Epidemiology & Biostatistics: A Change in Culture at USAISR
“Optimizing Combat Casualty Care”

Greetings ISR,

I would like to thank everyone who attended our Town Hall meeting held on January 28. It is important that I provide you with the most current safety information and results of the Command Climate Survey for our Institute. I want to especially thank those of you who provided feedback on the surveys. About half of you participated and offered valuable information and comments on our organization. This important tool helps to give me a starting point for continuously improving our Institute’s climate. I am pleased to say that the overall climate at the Institute is good; and with all organizations of our size, we have some areas that we can improve on. In safety, we reside in the top 25% of the Army. Great work keeping safety first in everything you do!

The opportunities for improvement you provided are exactly what I would like to accomplish during my tenure here. I want to assure you that the entire Institute’s leadership team is working to keep our command the most pleasant and desirable place to work in MEDCOM. I want you to feel safe and confident in knowing that if there’s something that can be improved upon in your work area or at the Institute, we want to hear your ideas and we encourage you to report it.

I understand that this Institute is a complex and dynamic work place with numerous wheels moving in all directions simultaneously. I know that we are all extremely busy, but I am never too busy to have a face-to-face conversation with you about any concern that you may have. All I ask is that you continue to work through your area’s leadership and utilize the Company chain of command if appropriate as a first venue to solve problems. This pathway facilitates leader development throughout the Institute. That said; know that my open door policy is always available if you cannot get the situation resolved in an appropriate manner.

This is by far the best command that I have had the honor to serve with. You are an amazing team conducting important, honorable work for our troops. I want to ensure you that your best interest is always at the forefront of what we do. Thank you for all that you do every day for our combat wounded and their families.

Serving to Heal… Honored to Serve!
SGM Says

Sergeant Major Quinton Rice Jr.

Protect - Project - Sustain

Back on Track

Team,

The concept for this month's article is dealing with the fact that concepts in reality brings about competitive advantages. This is seen in a multitude of different venues in both the military and industry. An example of it is illustrated in the story that was told about a prominent heart surgeon who entered into this automotive shop. The mechanic said to the surgeon, “I’m not sure why you are paid so much more than me. I do similar work as you. We both repair the engine that makes the body run. I replace lines and valves just as you and after I’m done, I have a new running engine, just as you. So I don't understand why you get paid so much more.” The surgeon paused for a minute and look at the mechanic and said, “Try doing it with the engine running.”

The surgeon's competitive advantage improved the mechanic’s conception in reality. For some the thought of being competitively advantaged has become an anachronism. If your idioms of thought are traveling down that road then you may be setting yourself up for some discord.

Now that the holiday season is behind us we should look forward to what this year has in store for us. This should give you some predictability so that you can ensure that your goals are aligned with the military to improve your competitive advantage for the near future. We are scheduled to receive a one percent pay raise and a reduction in our Basic Allowance for Housing so please budget accordingly. This year will also bring us several changes in senior leadership. We are awaiting confirmation for our new Secretary of Defense. Former Deputy Defense Secretary Ash Carter has been nominated by the Commander in Chief. We are also slated to get a new Chief of Staff of the Army who has yet to be identified. We have a new Sergeant Major of the Army who is SMA Daniel Dailey. He took over as the 15th Sergeant Major of the Army on 30 Jan 2015. Army medicine is slated to get a new Surgeon General at the end of the year. This year may also bring additional challenges as we still look to restructure the size of the force. The 15 year retirement is due to return this year as another tool to facilitate the reduction in force.

Additional changes for noncommissioned officers on the horizon are the introduction of the new Noncommissioned Officer Evaluation Reporting System which is designed to improve the method for identifying the best NCOs for promotion. This new system is delineated into three separate and distinct levels. They are Direct, Organizational and Strategic. Our NCOs will receive training on this new system prior to its schedule launch date later this year. There is also another layer of the noncommissioned officer education system (NCOES) that will be rolled out this year. It is currently called the Master Leader Course and is designed to fill the training deficient for our E-8 population. This course will be mandatory for career progression like the other layers of NCOES.

As a leader, we are always supposed to train our Soldiers up in order to improve their knowledge base. The military has a multitude of various professional academies designed for leadership development. Many of these courses are constructed to train our personnel to think critically and creatively. So the Army’s periphery on structured self-development (SSD) should not be a surprise. Recently, numerous sergeants who were promotable were removed from the promotion standing list because of their failure to complete SSD in a timely manner. This put them at a distinct disadvantage and stymied their potential for a competitive edge. Therefore competitive advantage is not a concept used only in the civilian sector. It permeates all aspects of our military careers. Summarily, I encourage you to pay close attention to the changes on the horizon and to be proactive in aligning yourself with them. There is always something new to learn and new requirements to adhere to. Remember that stagnation is not an option for today's creative, adaptive leaders. It is imperative that you work in conjunction with your leaders to develop an action plan with timelines to help you meet the goals that will keep you relevant and highly competitive.

On the Cover

Jeana Orman, Sc.D., left, and her team in the Epidemiology and Biostatistics office.

See story on page 5
Welcome to the ISR family: Maj. Rose Grimm and family welcomed a son, Albrecht Flynn Turner on January 10. Mother and daughter are doing well.

Congratulations to Spc. Daniel Oladejo for being selected as Soldier of the Month for December 2014 and Spc. Vanessa Zugg for being selected as Soldier of the Month for January. Their photographs will be on display in the company area.

Congratulations to the following Soldiers on their promotion effective Feb. 1: Sgt. 1st Class Christopher Coats, Staff Sgt. Jaffster Daus, and Sgt. Curtis Suafa.

Upcoming events: Feb. 9-12 we are hosting the NCO/SOQ 1st Quarter FY 15. Competition events will include the range, APFT, oral board, day and night land navigation, and obstacle course.

Thank you to the Equal Opportunity Team for the contributions made towards making our Martin Luther King Jr. Day Celebration a great success.

ISR military and civilians gathered early in the morning at the Jimmy Brought Gym on Joint Base San Antonio-Fort Sam Houston to Zumba with fitness instructor Silas McCarthy Jan. 23. See more Zumba photos by Capt. LaShawnna Ray on page 7.
To optimize the quality of their research, investigators at the U.S. Army Institute of Surgical Research (USAISR) need scientifically sound study designs, meticulous data collection and expert analysis. A weak research design, hasty data collection, or overly simplistic data analysis can be detrimental to a research study, resulting in publication of incomplete findings or inaccurate conclusions. That’s where epidemiologist Jeana Orman, Sc.D. and her team in the Epidemiology and Biostatistics office can assist the researchers.

“To do good research you must use the proper study design AND perform the appropriate data analysis and interpretation,” said Orman. “We help to make sure that the important things are measured so that the data that are analyzed and reported are meaningful.”

Orman, who studied at Johns Hopkins and was a senior scientist at both the National Institutes of Health (NIH) and the Centers for Disease Control and Prevention (CDC) before coming to the ISR, created the team of five epidemiologist/biostatisticians. Four of the staff are doctoral-level professionals trained in both Epidemiology, the branch of medicine that studies causes, risk factors, and treatment of disease and injury, and in Biostatistics, the field of statistics specific to biological and medical data—both important resources for clinicians and scientists doing research at the Institute.

“That team is phenomenal,” said Lt. Col. (Dr.) Kevin Chung, the Clinical Trials in Burns and Trauma task area manager. “They can take us to another level.”

“I’m excited to have this team here,” said Vic Convertino, Ph.D., USAISR Combat Casualty Care Research Senior Scientist. “They can identify the best statistical tools for analyzing data which can add significant credibility and reliability to the investigators and the studies at the Institute.”

Convertino pointed out that when analyzing data many researchers rely too heavily on p-values and statistical ‘significance’ while not focusing enough on the strength of the association and whether it is clinically significant. For example, a large study comparing the effectiveness of two blood pressure lowering medications may find that a two point difference in blood pressure is statistically significant; but this difference is not meaningful for patient care.

“As this example shows, the focus on statistical significance doesn’t always work in clinical studies,” said Convertino. “We need to change the culture by taking the views of Orman’s team to use and interpret statistics correctly.”

Judson Janak, Ph.D., an epidemiologist and a member of Orman’s team, stressed that research is a process and the entire team is here to assist researchers from identifying clinically relevant research questions in line with the Institute’s mission, to final analysis and interpretation of results.

“The researcher has to define the research question,” said Janak. “Then we help them develop a conceptual research model that guides the data collection process and the analytical plan.”

“This new focus on appropriate design, analysis and interpretation is critical to keep us on point to meet the Army’s needs,” said Convertino.

Chung added that sound research benefits not only ISR researchers who publish higher quality research, but also practitioners who use the research to guide their use of sound practices, which in turn benefits patients.

“It’s about quality, not quantity,” Chung said.

Chung also believes that the insight provided by the Epidemiology and Biostatistics team will take research at the USAISR to a higher level.

“I like the direction we’re going,” said Chung. “The caliber of our research has the potential to be on par with premier government research agencies like the NIH and the CDC.

Convertino agrees with Chung.

“The Epidemiology and Biostatistics team can change the culture of how we design our studies, apply statistical analysis techniques, and interpret data,” he said. “Cultural change is required.”
Bebarta named Geneva Foundation Researcher of the Year

Lt. Col. (Dr.) Vikhyat Bebarta was named the Geneva Foundation 2014 Researcher of the Year.

By Steven Galvan
USAISR Public Affairs Officer

The Innovator

The Geneva Foundation named Lt. Col. (Dr.) Vikhyat Bebarta the 2014 Researcher of the Year. Bebarta is the Director of the Air Force 59th Medical Wing En Route Care Research Center at U.S. Army Institute of Surgical Research (USAISR) at Joint Base San Antonio-Fort Sam Houston, Texas. He is also the Chief of Medical Toxicology in the Department of Emergency Medicine at the San Antonio Military Medical Center (SAMMC) and the Director of Clinical Resuscitation, Emergency Services, and Toxicology (CREST) Research Center for the Air Force 59th Medical Wing.

According to a Geneva Foundation press release, the Researcher of the Year Award is presented to a researcher who exemplifies Geneva’s mission of advancing innovative medical research within the U.S. military, for the benefit of U.S. service members and veterans, their families, and the global community.

“I am humbled to receive this national, prestigious award recognizing the top military clinical investigator in 2014,” said Bebarta. “I am fortunate to have been considered in the same line of the other elite research nominees.”

“Geneva’s Researcher of the Year Award was established by its Scientific Advisory Board in 2014 as a way to recognize and honor researchers within the U.S. military who have truly shaped military medicine in the delivery of better treatment options, therapies, and healthcare practices for our service members and the public at large,” stated Dr. David Shoultz, Chair of Geneva’s Scientific Advisory Board in the press release. “Geneva’s Scientific Advisory Board was honored to receive and evaluate nominees from Geneva’s management team in areas of research quality, dissemination, mentorship, innovation, collaboration, and impact.”

Bebarta and Geneva have partnered for more than six years on research projects in emergency medicine, combat casualty care and toxicology.

“The Geneva Foundation is a strong organization that has supported the military clinical investigator for many years and I am fortunate to have received their support,” Bebarta said. “While they named me the recipient, the award is a group award describing the achievements of many, not one.”

Bebarta acknowledge the collaboration from the research staff at the Air Force En Route Care Research Center; the Air Force CREST; the Air Force BEBARTA continues on page 9
Zumba Time  continued from page 4

photos by
Capt. LaShawnna Ray
In the Spotlight

Jesus “Jesse” Morales

Job title: Database Administrator

How long have you worked at the ISR? 11 years full time and 4 part-time

What or who has been an inspiration to you in your work? The Wounded Warriors. I see them in the halls, the parking lot, at the CFI. I can see the progress they make to get better.

What is your favorite part of your work? Knowing that the data I help maintain can advance medical practice.

Your proudest achievement? Being recognized in a submission by a research doctor here.

Short- and long-term goals: Obtain some needed IT certification and completing my BS.

Hobbies: Spurs, bowling, music, walking and Vegas.

Favorite book: The Lord of The Rings series

Favorite movie/TV show: Blazing Saddles (I always laugh no matter how many times I see it).

Favorite quote: “Try not. Do or do not! There is no try.” Yoda

9 Safety Tips for National Burn Awareness Week February 1-7

The smell of cookies baking in the oven or tasty sauces simmering on the stovetop is hard to resist for adults and children alike. However, before you dip your finger into the pot to taste that delicious soup, know that scalds from cooking liquids, grease, and food, as well as tap water and steam were responsible for 46 percent of all burns in 2012. Of these, 53 percent of the victims were children under 5 and most of these burns occurred in the home—usually in the kitchen or bathroom.

Scalds are the most common burn injury among young children and one of the leading causes of accidental death in the home for children under age 4. U.S. hospitals treat an estimated 110,000 people under 19 for scalds every year.

While thousands of scald burns occur annually, increased awareness of the dangers can prevent injuries. To help people be mindful of scald burns, the American Burn Association has declared the first week of February National Burn Awareness Week.

Following a few simple precautions will help keep you and your little chef safe from potential burns:

1. Cool a burn under cold running water for 10-15 minutes and call 9-1-1 for serious burns.

2. Always supervise children in the kitchen and dining areas.

3. Create a “No Child Zone” while preparing and serving hot foods and beverages.

4. Don’t carry or hold a child while cooking on the stove. Instead, place the child into a high chair or other safe area while cooking.

5. Children love to reach, so to prevent hot food or liquid spills, simply use the back burner of your stove and turn pot handles away from its edge; also, keep hot foods away from the edge of your counters.

6. Keep clothing from coming in contact with flames or heating elements.

7. A small adjustment to your water heater can give you one less thing to worry about. To prevent accidental scalding, set your water heater to 120 degrees Fahrenheit or the manufacturer’s recommended setting.

8. Make a habit of placing matches, gasoline, and lighters in a safe place out of children’s reach and avoid novelty lighters as they may look like toys in a child’s eyes.

9. When filling the bathtub turn on cold water first then mix in warmer water carefully.

For additional information refer to this link: http://www.ameriburn.org/prevention-BurnAwareness.php
Congratulations! You made it through January! How are your New Year’s resolutions? What steps are you taking to improve your heart health? Are you exercising more? Eating better and getting more sleep? Knowing what to eat and not to eat can be confusing. Everywhere you turn, there is news about what is or isn’t good for you. But a few basic tips have withstood the test of time and weathered the fad diets.

This is the perfect time to reflect on the past 12 months and assess what habits you want to take with you, and what you want to leave behind. Resolutions can both feel and be hard to keep. No matter what it is, it takes 21 days to make a habit and only one day to break it! So keep your focus. Incorporate healthy eating and better habits into your busy lifestyle.

To ensure success, follow these rules:
1. Create realistic goals and strategies. Set goals you know you can keep.
2. Keep it simple. If you aren’t used to eating something, try gradually adding it to your diet. Triad says 8 fruits and vegetables
3. Be patient. Accept the fact that we followed the same lifestyle for a very long time. Changing now won’t be easy. Remember, it’s OK to slip up sometimes – just remember to get back on track.

Here are some fast facts from the American Heart Association and the Performance Triad.
1. Drink more water. Performance Triad recommends hydration for clear thinking and focus. Water is good—8 glasses is great!
2. Go green! Make this the year of the kale chip – not the tortilla chip 1/2 plate of fruits and vegetables for each meal.
3. Eat seasonally. Good for your budget and waistline. Eating seasonally means you are getting food at its peak performance and flavor level
4. Cut out processed food. Just do it. Say no to aspartame, high fructose corn syrup and hydrogenated oil. All of which are associated with chronic inflammation, extended muscle soreness after strenuous exercise and increased risk for chronic diseases.
5. Eat more fiber. Crucial to heart health and reducing the risk of heart disease, Dietary fiber from whole grains, fruits, vegetables, as part of an overall healthy diet, helps reduce blood cholesterol levels and may lower risk of heart disease. Fiber is important for proper bowel function. It helps reduce constipation and diverticulosis.


Learn more about the Performance Triad at: http://armymedicine.mil.
www.myheart.org
Army’s Go for Green® Program: Go for Green® is food identification labeling system that provides Service members with a quick assessment of the nutritional value of food items served in the dining facility (DFAC).

This American Heart Month keep in mind that the color Red signifies a pioneering spirit and leadership qualities, promoting ambition and determination. It inspires us to take action. In Eastern cultures such as China red is the color for good luck.

This February in addition to seeing Red, Go Green!

Skip the cake, say goodbye to pie and take a walk after dinner.

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59th Medical Wing; the USAISR and the USAISR Joint Trauma System; the SAMMC and other sites.

“More importantly it represents the work to better the survival, the lives, and the families of the Airmen, Marines, Sailors and Soldiers we treat in combat and at home,” Bebarta said.

Bebarta was selected as the Research of the Year from among six finalists including Lt. Col. (Dr.) Luis M. Alvarez, Acting Director, Armed Forces Institute of Regenerative Medicine, U.S. Military Academy, National Cancer Institute; Dr. Andriy I. Batchinsky, USAISR Research Scientist, Combat Critical Care Engineering Task Area; David J. Fitzgerald, Ph.D., Senior Investigator, Laboratory of Molecular Biology, National Cancer Institute; Col. (Dr.) Stephen Harrison, SAMMC Director of Graduate Medical Education and Gastroenterology Consultant to the Army Surgeon General; and Patricia S. Steeg, Ph.D., Deputy Chief, Women’s Malignancies Branch, Center for Cancer Research, National Cancer Institute.
Top left: Kelley Thompson welcomes Bradley Cooper to the Burn Center who was there to visit with patients Jan. 15.
Top right: Sgt. Jaffster Daus holds up a medal for completing 14 half marathons in 2014. He also competed in and finished a full marathon. Photo by Staff Sgt. Khanesha Murrell.
Bottom right: Maj. Thomas Rountree, right, gives a tour of the Burn Center to British Brigadier Timothy Hodgetts, Medical Director, Joint Medical Command, first on left, and two medical officers from the U.K. Jan. 20.
Bottom left: Burn Center staff pose with Bradley Cooper, right, and Wayne Kyle, the father of Navy SEAL sniper Chris Kyle portrayed in the movie *American Sniper*, during a visit to the Burn Center Jan. 15.
Center right: Maj. Scott Phillips briefs Dr. Baligh Yehia, Senior Advisor (Healthcare) to the Secretary of Veterans Affairs on DoD Medicine on rounds procedures at the Burn Center during a tour Jan. 8.
Center left: Lt. Col. Robert Carter is promoted to his new rank by his mother Mary Carter, grandmother Camilla Carter, and Col. (Dr.) Anthony Johnson Jan. 15 at the AMEDD Museum auditorium.
Burn Survivor Expresses Gratitude to Burn Center Staff

By Steven Galvan
USAISR Public Affairs Officer

There are two words that the staff at the U.S. Army Institute of Surgical Research Burn Center routinely hear—“thank you.” That simple phrase is usually accompanied by a hand shake or a hug from a patient, family member or friend and is all the reassurance that the staff needs to know that they are providing the best care for every patient every day. Karen Starrs and her husband Ken went further to express their gratitude for the care she received as a patient in the Burn Center. They designed a military challenge coin, mounted the coin with a thank you note in a picture frame, and presented it to the burn center staff as a token of their appreciation.

“The burn center team is an amazing and dedicated staff,” said Ken. “We had to do this. The care that they provided Karen is unbelievable and the reason that she is here today.”

Ken is not exaggerating. Karen was given a 2 percent chance of survival. Forty-five percent of her body had been burned and her airway and lungs were severely damaged from smoke inhalation.

January 21, 2013 is the day that changed the Starr’s lives and the day that they now celebrate as Karen’s “Alive Day.”

“IT’s the anniversary of the miracle,” Ken said.

At 5 o’clock that morning the Starrs were awaken by a loud pop in their home at Corpus Christie, Texas that started a fire and destroyed it.

“I don’t know what caused it, but I was told it was electrical,” recalled Ken. “The Starrs were able to make it outside unharmed, but realized that their pets (a dog, 2 cats and a bird) were still inside. Ken ran to the garage to rescue the pets, not knowing that Karen had gone back inside the front door to do the same.

“I went in the side door and she went in through the front,” Ken said. “Once I realized Karen and gone inside, I tried to reenter through the front door but was hit by a rush of flame and smoke that drove me back into the yard.”

Ken made it back inside and was able to get Karen out, who wasn’t breathing. With a chest compression Ken revived his wife.

Karen was taken to a local hospital where Ken was told that his wife needed to be transferred to the burn center in San Antonio. Initially told that Karen would be airlifted to the burn center, preparations were made to transfer her by ambulance due to foggy weather.

“In the last minute I was told that the fog had lifted enough and that they would be able to airlift Karen to San Antonio,” said Ken. “I was advised later that if they would have taken her by ambulance she would not have made it because of the smoke inhalation.”

Chris Boyd, a nurse at the Burn Center Intensive Care Unit remembers the day Karen was admitted to the Burn Center.

“Her condition was very serious,” he said.

The Starrs family was told to be prepared for a roller coaster ride with good news one day followed by setbacks. On April 9th, after numerous medical procedures, countless hours of rehabilitation, healing milestones and setbacks, Karen was released from the Burn Center to a rehabilitation center in Corpus Christi. Ken recalls what he and his family have gone through as a family during the past two years.

“I still get emotional thinking about it,” said Ken, who is a law enforcement officer in Corpus Christi. “But here we are now and we owe it all to the great work done by the entire staff at this Burn Center.”

The Starrs presented the framed gifts to the Commander of the Brooke Army Medical Center, Col. (Dr.) Evan Renz, the Director of the Burn Center in 2013; the San Antonio Military Medical Center Ear, Nose and Throat

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Department; the Burn Center Outpatient Clinic; and the Burn Center Intensive Care Unit.

“It’s uncalled for,” said Boyd. “But it’s amazing and awesome. It makes us feel good to get the ‘thank you’ and recognition.”

The Starrs have built a new home in the same location where the other was destroyed by the fire where they live with their pets, except for the bird, who did not survive the fire. Life for the Starrs is back to their new normal. Designing the military challenge coin and presenting it to the staff at the Burn Center and SAMMC was something that the Starrs felt that they had to do to show their appreciation.

“Words cannot describe the gratitude that we have for the care that the staff gave Karen,” said Ken. “She wouldn’t be here without them.”

Giving Back to the Community

USAISR Soldiers participated in two volunteer projects assisting 9th grade students from Highlands High School at the Junior Achievement Finance Park Jan. 23 and 25.


Can you guess who this ISR staff member is? This photo was taken in 1983 when she was in the 3rd grade and a cheerleader mascot for a high school in South Texas.

Vic Convertino, Ph.D. Combat Casualty Care Research Senior Scientist

Submit your photo for publication in upcoming issues.

January Awards Ceremony

9A Designator Certificate of Achievement
Col. (Dr.) Kirby Gross
Lt. Col. (Dr.) Robert Mabry

Army Achievement Medal
Sgt. Jamar Williams

Army Good Conduct Medal
Spc. Micah Korff

Military Outstanding Volunteer Service Medal
Spc. Micah Korff

Certificate of Achievement
Spc. Daniel Wendorff

Congratulations to the outstanding Medical Corps Officers selected to receive the 2014 9A Proficiency Designator

The 9A Designator recognizes the highest level of professional recognition with each Corps of the AMEDD. Col. (Dr.) Michael Wirt presents Col. (Dr.) Kirby Gross (left) and Lt. Col. Robert Mabry with 9A Proficiency Designator Certificate of Achievement during the command Awards Ceremony Jan. 7.