diuretics (e.g., Potassium acetate), rubefacients (e.g., oil of Turpentine).

5. *iatrogenic* or “doctor induced disorders.” From the Greek *iatros* (“doctor” or “treatment”) and *ginein* (“to produce.”)

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Pictured is a surgical kit used by Navy Medicine personnel during the War of 1812. (Photo courtesy of Navy History and Heritage Command)

DEPARTMENT OF THE NAVY  
BUREAU OF MEDICINE AND SURGERY  
COMMUNICATIONS DIRECTORATE  
7700 ARLINGTON BLVD  
FALLS CHURCH VA 22042-5122

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