Santa Claus (Dale Prince) and his helpers: left to right: Sgt. Mary Alvarez, Sgt. Hector Cortez, and Staff Sgt. Tiffany Baldwin at the ISR Rock'n Holiday Party December 13.
Hello ISR,

Welcome back. I hope that everyone had a great holiday season and was able to spend some enjoyable time to celebrate with family and friends. I am very pleased and proud to know that this was a safe holiday period for the ISR staff where we did not have any alcohol-related incidents. We are now ready to begin a new year to work on our personal and professional resolutions.

2013 will be a year where we’ll see changes in the U.S. Army Medical Department and more importantly in our immediate chain of command. On January 11, Maj. Gen. James Gilman, Commander, U.S. Army Medical Research and Materiel Command (MRMC) will change command with Brig. Gen.(P) Joseph Caravalho, Commanding General, Northern Regional Medical Command (NRMC). On January 24, Maj. Gen. M. Ted Wong, commanding general of Brooke Army Medical Center (BAMC) and the U.S. Army Southern Regional Medical Command (SRMC), will change command of the hospital, San Antonio Military Medical Center (SAMCC) with Col. Kyle Campbell. Col. Campbell is currently the chief-of-staff at SRMC.


These changes of command will stimulate renewed interest in what we do at the ISR. There will be many opportunities for the new leadership to visit the ISR to better understand how we optimize combat casualty care. I worked for Brig. Gen.(P) Caravalho as his OIF-OEF theater consultant for vascular surgery in 2008-2009. He has a genuine interest in everyone within his command. When he inspects us on January 25, he will want to get to know each of us. Please be candid and unafraid to let him know not just what you do, but why you do it and how your work supports our mission of optimizing combat casualty care. San Antonio is a city full of opportunity for medical employment. I know that each of you have a choice and I am especially grateful to those who chose to work for the ISR.

Thank you for all that you do.

Hooah!
“Protect and Sustain, Lead From the Front”

This month came to an end swiftly, but not without some outstanding achievements from our civilians and service members. Congratulations to Lt. Col. Andrew Cap and Dr. David Baer for recently becoming members of the Order of Military Medical Merit.

Despite being a short work month we had quite a few Soldiers and NCO re-enlist in the Army. Congratulations to Sgt. Scott Eriksen, Sgt. Brandon Fitzgerald, Spc. Belinda Becoat-Rogers, Sgt. John Newton, and Sgt. James McAlister for reconfirming their commitment to the Army by re-enlisting.

Congratulations to the numerous civilians and Soldiers who distinguished themselves by earning various awards and certificates this month. As we enter 2013, I wish everyone the best and challenge everyone to continue to strive for excellence.

“A professional …..is a dynamic growing being who has learned from the past, acts in the present, but above all, he focuses on accomplishing his mission.”

SMA George W. Dunaway, “Let’s PULL Together,” Army Digest, June 1969

Sgt. John Newton reenlisted December 26 for three years.

Lt. Col. Andrew Cap

Lt. Col. Richard Williams, left, administers the oath of enlistment to Sgt. Scott Ericksen December 18.

David G. Baer, PhD

Recipients of the Order of Military Medical Merit Award
ISR stays on course with a Balanced Scorecard

Part 2 of 2

By Steven Galvan
ISR Public Affairs Officer

The U.S. Army Institute of Surgical Research (ISR) has made significant contributions to research for the combat wounded in the past several years. With the mission of “optimizing combat casualty care,” the successful role that the ISR has played in combat casualty care is not by coincidence. The Institute has been leveraging a tool or roadmap that many thriving commercial organizations have utilized to accomplish their goals to success. The roadmap that the ISR has been using is known as the Balanced Scorecard (BSC).

The BSC is a strategic planning and management tool used throughout the business world to establish and communicate an organization’s vision, mission, and strategy to stakeholders and employees and to align day-to-day work to the strategy. In November 2012, the ISR Commander had various staff members attend a three-day workshop to review the existing BSC and provide necessary updates to keep the command relevant and contributing to combat casualty care in the future. Staff members from the ISR Resource and Research Directorates, Burn Center, Joint Trauma System, and the Dental and Trauma Research Detachment met at the U.S. Army Medicine Center and School on Fort Sam.

The ISR balanced scorecard was developed with four perspectives to develop strategic map objective statements. The four perspectives are Customer/Stakeholder; Internal Process; Learning and Growth; and Resources. There are a total of nine objective statements under the four perspectives, as follows:

**Customer/Stakeholder**: 1. Improve functional survival: Translating research and evidence-based practice into care throughout the continuum to improve survival and return the

*see BSC continued on next page*
The Innovator

**BSC continued from previous page**

combat wounded to optimum levels of function. 2. Develop improved medical solutions: Research, develop, prototype, and test new medical devices, drugs, agents, knowledge products, processes, and information systems that reduce mortality and morbidity for military combat casualties using evidence-based approaches. 3. Demonstrate unique capabilities and military relevance: Identify capability gaps by integrating information from JTS, health care providers, scientists, state-of-the-art care informatics, and other staff. Employ a spiral development process for evidence-based research (bedside to bench) that is Warfighter focused and target dissemination of information to customer and stakeholders.

**Internal Process:**
1. Acquire and disseminate knowledge: Generate and gather data from diverse sources, cross-reference, and organize with project focus and deliver integrated information through teaching, publications, tangible medical solutions, presentations, guidelines, and other collaborations. 2. Leverage and cultivate relationships (internal and external): Increase effectiveness of each individual/functional area through active pursuit of synergistic formal and informal interactions/collaborations with internal and external partners. 3. Improve quality and safety: Foster and cultivate best practices and performance improvement initiatives to develop products that meet the highest standards while mitigating risk and avoiding workplace incidents.

**Learning and Growth:**
1. Innovate responsibly: To apply creativity in each functional area to improve efficiency and effectiveness while simultaneously meeting ethical, regulatory, and resource requirements. 2. Train and develop the workforce: Attract, develop, and retain a highly competent workforce of motivated professionals focused on optimizing combat casualty care.

**Resources:** Optimize resources: Applying efficient and effective processes to ensure that the organization has leveraged its capital and implemented practical stewardship of all assets to maximize potential.

Jane Wingate, a quality assurance specialist at the U.S. Army Medical Research and Materiel Command who facilitated the workshop, said she enjoyed working with the ISR leadership team as they discussed the way ahead for the Institute. “Col Weber, ISR Commander, supports the Balanced Scorecard and was involved throughout the three-day workshop,” she said. “His support, along with leadership support from directors/managers, will make the Balanced Scorecard at ISR successful and an ongoing measurement/management tool for the command.”

---

**Medical revolutions highlighted in 10-year supplement**

The U.S. Army Institute of Surgical Research (ISR) announced the release of a capstone publication in the *Journal of Trauma and Acute Care Surgery* summarizing key medical advances from the war-time experience of the U.S. military. As a subordinate command of the U.S. Army Medical Research and Materiel Command at Fort Detrick, Md., the ISR strives to be the Nation’s premier joint research organization planning and executing registry-based and translational research providing innovative solutions for burn, trauma, and combat casualty care from the point of injury through rehabilitation.

The publication describes a triad of military medical revolutions in three key areas of military trauma medicine: pre-hospital care, deployed hospital care, and medical system transformation. See *Journal* continued on page 7.
Farewell and safe travel to Lt. Col. Kimberlie Biever, who departed for a 9-month deployment. We have been in contact with her, and she is doing fine. Join us in congratulating these Soldiers and their families on their new bundles of joy. Welcome to the ISR family: Spc. Christopher Drew and his wife welcomed a daughter November 29; Sgt. Valentino Foronda and his wife welcomed a daughter December 19; Staff Sgt. Juan Villegas and his wife welcomed a son December 20.

Final thoughts and upcoming events: The Institute celebrated its second annual holiday party December 13. Those who were not able to make it missed out on a wonderful event that included a game of “white elephant,” arts and crafts, and a showcase of dance moves from the children. Our Santa war winner, Dale Prince, and elves, Sgt. Hector Cortez and Staff Sgt. Tiffany Baldwin, gave out gifts to the children and posed for some rather interesting photos. First Sgt. and I rather enjoyed looking at the photo of our Chief of Staff, Terry L. Owens, ISR Commander, Col. Michael A. Weber, and Santa.

This was officially the last event that Sgt. Mary Alvarez will be overseeing as the Special Events/Family Readiness Group coordinator. She left some big shoes to fill, but I am looking forward to working with the next officer or NCO who decides to step up to the challenge. The events committee and volunteers truly did an outstanding job to make the night a success.

We would like for everyone to congratulate the winners of the NCO and Soldier of the Month competition. December winners are Sgt. Leonardo Aviles and Spc. Marites Staley, respectively. Their photographs will be on display in the company area.

We will host the FY2012 Soldier and NCO of the Year competition in mid-February. Also in February, we will start the train-up for Expert Field Medical Badge.

In the New Year, we have the opportunity to pursue innovative approaches to existing programs. We will continue to build upon our Unit Development Plan under Master Army Profession

see Co. Notes cont. on next page
The Innovator

January 2013

Hand Hygiene Compliance

Journal continued from page 5

care, and trauma systems and restorative medicine. Together these articles provide an important milestone in military medical care and highlight how the lessons learned in war have translated to improving trauma care delivered in U.S. civilian trauma centers.

“The goals of this supplement are twofold, to document the landmark medical advances from this war and to document the gaps along the continuum of combat casualty care from a historical perspective so that in the future medical personnel can bridge these gaps and save lives,” said senior editor of the supplement and former ISR Commander, Col. (Dr.) Lorne H. Blackbourne. “Documenting the revolutionary advances from these wars can help with the translation of military advances to civilian trauma care so that all Americans can benefit in addition to our wounded warriors.”

“This supplement documents the extraordinary progress in saving lives on the battlefield that combat casualty care research has affected during the last decade,” the Director of ISR Combat Casualty Care Research Directorate, David G. Baer, Ph.D.

In order to ensure the widest distribution possible, the Journal of Trauma has made the three articles in these three areas available on an open-access basis at http://journals.lww.com/jtrauma/toc/2012/12005. These articles are supported by focused reviews of tactical combat casualty care, analysis of the peer-reviewed combat trauma literature, burn care, coagulation monitoring, causes of death on the battlefield, amputations, blood product use, head and neck injuries, trauma training programs, innovations in treatment for pain, and moderate to severe brain injury.

“The best way to optimize and direct research and trauma system efforts for the greatest good is evidence-based information on the burden of injury and capability gaps extrapolated from outcome data—the publications in this supplement provide the data to help guide all future efforts in these areas,” said Blackbourne, the current director of the U.S. Army Trauma Training Center in Miami.

Together, these articles document extraordinary progress in saving lives on the battlefield and highlight areas for continued innovation and translation of military medical expertise to saving the lives of civilian trauma victims.

“We’re dedicated to optimizing combat casualty care,” said ISR Commander, Col. (Dr.) Michael A. Weber. “The research that we are conducting at this Institute is saving lives—on and off the battlefield.”

Co. Notes cont. from previous page

and Ethic Trainer. The 15 locally designed questions were used to fine-tune the Unit Development Plan and provide direction for integrating Army profession into our unit’s activities. I would also like to congratulate the unit on successfully going six months without any serious incidents that resulted in disciplinary actions requiring UCMJ.

Continue to hold yourselves and your peers to the standard; I challenge you to self-reflect each day to ensure you uphold the moral character expected of a Soldier. My hope is we continue this trend in the coming months.
The Innovator

Safety Notes

By Stephanie L. Truss
Health, Safety and Environmental Specialist

Hunting with firearms sounds dangerous, but data from the National Shooting Sports Foundation tells a different story. Hunting is number three on the top-10 list of the safest sporting activities. Only camping and billiards are safer.

Deer hunting is the most popular type of hunting in the U.S. According to the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, there were 10.1 million deer hunters that year, which is nearly four times greater than the second most hunted species: turkey.

For people over 16 years of age, approximately one in every 25 Americans and eight in 10 hunters hunted deer in 2006. Their total hunting-related trip and equipment expenditures while seeking deer totaled $8.9 billion.

Deer/vehicle collisions occur much more frequently than do accidents while hunting with firearms. For example, Georgia officials report approximately 50,000 such collisions annually, 20,000 per year are reported in neighboring Alabama.

The chances of being injured in a deer/vehicle collision are much greater than firearms-related hunting accidents. Risks of being involved in deer-car collisions increase during the breeding season and during the times of year when food supplies are lowest, such as late-winter and early spring.

Deer are active at dawn and dusk and often move in groups and because of competition for habitat and food, deer may now be found in urban settings.

Tips:
Be aware that deer represent a legitimate hazard to all motorists, not just to Soldiers.

Deer may now be found in urban areas; don’t think you won’t encounter them just because you’re not in a rural area. More injuries occur from deer/vehicle collisions than from hunting-related accidents.

With that being said, while hunting with firearms, hunting bows, and arrows be careful and follow these tips.
- Always point the muzzle or nocked arrow in a safe direction.
- Treat every firearm or bow with the same respect you would show a loaded gun or nocked arrow.
- Be sure of your target—what is in front of and beyond your target.
- Unload firearms and unstring conventional bows when not in use.
- Handle firearms, arrows, and ammunition carefully.
- Know your safe zone-of-fire and stick to it.
- Control your emotions when it comes to safety.
- Wear hearing and eye protection.
- Don’t drink alcohol or take drugs before or while handling firearms or bow and arrows.
- Be aware of additional circumstances which require added caution or safety awareness.

In the Spotlight

Spc. Brian J. Brown

Job title: 68WM6/LVN 4 East

How long have you worked at the ISR? 7 months

What or who has been an inspiration to you in your work? My family is a big inspiration to me. With their support, I feel I can do anything. Also the people I work with on 4 East.

What is your favorite part of your job? My favorite part of my work is wound care.

Your proudest achievement? My proudest achievement is my beautiful daughter.

Short- and long-term goals? My short-term goal is to be promoted to SGT and my long-term goal is to continuing work on the burn ward.

Hobbies: Playing video games, hunting, fishing, supporting my favorite sport teams.


Favorite movie/TV show: Fight Club/ How I Met Your Mother; Bones

Favorite quote: “If you are going through hell, keep going.”
Sir Winston Churchill
The Innovator

January Health News

By Maria G. Dominguez, R.N.
COHN-S/CM
Occupational Health

Happy New Year!

If you’ve made a resolution to be healthier and happier in the New Year, you may be asking yourself, “okay, so now what?” The choices can be overwhelming. But did you also know that January is Birth Defects Prevention Month?

Birth defects affect 1 in every 33 babies born in the United States and are a leading cause of infant mortality. Babies who survive and live with birth defects are at increased risk for developing lifelong physical, cognitive, and social challenges. Medical care and support services are only the surface of the financial and emotional impact of living with birth defects.

The good news is awareness efforts offer hope for reducing the number of birth defects in the future. Prevention tips are as follows:

- Consume 400 micrograms of folic acid daily. January 6-12 is National Folic Acid Awareness Week. Adequate folic acid intake is important for the prevention of birth defects.
- Manage chronic maternal illnesses such as diabetes, seizure disorders, or phenylketonuria (PKU).
- Reach and maintain a healthy weight.
- Talk to a health care provider about taking any medications, both prescription and over-the-counter.
- Avoid alcohol, smoking, and illicit drugs: National Non-Smoking Week is January 20-26.
- See a health care provider regularly.
- Avoid toxic substances at work or at home.
- Ensure protection against domestic violence.
- Know their family history and seek reproductive genetic counseling, if appropriate.

So what are some of the reproductive hazards we encounter? Reproductive hazards are substances or agents that may affect the reproductive health of women or men or the ability of couples to have healthy children. Hazards may be chemical, physical, or biological. Examples of reproductive hazards are lead (chemical), radiation (physical), and certain viruses (biological).

Workers may be exposed to reproductive hazards by breathing them (inhalation), by contact with skin (dermal), and by swallowing them (ingestion). Potential health effects include infertility, miscarriage, birth defects, and developmental disorders in children.

Exposure to reproductive hazards in the workplace is an increasing health concern. Reproductive hazards are substances or agents that may affect the reproductive health of women or men or the ability of couples to have healthy children. These hazards may cause problems such as infertility, miscarriage, and birth defects.

Although some studies report no adverse health effects from long-term exposure to low concentrations of waste anesthetic gases, several studies have linked such exposure to miscarriages, genetic damage, and cancer among operating room workers. Studies have also reported miscarriages in the spouses of exposed workers and birth defects in their offspring.

Therefore, the National Institute for Occupational Safety and Health (NIOSH) is concerned about worker exposures to these gases and recommends controls to prevent exposures.

Anesthetic gases cannot be detected by their odor until concentrations are very high.

Another example is TORCH complex (also known as STORCH, TORCHES or the TORCH infections) is a medical acronym for a set of perinatal infections (i.e., infections that are passed from a pregnant woman to her fetus). The TORCH infections can lead to severe fetal anomalies or even fetal loss. They are a group of viral, bacterial, and protozoan infections that gain access to the fetal bloodstream transplacentally via the chorionic villi. Hematogenous transmission may occur at any time during gestation or occasionally at the time of delivery. The diseases present similarly, involving the heart, skin, eye, and central nervous system. They all cause chorioretinitis, microcephaly, and focal cerebral calcification. Many of the viral TORCH infections have no effective treatment. Some of the TORCH infections, such as toxoplasmosis and syphilis, can be effectively treated with antibiotics if the mother is diagnosed early in during pregnancy. But some, notably rubella and varicella-zoster, can be prevented by vaccinations prior to pregnancy.

Nationally founded in 1938 by President Franklin D. Roosevelt, the March of Dimes is a leading non-profit organization for pregnancy and baby health. The March of Dimes is dedicated to improving the health of babies by preventing infant mortality, birth defects, and premature births. These are great sources of information on this topic as well as Occupational Safety and Health Administration for the occupational related aspect.

Today’s life is busy. You know that you should exercise, eat right, and get enough sleep.

Have a great year!
ISR staff members and their families celebrated the holidays at the Rock’n Holiday Party at the Fort Sam Houston Army Community Services December 13. Santa Claus handed out gifts, provided hugs, and posed with individuals and groups. This is the second year that the ISR Special Events Committee has hosted a holiday party. Along with food provided by the committee, attendees enjoyed a “white elephant,” arts and crafts, and a display of dance moves from the children.

Santa Claus, Dale Prince, handed out gifts and provided hugs for the ISR staff and family members.
ISR Special Events Committee members work overtime to ensure a successful holiday party.

Lina Alvarado, as always, helping out where she can.

Burn Center Outpatient Clinic staff members Karliss Kimbrough and Ana Rodriguez.

Santa’s helpers Staff Sgt. Tiffany Baldwin and Sgt. Hector Cortez.
Col. Michael A. Weber, right, presents Connie Luna with a Civilian of the Quarter certificate December 6.

Beverly Ash cuts a birthday pie to celebrate her birthday December 6.


ISR Deputy Commander, Col. Todd Rasmussen, left, poses with Maj. Jonathan J. Morrison, Royal Army (Reserve). Morrison heads back to the U.K. after conducting combat casualty care research with ISR staff members.
CD Peterson and Patricia Colston with their Civilian of the Quarter certificates December 11.


Sgt. Brandon G. Fitzgerald takes the oath of enlistment from Capt. Amy Martino December 20.

Lt. Col.(P) Booker T. King, right, welcomes Brig. Gen. John S. Regan, Director Requirements Integrator Directorate, to the Burn Center December 17 for a tour.
A warm heart-filled thanks goes out to the entire ISR/BHT family for your support with the 6th Annual Angel Tree. This year, 96 Angels were prepared; and thanks to you, they were returned attached to wonderful wrapped gifts. The Angel Tree was open to all military and civilian personnel and as always your kindness made it happen and placed smiles on the 96 children.

Stephanie L. Truss
Researchers DICOM access expands

By Glen Gueller, CKM
Chief, Media Informatics Branch/KM

Digital Imaging and Communications in Medicine (DICOM) images are medical, mostly radiological, images used to document, track progression, and diagnose. DICOM may include computed tomography (CT or CAT) scans, magnetic resonance imaging (MRI), electrocardiograms, mammograms, ultrasound, and external camera (XC) images.

The ISR uses DICOM images in research and has access to patient DICOM images. The resource used has been a single workstation located in the Veterinary Support Branch. Several of the research protocols have led to the need for more advanced analysis and greater staff access.

The Information Management Division recently developed virtual servers to support Vitrea® Core and Advanced software upgrades. The Vitrea® imaging tools greatly expand and enhance our researchers' abilities to analyze and document research conducted within the Institute.

Hands-on training sessions were provided in December to current users by Tiffany Lewis, a clinical applications specialist from Vital Images. During the next few weeks, additional Intranet resources will become available for training and user documentation.

(Vitra is a software product of Vital Images, a Toshiba Medical Systems Group Company. Reference to this company is for informational purposes only and not to be construed as an endorsement by the U.S. Army or the ISR).

A three-dimensional (3D) view of a jaw showing metal re-enforcement implants (in blue).

A 3D view of skeletal and vascular structure.

Safety continued from page 8

Every year, over 30,000 youth and adults in Texas become certified in hunter education – a certification that lasts a lifetime and is recognized by all states and provinces requiring hunter education. Join the ranks of today’s hunter education graduates who are ensuring the future of our hunting heritage!

There are two ways to get certified in Texas Hunter Education.

• Traditional two-day course or
• Online Course plus a one-day field course.

see Safety continued on page 16
**Back When...**

Can you guess who this ISR staff member is?  
This photo was taken 1986 at Fort Knox, Ky., while he was attending the Advanced Non-Commissioned Officer Course.

**Last Month’s Answer:**  
Reynaldo Ruiz  
Budget Division

---

**The following cell phone text message was sent on December 4 from an AMEDD physician serving at SAMMC.**  
**Subject: A Simple Salute**

Dear Friends and Family,

Tonight, I exited the hospital at 1729 hours, heading home to join my family for dinner.  
Five steps later I halted in response to the recorded bugle call and turned towards the American flag atop BAMC’s flagpole for retreat.

As I raised my hand in salute to the colors my eyes shifted just a few degrees to my right, just enough to see a young Soldier also raise his salute to the same flag.

His salute was different. His salute was better than mine; it was perfect. His right hand rose briskly to the proper position and was held immovable by a strong solid arm. His fingers were perfectly straight. He remained alone, quiet and motionless as honors were rendered.

His stance, however, was far different than mine for he remained seated during honors to the colors.

A few months ago he would have stood, but now he sat in his wheelchair, with the remnants of his once agile legs providing barely enough base with which to balance in his seat.

His left arm was not pressed to his side like mine was, for he had none. His entire left arm was taken from him by the same explosion that stole both of his legs.

Earlier today this same young Corporal thanked me for the care he has received in our hospital. He is grateful. His wounds are healing. He is happy to be alive. He is proud to be able to salute the flag.

It is him, and those honorable American sons and daughters like him, that we seek to serve.

It is a moment such as this that God uses to remind me of the who, what, when and why of my duty, at least as I understand it.

It was difficult for me to write this, but I felt compelled to so as not to forget the moment, and to remember the price some have paid for the flag we are honored to salute.

---

**Safety continued from page 15**

Additional Option: One-time, one year Hunter Education Deferral Extension.

Hunter Education Deferral (cost: $10) allows a person 17 years of age or older who has not completed a hunter education program to defer completion for up to one year.

A deferral may only be obtained once and is only valid until the end of the current license year. A person who has been convicted or has received deferred adjudication for violation of the mandatory hunter education requirement is prohibited from applying for a deferral. Take the course by August 31 of the current license year and receive a $5 discount.

The one-time Hunter Education Deferral is available at licensed vendors and went into effect September 1, 2004.