The Point

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A newsletter for and about the people of the U.S. Army Medical Research and Materiel Command

Inside

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Joint Trauma Institute takes on national role

A San Antonio-based joint trauma institute is taking on a national role, a change that is expected to have a positive impact on trauma research, officials said Feb. 23 during a press conference at the U.S. Army Institute of Surgical Research.

Sen. Kay Bailey Hutchison and Rep. Charlie Gonzalez together announced the formation of the National Trauma Institute, formerly known as the Trauma Institute of San Antonio, Texas.

"I think we can do phenomenal things, not only for our troops in the field in Afghanistan and Iraq ... but also for people who are victims of car accidents and other traumas," said Hutchison, who was instrumental in the formation of TRISAT.

The TRISAT collaboration started in 2004 as an effort to coordinate medical care, training and administrative functions for trauma. The institute partnered San Antonio's three Level 1 trauma centers—Brooke Army Medical Center, Wilford Hall Medical Center and the University Health System—along with the University of Texas Health Science Center at San Antonio and the ISR. It was the nation's first combined military and civilian trauma partnership.

"The Army, Air Force and university relationship is a powerful thing for San Antonio citizens and now for the nation," said Col. John Holcomb, ISR commander, adding that San Antonio is home to the only two Level 1 trauma centers in the Department of Defense.

"Becoming a national institute will increase our funding and our impact on national trauma research," he said.

The joint collaboration benefits both civilians and military members, Holcomb said. "The research we do on the battlefield applies to civilian traumas and the research on civilian traumas works in the battlefield. It's a give and take relationship," he said.

Col. John Holcomb, commander, U.S. Army Institute of Surgical Research, explains the latest tools in trauma research to Sen. Kay Bailey Hutchison and Rep. Charlie Gonzalez Feb. 23 at the institute. Hutchison and Gonzalez were at the ISR to announce that San Antonio's trauma partnership was going national. (Photo by Elaine Wilson)

"Great research is being done in San Antonio, both in the burn area, for which San Antonio has been known for a long time, and also in prostheses," Hutchison added. "That is exactly what we owe these great patriots who have fought ... for our country."

Despite budget crunches within the DoD, Hutchison said the trauma institute is in a "good position" since the funding for the DoD bill went through. She also relayed assurances from the majority leader that the Base Realignment and Closure funding, which means about $141 million for San Antonio, was secured.

"We gave the DoD six years to complete a BRAC transfer; we have to give them the money to build the facilities to make these

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USAARL personnel Spc. Lance Sumner, third from left, biological sciences specialist, and John Ramiccio, fifth from left, helicopter research pilot, assist with evacuation of the wounded from Enterprise High School after a tornado hit the school March 1. (Photo used with permission of the Dothan Eagle)

After tornado, lab contributes to rescue, recovery

Enterprise, Ala., the city so badly damaged by a deadly storm that struck March 1, is located immediately outside the Fort Rucker gate. The Enterprise High School was devastated by a tornado that claimed the lives of eight students, five of whom had ties to Fort Rucker.

After the tornado hit, personnel from the U.S. Army Aeromedical Research Laboratory, located at Fort Rucker, immediately responded with medical evacuation assistance to include recovery, triage and loading of casualties.

The USAARL research helicopter was on standby with physicians and medics ready to deploy if they were needed. Maj. Richard Scheuring, a research flight surgeon assigned to USAARL, established and ran a casualty triage station at the high school.

In addition to donations of funds, food and supplies, many USAARL military and civilians are giving their personal time as volunteers to help clear debris from hard-hit dwellings.

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transfers," Hutchison said.

"I think we have the assurances from those who are able to deliver in this process," Gonzalez said. "Things look promising, but we still need to be vigilant and diligent."

Hutchison said her focus will remain on San Antonio and El Paso, which have the biggest projects in BRAC and military construction. Fort Bliss will be one of the recipient bases of 70,000 overseas troops returning home.

"We have also got to do military construction there so these people have a place to come and they have the quality of life that we owe our military personnel," Hutchison said.

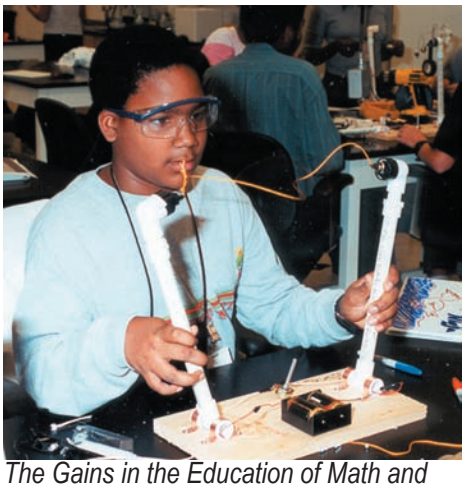
"Everyone in the U.S. Congress believes that our Soldiers, Airmen, Marines—anyone who is in Iraq—deserves to have the support they need to do the job they're asked to do," she said.

—By Elaine Wilson, Fort Sam Houston Public Information Office

Student program gets Army funding, continues

The Gains in the Education of Math and Science, or GEMS, program at the Walter Reed Army Institute of Research in Silver Spring, Md., has received more than $260,000 from the Assistant Secretary of the Army (Acquisition, Logistics and Technology).

The money will continue funding the program that exposes students in the Washington area to the wonders of science every summer.



The Gains in the Education of Math and Science program will continue at the Walter Reed Army Institute of Research.

Dr. John Parmentola, director for Research and Laboratory Management for the U.S. Army, recognized the value of the program and disseminated it to additional sites during the past three years, including the Army Research Laboratories at Adelphi and Aberdeen, Md.; George Washington University, Washington; Redstone Arsenal, Ala.; and, in part, at the Salish Kootenai College in Montana, with cooperation of the Flathead Indian Reservation, Pablo, Mont.

The GEMS program was initially funded for six years by two grants from the National Institutes of Health's National Center for Research Resources, but that line of funding ends this year.

"We are so relieved that ASA(ALT) came through with the funding," said Dr. Marti Jett, who with Dr. Debra Yourick, founded the GEMS program at WRAIR.

Collaboration to seek treatment for severe malaria

The Walter Reed Army Institute of Research and the U.S. Army Medical Materiel Development Activity announced a new partnership with Sigma-Tau Pharmaceuticals, Inc., March 19 to help finalize the research and development of intravenous artesunate, a new and promising treatment for severe malaria.

In the United States, there are 1,000 to 1,500 reported cases of malaria annually, occurring mostly in persons traveling to areas of the world with ongoing malaria transmission.

At least 10 to 15 percent of malaria is classified as severe rather than uncomplicated and is associated with impaired consciousness, extreme weakness and jaundice, and typically requires immediate diagnosis and treatment. Four to eight deaths occur annually in the United States as a result of misdiagnosis or delayed treatment.

"We saw a need for improved severe malaria treatment not only to protect our troops abroad, but as a potential treatment for those around the world affected by this devastating illness," said Col. Peter J. Weina of WRAIR. "WRAIR's vast research network played an important role in helping us research this new treatment for severe malaria, and with Sigma-Tau's help we are hopeful that IV artesunate will one day become available to people around the globe."

IV artesunate is a semi-synthetic derivative of the natural product, artemisinin, from qing hao, the sweet wormwood plant. It was developed for the treatment of severe malaria with the goals of rapid parasite reduction, prevention of death and reduction of mortality.

In March 2006, an orphan-drug designation was granted for IV artesunate for the immediate treatment of malaria.

WRAIR and USAMMDA initially developed IV artesunate in response to concerns over the risks of malaria exposure to deployed forces. Additionally, IV quinidine, the current standard therapy for severe malaria in the United States, has potentially harmful side effects.

Under a cooperative research and development agreement among the three organizations, Sigma-Tau will be responsible for the commercial development and manufacturing of IV artesunate should the FDA approve it.

Sigma-Tau plans to submit an application for FDA review of IV artesunate in the first quarter of 2008.

Institute awarded $14.4 million grant

The National Institutes of Health has announced the award of a "Countermeasures Against Chemical Threats Research Center of Excellence" grant worth $14.4 million dollars over five years to the U.S. Army Medical Research Institute of Chemical Defense at Aberdeen Proving Ground, Md. The institute is the Department of Defense's premiere laboratory for the development of medical products against the effects of toxic chemicals. The NIH CounterACT program addresses the critical need for improved antidotes for civilian populations vulnerable to chemical agent poisoning by a terrorist attack. The competitive funding opportunity was available for all U.S. academic, industrial and government laboratories.

Col. Brian Lukey, commander of the Army Medical Research Institute of Chemical Defense, right, and Dr. David Lenz, the principal investigator for the new Center of Excellence, examine a model of a bioscavenger molecule. (Photo by Stephanie Froberg)

Led by the center's principal investigator, Dr. David Lenz, the new NIH Center for Catalytic Bioscavenger Medical Defense Research at the USAMRICD will build upon the established infrastructure and personnel resources at the USAMRICD and at collaborating institutions.

"We are delighted that the NIH has recognized the considerable talents resident at the USAMRICD, as well as the quality of the research team organized by Dr. Lenz to address this important problem," said Col. Brian Lukey, commander of the USAMRICD.

The USAMRICD is responsible for the overall administration of the center and the management of the award.

"Nerve agents, such as sarin, are among the most lethal chemical weapons ever developed. They have been used in wars as recently as the 1980s and by terrorist organizations such as in the subway attacks in Japan in the mid-1990s," said Dr. David Moore, director of Strategic Research Program Development at the USAMRICD.

The possibility of future use of nerve agents by terrorists requires the development of effective and safe antidotes. A pretreatment effective against a broad spectrum of nerve agents and capable of reducing the concentration of nerve agent in the blood before it can reach its site of action should be particularly effective as an antidote. Likewise, a very rapid onset therapy that could specifically reduce the concentration of the nerve agent poison in circulation would be more advantageous than the currently available therapeutic drugs. The concept of designing a safe and effective nerve agent bioscavenger addresses the strategic need for improved preventative and therapeutic drugs.

"The work of this new center will lead to a paradigm shift in how to treat nerve agent exposure and will lead to therapeutics with less toxic potential and reduced immunogenicity," Lenz said.

The center will provide a comprehensive collection of scientific and technological capabilities needed to address novel drug discovery and drug production challenge. The center will align collaborative research efforts between the USAMRICD and five other research groups: the Human Biomolecular Research Institute, San Diego; The Weizmann Institute in Israel; the Department of Plant, Cellular, and Molecular Biology, The Ohio State University; The Biodesign Institute at Arizona State University; and the Department of Chemistry, The Ohio State University.

Institute welcomes first commander's family

On Jan. 26 MRICD welcomed the relatives of Col. Edward B. Vedder, a career military physician, noted researcher and medical educator. He is considered the first commander of what eventually developed into MRICD as well as the father of MRICD's training program in the medical management of chemical casualties.

Visitors to the U.S. Army Medical Research Institute of Chemical Defense are not uncommon: assistant secretaries of the U.S. government, general officers, and foreign dignitaries have all come by for briefings and tours. On Jan. 26, however, MRICD welcomed a very special group of people, the relatives of Col. Edward B. Vedder, a career military physician, noted researcher and medical educator.

Vedder can be considered the first commander of what eventually developed into MRICD as well as the father of MRICD's training program in the medical management of chemical casualties, according to Dr. Gary Hurst, chief of MRICD's Chemical Casualty Care Division. Vedder's importance to MRICD is underscored by the institute's having named its training building after Vedder and then, as the CCCD buildings increased, naming all of the division's training and office facilities the Vedder Complex. In addition, Vedder's photograph was incorporated into the design of MRICD's logo, which was developed a few years ago.

Col. Brian Lukey, commander of MRICD, called Vedder "one of my heroes," as he welcomed the family.

"It is an absolute honor to host you today," Lukey told the family.

The Vedder family was led by Martha Vedder Cullinane, widow of Vedder's only son, Henry Clay Vedder II, who followed in his father's footsteps, serving as a physician in the Army for 30 years. He died in 1989. Cullinane was joined by their three children and members of their families as well as by several of the descendents of Vedder's daughter, Sibyl. These included one of Sibyl's sons-in-law, his three children and members of their families, and two of his nieces, children of Sibyl's other two daughters. While many of the Vedder family live in Virginia, others came from California, Tennessee, New York City, and even Nova Scotia, Canada.

"My mother talked about her grandfather and had many stories about his accomplishments," said Pamela Lowen Osti. "She was very proud of him. I wanted to share in that."

Plans for the family to visit MRICD and the Vedder Complex began four years ago when members of the Chemical Casualty Care Division located a Henry Clay Vedder III on the Internet, contacted him, and asked whether he was any relation to MRICD's Col. Vedder. He turned out to be Vedder's grandson and put the CCCD officers in contact with his mother.

Meanwhile, Lt. Col. Nathan Johnson, U.S. Air Force, currently with the Defense Threat Reduction Agency, was developing an interest in medical chemical defense as he pursued his graduate degree in biochemistry and found himself continually coming across Vedder's name. Through research, he learned more about Vedder's many accomplishments in the fields of science and medicine and discovered Vedder's papers, which Cullinane had donated to the University of Rochester Medical School. Johnson contacted Cullinane and a dialogue about Vedder and a family visit to MRICD began.

During the visit, both Johnson and Hurst gave presentations highlighting Vedder's contributions to modern medicine, which were extensive and not merely related to the medical treatment of chemical warfare casualties. Among the medical diseases and topics that Vedder advanced through his research are beriberi, syphilis, plague,

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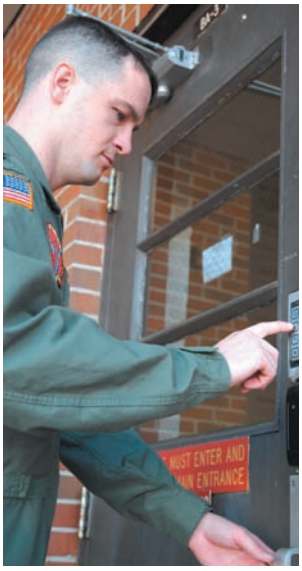
Lab excels at the science of security



Capt. David Turner, U.S. Army Aeromedical Research Laboratory antiterrorism officer, enters the lab.

The three-day 2006 Fort Rucker Force Protection Exercise in December featured several challenging events targeting the personnel and security procedures at the U.S. Army Aeromedical Research Laboratory. In the past, the lab was subjected to minimal attempts to breach security, resulting in little or no testing of internal security measures and procedures.

This exercise was different. The USAARL was a priority target. Several attempts were made to plant a simulated improvised explosive device, as well as insert trained opposition forces infiltrators who targeted a most critical asset of the USAARL: information.

The exercise focused on specific events testing communication, flexibility and coordination of all USAARL employees. Soldiers and civilians reported all suspicious personnel and events. They responded so well, in fact, that opposition forces had to significantly modify plans—including four vehicle switches and numerous changes of attire—to gain access to USAARL buildings. Because of the vigilance of laboratory personnel, opposition forces were unable to complete their mission.

Only after obtaining assistance from exercise controllers were opposition forces able to gain access to the laboratory to attempt to obtain any classified or proprietary information from the USAARL employees. These sharply dressed "industrial spies" were equipped with fake identification badges, briefings and talking points. They were quickly dismissed by Soldiers and civilians, and no unauthorized information was released.

At the end of the exercise, the USAARL was singled out by the post's force protection officer for its outstanding security, both in attitude and implementation.

At the USAARL, security is a proven science that preserves the fighting strength. Security of personnel, facilities and information is indispensable to mission success—whether in the laboratory, training facility or on the battlefield.

—By Capt. David Turner, USAARL

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pellagra, cholera, vitamins and medical hygiene.

Vedder was handpicked by the Army Surgeon General and approved by the chief of the Chemical Corps to serve at Edgewood Arsenal as the first chief of medical research. Toward the end of his tour, he studied information about the chemical injuries of World War I, which led to his groundbreaking book "Medical Aspects of Chemical Warfare." While at Edgewood, Vedder also began a training program for doctors and nurses that included a course on the clinical aspects of gas poisoning and the treatment of gas casualties.

"He was humble," Hurst said. "He downplays his contributions and mentions [those of] others, but he was not a shrinking violet. Vedder is part of the reason modern medicine now exits."

After presentations by Johnson and Hurst, Cullinane was presented with a copy of the modern "Textbook of Military Medicine: Medical Aspects of Chemical and Biological Warfare" and a framed photograph of the Vedder Complex at MRICD. Lukey also gave her a commander's coin.

For Cullinane, who had wanted to visit since hearing of the dedication of the Vedder Complex, the reception was much more than she had expected.

"This is truly an honor for us," Cullinane said.

—By Cindy Kronman, USAMRICD

IT conference

Lt. Col. Gilroy Gotiangco, standing, U.S. Army Medical Information Technology Center, responds to some AHLTA questions from the audience at the Army Medical Department's Information Management Conference held Feb. 23 in New Orleans. Gotiangco and his staff work closely with the Military Health System to successfully integrate their information technology systems into Army healthcare facilities. USAMITC, hosting one of four tracks offered at the conference, provided an integrated view of how the Army Medical Command's IT enterprise is managed and how this management is integral to supporting the command's healthcare mission.

Scientists receive R&D achievement award

Three scientists from the U.S. Army Medical Research Institute of Chemical Defense received a 2006 Research and Development Achievement Award for Technical Excellence.

Drs. John McDonough and Tsung-Ming Shih of MRICD's Research Division, Pharmacology Branch, and Dr. Benedict Capacio of the Analytical Toxicology Division, Medical Diagnostics and Chemical Branch distinguished themselves in the design and execution of a collaborative research effort towards the advancement of the anticonvulsant drug midazolam for the treatment of seizures induced by chemical warfare nerve agents. The team identified midazolam as a more potent and rapidly acting anticonvulsant than the currently fielded diazepam against seizures produced by nerve agents.

Dr. John McDonough, Dr. Tsung-Ming Shih and Dr. Benedict Capacio of the U.S. Army Medical Research Institute of Chemical Defense received a 2006 Research and Development Achievement Award for Technical Excellence for their work with the anticonvulsant drug midazolam for the treatment of seizures induced by chemical warfare nerve agents.

In addition, they successfully demonstrated that prompt and effective anticonvulsant treatment was essential to protect against nerve agent-induced permanent brain damage. Their research efforts provided a significant body of scientific evidence for the Army to seek from the Food and Drug Administration approval of midazolam as an improved anticonvulsant for the treatment of nerve agent-induced seizures.

McDonough, Shih and Capacio were presented their awards at MRICD Feb. 1 by Jean Reed, special assistant for chemical and biological defense and chemical demilitarization in the Office of the Assistant Secretary of Defense (Nuclear and CB Defense Programs).

"Thank you very much for giving me the honor [of presenting the awards]," said Reed, who along with his scientific adviser, Fay Peng, was visiting the institute.

Reed expressed pleasure at being back at the MRICD and thanked the scientists for the effort and time they devote to what they do, acknowledging that the cutting-edge research performed at MRICD and other Army labs could not be done in the private sector. After the award presentations, Reed and Peng had the opportunity to see some of that technology with tours of MRICD's Affymetrix gene chip facility and the Electron Microscopy Laboratory, with its JEOL 7401F Field Emission Scanning Electron Microscope.

—By Cindy Kronman, USAMRICD

Medicine meets virtual reality at conference

The Telemedicine and Advanced Technology Research Center hosted its seventh annual TATRC Day as part of the Medicine Meets Virtual Reality conference held in Long Beach, Calif., in early February. More than 275 attendees from government, academia and businesses from around the nation and globe attended to hear the latest in medical modeling and simulation, computational biology, extraction and surgical robotics and healthcare informatics.

Cheryl Hein of UCLA learns how to use a cable-based haptics simulator at the Medicine Meets Virtual Reality conference. (Photo by Harvey Magee)

With a theme of "Partnering to Enable Technology: From Basic Research to Deployment," the presentations described the path TATRC's investigators took to reach their current state, how collaborative efforts impact their work and how they see their work proceeding.

Dr. David Klonoff, a keynote speaker, discussed technologies for glucose control in trauma patients, a topic of clinical relevance since the discovery that otherwise healthy patients develop metabolic derangements that can negatively impact their healing process when they're in a state of trauma from injury or surgery. Dr. Jaques Reifman summarized two in-house computational research initiatives: the Biotechnology High Performance Computing Software Applications Institute and the Bioinformatics Cell.

Robotic extraction and evacuation technologies and surgical robotics and telesurgical technologies were showcased as well. Modeling and simulation are already used extensively in these arenas, yet opportunities for additional innovation remain. Finally, investigators presented cutting-edge efforts in healthcare informatics, with an emphasis on grid technologies that have already begun to impact the medical modeling and simulation and other healthcare domains.

TATRC's Advanced Medical Technology Review underscored that advanced technology research can be accelerated and enhanced through collaboration among government, academia and industrial partners.

The TATRC exhibit area reinforced the center's messages and provided an opportunity for hundreds of conference attendees to enjoy "hands-on" demonstrations of prototypes.

Two virtual reality video games were featured. Forterra Systems, with Stanford University, is developing a multi-player training technology to train for a response to a chemical, biological, radiological, nuclear event, and the Institute for Creative Technologies demonstrated technology to augment clinical care for post traumatic stress disorder patients.

SIMmersion LLC, in collaboration with the Uniformed Services University of the Health Sciences, is developing a movie-based training system to teach differential diagnostic skills that health care providers should have when responding to chem-bio events, such as the ability to diagnose smallpox versus chicken pox. SA Technologies demonstrated technology to identify cognitive readiness measures for individual and team training.

People in the News

Jaffin becomes acting commander

Jaffin

Col. Jonathan Jaffin took the reins of the U.S. Army Medical Research and Materiel Command March 3, when Maj. Gen. Eric Schoomaker was tapped to lead the Walter Reed Army Medical Center and the North Atlantic Regional Medical Command.

Jaffin, a native of Princeton, N.J., and a trauma surgeon, served as deputy commander for the USAMRMC since July 2006.

"Although MG Schoomaker's reassignment occurred suddenly, during a period of significant turmoil for the Army Medical Department, I know each of you will continue the outstanding performance that is the hallmark of this organization," he wrote in his first message as acting commander.

Jaffin is a graduate of the Army's Command and General Staff College and was an Army War College Fellow with the Department of Health and Human Services.

His military assignments have taken him to Joint Task Force Bravo in Honduras; the Walter Reed Army Medical Center in Washington; Brooke Army Medical Center and the Army Medical Department Center and School in San Antonio; McDonald Army Hospital at Fort Eustis, Va.; and Human Resources Command in Alexandria, Va.

In a parting e-mail, Schoomaker wrote, "My thoughts are never far from you and the remarkable work which you all are doing.... You are truly the future of Army and military medicine—the key to the preservation of individual well-being, health improvement and healthcare delivery for the joint force and, increasingly, for the nation as a whole.

"I have never seen the combination of skilled leaders, passionate staff and scientists, skilled technicians, dedicated Soldier-medics and effective partnerships as I see in the USAMRMC and Fort Detrick today. I wish the greatest success to all of you."

Assumption of command

Capt. Jason R.W. Weir, right, became the first official Headquarters Detachment commander for the the U.S. Army Medical Information Technology Center March 9 during an assumption of command ceremony. Lt. Col. Joseph P. Bentley, commanding officer of USAMITC passed Weir the unit's colors, making him responsible for the health, welfare and training for military personnel assigned to the center. (Photo by Dee Bradshaw)

People in the News

Trauma researchers head to national competition

Two trauma researchers from the U.S. Army Institute of Surgical Research in San Antonio competed in the Olympics of their field in March.

Capt. David Kauvar

Capt. David Kauvar and Dr. Heather Pidcoke faced off in the 2007 Residents Trauma Paper Competition at the Annual Meeting of the Committee on Trauma in Denver March 15-17.

"It will be nice to have a friendly face at the competition … provided she's not too fixated on kicking my butt," said Kauvar, now a surgical resident at Brooke Army Medical Center in San Antonio before the competition.

Though the two hail from the same institute, they took different routes getting to the competition. Kauvar won top honors for region 13, the military region, competing against fellow ISRite, Capt. Neil McMullin, at the annual Gary Wratten Surgical Symposium in May 2006. Pidcoke, a research fellow from University of Texas, Health Science Center, San Antonio, competed in and won region six, which includes San Antonio. They faced 12 additional competitors.

Dr. Heather Pidcoke

"We've got a 14 percent chance of taking home top honors for the institute," said Dr. Charles Wade, senior scientist for the Institute of Surgical Research. "We really believe that we have a responsibility to generate the next generation of researchers to replace some of us older researchers, on both the military and civilian side, who conduct research on combat casualty care. Competitions like these recognize our next generation's excellence."

The Institute of Surgical Research employs researchers who focus on basic science and doctors and nurses who spend their time in clinical research and care to work toward the common goal of discovering better ways to treat trauma patients. Trauma, Pidcoke said, is a leading cause of death in otherwise healthy people, but research in this area has been hampered by consent issues.

"Patients arrive without family members who often don't get there in time for many studies. When they do, they may be too upset to make a decision," she said.

The researchers' work is all geared to make a difference in how care is provided. McMullin, a Texas A&M grad, said his research will prompt a change in how patients with penetrating abdominal wounds are treated. The Emergency War Surgery Manual says that when those patients arrive at a medical facility, they need an operation called a laparotomy to open the abdomen. McMullin looked at patient records from the 31st Combat Support Hospital in Iraq and showed that computerized tomography, or CT, scans were a good method to determine if that operation was truly necessary.

"In our active-duty population, where our manpower is our greatest asset, to take a Soldier off the line due to a (unneeded) laparotomy is a serious loss," he said. The captain added that triage using CT scans in a mass casualty event is an effective way to allocate resources because operating room space is at a premium then.

Both Kauvar and Pidcoke have prepared written descriptions of their research and will present their findings to a panel of judges March 15. Kauvar, who joked that he'd been drinking protein shakes to train for the competition, said that after three years he's adept

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The puck stops here

Capt. Eric Ansorge, left, of the U.S. Army Aeromedical Research Laboratory and teammate, Capt. Michael Adams enjoy the Army team's win over the Bitburg Bears to secure a third place finish in the U.S. Air Force European Ice Hockey Championship in Garmisch, Germany. The championship tournament consisted of the U.S. Army team, based in Mannheim, Germany, and U.S. Air Force teams from bases throughout Europe, as well as teams from other NATO countries.

"Trauma," continued from 10

at presenting his findings. His research looked at how the muscles of the arm and leg are affected by bleeding and the lack of and then return of blood supply.

"This is something that occurs very often in military trauma because severe limb bleeding is common and is frequently treated by the use of a tourniquet to stop the blood flow," he said. "Hopefully, learning more about these injuries will help our medics and doctors in the field take better care of combat casualties."

Pidcoke, a graduate of the University of Southern California's medical school, polishes her presentation skills at weekly meetings where she answers questions about her work and defends her methods and results to the ISR faculty who mentor her.

"It is the best preparation possible because it forces me to think critically about my work," she said.

Pidcoke's work examined the reliability of glucometers, the monitors used to measure blood sugar levels hourly in burn patients at the institute's Burn Center. Burn patients are given insulin to regulate their blood sugar levels because their bodies aren't able to regulate those levels. Working under mentor Dr. Steven Wolf, director of the burn center, Pidcoke found that, because burn patients are anemic and have thin blood, glucometers don't give accurate results. In fact, the machines indicated that patients' blood sugar levels were higher than they actually were.

"This is a big problem because a patient could have blood sugar so low that it is dangerous, and no one would know," she said. "My research gives doctors a way to fix the mistake and find out what the real blood sugar level is. This keeps patients safer because, now that doctors and nurses know what the real blood sugar level is, they can keep it from going too low."

Competitors or not, both physicians are committed to helping trauma patients through hands-on care and research. "It really matters. Critically injured trauma patients are people who would die without treatment, not next month or next year, but immediately," Pidcoke said.

Though neither were aware of any office pools that were created in light of the competition, Pidcoke said she wanted in if there were one.

"There hasn't been much rivalry. That doesn't mean it can't start now, though; he can 'bring it,'" she said. "But seriously, of course I want to win, but I would be really happy if Dave won, too."

Pidcoke finished in second place in the clinical science category.

People in the News

Army officer and native of the Philippines Capt. Michael Van Hoven helps haul relief supplies after a super typhoon devastated the Philippines in late November.

Lab officer enlists for typhoon relief in the Philippines

Capt. Michael Van Hoven was stunned when he saw CNN's internet coverage of the typhoon that hit the Philippines in late November 2006.

High winds stripped roofs from houses and buildings, and flash floods from heavy rains created mudslides, destroying crops and livelihoods. Power and water systems were devastated. Hundreds died; thousands were left homeless.

"I was shocked at seeing the dead along the road—the same road I used when going to school," said Van Hoven, a native of the Philippines. The captain is assigned to the Armed Forces Research Institute of Medical Sciences in Thailand where researchers study tropical diseases endemic to Thailand and Southeast Asia for the U.S. military. The overseas lab is an asset of the Walter Reed Army Institute of Research in Silver Spring, Md.

As the death tolls and damaged estimates climbed, the laboratory officer felt compelled to return to his family farm in Albay, even though he hadn't called the Philippines home for more than a dozen years.

"I could not sit in comfort in Thailand knowing that the very people I shared my life with were going to starve," he said. "I played and grew up with their children, who at this time already have their own families and some are still on the farm. Our people have no one to run to for help."

When Van Hoven asked his commanders at AFRIMS for permission to go to the Philippines, they supported him. "It was the right thing to do from a human standpoint. I knew (he) was from the area affected and there were many people in need," said Lt. Col. Robert Gibbons, Van Hoven's supervisor. "Second, we do (research) work in the Philippines, and we want to be supportive of the country in any way that we can."

Typhoons are common in the Philippines. In 2006, five struck, killing 688 people and destroying more than 175,000 homes, according to the Philippines National Red Cross. Typhoon Durian, the one that hit Nov. 30, was a super typhoon with winds of up to 165 miles per hour.

Van Hoven witnessed many typhoons during his 25 years in the Philippines. One super typhoon named Sisang that hit in 1986 is still a vivid memory. While studying for mid-terms by candle light as Sisang roared, Van Hoven heard a loud crack, and then books fell from a shelf onto him.

"When I grabbed a flashlight and pointed it to the ceiling, there was no reflection," he said. "That was when I realized that our roof was gone. I made it to the other room and took my screaming mom and little sister downstairs to safety."

Bringing sympathy and donations gathered in Thailand, Van Hoven headed home for the first time since 1992. He hoped to provide two months of food and funds to buy seeds and fertilizer to help the farm's 10 families start over.

The captain also approached the U.S. Agency for International Development for help in buying non-food items. USAID

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People in the News

Raise your hand

Sgt. Erik B. Lloyd, right, the retention noncommissioned officer for the U.S. Army Research Institute of Environmental Medicine, re-enlisted at Minute Man National Historical Park in Concord, Mass., Oct. 27. Capt. Brian Barnes, left, administered the re-enlistment oath at the park named for the militia who fought British troops in the American Revolution. Lloyd chose the location because it has ties to Army's history and the local area. The event was also featured in the Army Times.

Other recent USARIEM re-enlistments include Staff Sgt. Jorge Diaz, Sgt. Joseph Alemany, Sgt. Lavincent Harris and Pfc. Stanley Reams.

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referred him to a local development foundation, World Vision. The organization gave each family on the farm 50 kilos of rice, a lantern and flashlight, a sleeping mat and mosquito net and a box of cookies, even though the area for which it was responsible did not include the farm.

In turn, Van Hoven organized volunteers from the farm to help distribute World Vision's relief goods to others who had lost everything.

Van Hoven's efforts soon reached beyond his farm. His military ties led him to link up with an advance party of Marines from the 3rd Marine Expeditionary Brigade that arrived Dec. 3 from Okinawa, Japan, to provide humanitarian assistance. He worked with their officers in coordinating the medical part of their mission.

By mid-December Van Hoven was officially attached to the Joint U.S. Military Assistance Group in the Republic of the Philippines.

"I was the stay behind and be the-guy-on-the-ground for JUSMAGPHIL while at the same time supporting World Vision," he said.

Most of his work with that organization involved strenuous physical labor. He helped repack relief items from bulk containers into distributable packs, load those packs on to trucks and unload supplies to help 400 to 900 families daily.

"It is hard to explain the joy it brings when the people receiving those relief items express their gratitude," he said. "The end result of what everyone did was directly evident."

Officially, Van Hoven's involvement with relief efforts ended Dec. 23, and he returned to Thailand.

His unofficial work continues. He, his wife and her family organized a local relief organization using donations gathered from the Nichada Thani community, the housing complex where the Van Hovens live in Thailand.

"The most important point is the opportunity to help others," Van Hoven said.

People in the News

Biochemist retires after 46 years

After nearly five decades of federal service, countless awards and more than 600 articles and presentations, one of the Walter Reed Army Institute of Research's experts in medical chemical defense retired Jan. 10.

Dr. Bhupendra P. Doctor, who served as the institute's director of the Division of Biochemistry for more than 28 years, left the Walter Reed Army Institute of Research with 46 years of civil service.

During his career as a biochemist, Doctor served not only as "one of the world's leading experts in chemical defense … but also someone who has reached out to mentor, to train and to constantly take folks who are coming up through the ranks and help them achieve greatness," said Col. Kenneth Bertram, commander of the Walter Reed Army Institute of Research, during the ceremony in the packed auditorium.

In his farewell remarks, Doctor said his methods for grooming the institute's next generation of scientists were straightforward. He corralled the energy of every enlisted person in his department, explaining the lab's work then sending the Soldier to the library to learn more about it and develop experiments.

"They got to add their vision to the existing vision," he said. "You could see a big glow in their faces when they got results. This is what research is."

In the end, 52 enlisted members in the Biochemistry Division pursued their bachelor's, master's or doctoral degrees in science.

"I'm not worried about ... anyone who has worked for me because they all know how to take charge," he said.

Doctor, a member of the Senior Executive Service, worked on confronting the nation's medical response if chemical warfare agents were used. He helped develop pretreatments, called bioscavengers, which interdict nerve agents when they enter the bloodstream so the nerve agents can't reach their targets. These bioscavengers may result in saving military and civilian lives and making chemical warfare agents obsolete as weapons of mass destruction.

Dr. Bhupendra P. Doctor served as the Walter Reed Army Institute of Research's director of the Division of Biochemistry for more than 28 years. He retired Jan. 10.

An avid scientific collaborator, Doctor is a "source of great inspiration and great comfort," said Maj. Gen. Eric Schoomaker, commanding general of the U.S. Army Medical Research and Materiel Command, the parent command of the institute. As a young hematologist, the general spent time studying the effects of chemical agents under Doctor.

"I walked away from that period of study a bit depressed that we had enemies who possessed tools that made any other weapon in the hands of a Soldier look like child's play," he said. "In fact, I wondered at times why we looked at any other forms of defensive weaponry when things like nerve agents were around."

Researchers, including Doctor, began to wonder whether there could be "a biological chaff that you could throw at an agent that would distract it from attacking the body of Soldiers or civilians," Schoomaker said. "At the time it seemed like a glimmer of hope, but today it (the bioscavenger) is a patented product, and it's very close to being used in defense."

Born in Surat, India, Doctor earned 10 patents and numerous awards throughout his career. He was a three-time winner of the Presidential Rank Award and was the first recipient of the SES Sabbatical Leave in 1981.

He served as a visiting professor, guest lecturer and consultant to institutions worldwide, including the Salk Institute of Biological Sciences, the Medical Research Council, the University of Cambridge, the Pasteur Institute and the World Health Organization.

People in the News


Dr. Lloyd Salisbury

Military medical merit

Dr. Lloyd Salisbury of the U.S. Army Medical Materiel Development Activity received the Order of Military Medical Merit March 8 for "a lifetime's worth of work and dedication," said Col. Johnathan Jaffin, acting commander of the U.S. Army Medical Research and Materiel Command. Salisbury, who came to the command in 1964, will mark 55 years of federal service April 2.

"It was a priviledge," Salisbury said. "It was fun doing the work."

Col. James Madsen of the U.S. Army Medical Research Institute of Chemical Defense's Chemical Casualty Care Division received the Order of Military Medical Merit Feb. 1 from Jean Reed, special assistant for chemical and biological defense and chemical demilitarization in the Office of the Assistant Secretary of Defense (Nuclear and CB Defense Programs). The medal, said MRICD's commander, Col. Brian Lukey, acknowledges the excellence with which Madsen does his job as well as his contribution to the Army Medical Department.

Board slot

Dr. John Crowley, scientific programs director at the U.S. Army Aeromedical Research Laboratory, has been elected to serve a three-year term on the American Board of Preventive Medicine.

"This is a significant accomplishment, because the ABPM sets the practice standards and certifies all physicians who practice in this specialty," said USAARL Commander Col. James S. McGhee.

Founded in 1948, the American Board of Preventive Medicine was developed to protect, promote and maintain health and well-being. It is composed of three distinct specialties: aerospace medicine, occupational medicine and public health and general preventive medicine. Aerospace medicine focuses on the clinical care, research and operational support of the health, safety and performance of crewmembers, support personnel and passengers of air and space vehicles.

"One of the greatest challenges right now is the new 'maintenance of certification' or recertification process, which has required a fresh look at our specialty and what it means to be a specialist in aerospace medicine," Crowley said.

Crowley also serves as the vice chair for Aerospace Medicine of the ABPM. Each member can serve on the board for three three-year terms. This is Crowley's third term.

Certified

Five infectious disease officers from the Walter Reed Army Institute of Research learned in December that they passed their American Board of Internal Medicine certification examination in Infectious Diseases:

- Col. Peter Weina from Experimental Therapeutics
- Lt. Col. Mark Polhemus from the U.S. Army Medical Research Institute-Kenya
- Lt. Col. Emil Lesho from Retrovirology
- Maj. Otha Myles from Retrovirology
- Maj. James Moon from the Clinical Trials Center

With the exception of Moon, who trained at Brooke Army Medical Center, the rest are all graduates of the Walter Reed Army Medical Center/National Naval Medical Center National Capital Consortium Fellowship Program in Infectious Diseases.

Board-certification is an important credential for medical corps officers who have completed graduate medical education training.

Audie Murphy Club inductee

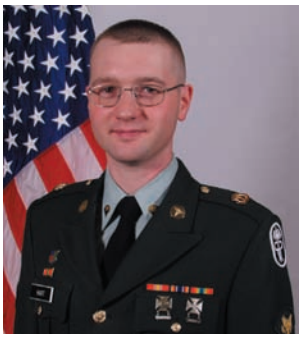

Sgt. Dineen Peterson-Parker

Sgt. Dineen Peterson-Parker of the U.S. Army Aeromedical Research Laboratory was unanimously inducted into the Sgt. Audie Murphy Club Dec. 6. The club is intended for those Soldiers who have demonstrated performance and inherent leadership qualities and abilities characterized by those of Sgt. Audie Murphy.

People in the News

Army-Navy Bowl I

The staff of the U.S. Army Medical Information Technology Center, in black, hosted a seriously competitive but friendly game of flag football against a team of Navy recruiters who work in the building next door March 2 at Fort Sam Houston, Texas. The first go 'round was a low-scoring game and went to the Navy, 2-0, but plans for more games and other sports are in the works. (Photo by Dee Bradshaw)



Spc. Jessie Hart

Movin' on up

Spc. Jessie Hart of the U.S. Army Aeromedical Research Laboratory was recently selected to attend Officers' Candidate School and will begin training in mid-September.

Spc. Olufunso Ogidan of the U.S. Army Medical Research Institute of Chemical Defense was accepted for a direct commission as an environmental science officer and will report to the Officers Basic Course April 8 at Fort Sam Houston, Texas.

Read Across America

Several soldiers from the U.S. Army Medical Research Institute of Chemical Defense participated in a National Education Association Read Across America event March 2 at Churchville Elementary School in Harford County, Md. Staff Sgts. Karla Wilson and Jennifer Devorak and Spcs. Michael Thomas and Joseph Chadwick had a good time and enjoyed reading to the children. Wilson read "Oh, The Places You'll Go" to a kindergarten class and found the children eager to ask questions and share personal experiences. Devorak, too, read to a kindergarten class, choosing another Dr. Seuss's classic "Horton Hears a Who."

"It was fun and interesting to answer some of the questions that the kids had for us," said Thomas, who read "Toluse the Canadian Goose" to a fifth grade class. "I think it is good when we interact with the community and hope more opportunities come along."

Promotions

Soldiers recently promoted at the U.S. Army Research Institute of Environmental Medicine include:

- Lt. Col. Lori Sigrist
- Staff Sgt. Jorge Diaz
- Staff Sgt. Samuel Griffin
- Sgt. Marcus Tillis
- Pfc. Stanley Reams

People in the News

Treasured momento

Sgt. 1st Class Trevor Diaz, left, of the U.S. Army Aeromedical Research Laboratory, poses with the Minister of Intelligence for Northwest Kurdistan, Said Shingari, while deployed in Iraq. Shingari told Diaz the photo of Pope John Paul he is holding was autographed and personally presented by the Pope.

During Saddam's reign, Shingari led Iraqi Christians, who were outnumbered 3 to 1, in a charge that sent the Muslims reeling back to the south, thus preserving the Christian population and their land, Diaz wrote in an e-mail. Having heard of this, the Pope presented Shingari with the picture as a token of appreciation.

"He is really proud of this picture," Diaz wrote.

Chem defense Soldiers excel

Kudos are due to several Soldiers from the U.S. Army Medical Research Institute of Chemical Defense:

◆ Spc. Ardicio Galvao, now assigned to the Lawrence Joel Army Health Clinic, at Fort McPherson, Ga., was the USAMRICD's Soldier of the Year.

◆ Staff Sgt. Jennifer Devorak won noncommissioned officer honors for the first quarter.

◆ Spc. Emily Willis was promoted to sergeant and Pfc. Trent Smith was promoted to specialist.

◆ Spc. Victor Miranda re-enlisted.

◆ Maj. Scott Willens, Spc. Victor Miranda, Spc. Olufunso Ogidan, Spc. John Fortnash and Spc. Ardicio Galvao received Army Commendation Medals.

◆ Spc. Ardicio Galvao and Spc. Lakeisha Burr received Army Commendation Medals.

Headquarters awards

"It's always good to give out awards because it means people are doing great stuff … with cool, calm professionalism," said Col. Jonathan Jaffin, presiding over his first awards ceremony as acting commander of the U.S. Army Medical Research and Materiel Command March 8. "These awards also serve as a reminder of how much is going on in this command."

◆ Maj. Katherine Suarez received the Meritorious Service Medal for serving as Medical Company commander for the U.S. Army Medical Research Institute of Infectious Diseases from January 2005 to January 2007. Command, she said, "is something that I never thought I wanted, but I got the perfect command for me," she said. "Col. (George) Korch (USAMRIID commander) showed a lot of faith in me and gave me a lot of autonomy."

◆ Col. Harry Slife, now the deputy commander of the U.S. Army Medical Research Institute for Chemical Defense, received the Army Commendation Medal for coordinating the 2006 SHORESH conference, which involved running five meetings at one time in Isreal. "It was a great experience, and I hope someone else gets the opportunity to excel next time," he said with a laugh.

◆ Col. George Korch, USAMRIID commander, and Lt. Col. Jose Andujar, Deputy Chief of Staff for Operations, received Army Achievement Medals for their work with the SHORESH Conference. Other command officers recognized with Army Achievement Medals for their work with the conference include Col. David Vaughn, Col. Robert Vandre, Col. Beau Freund, Lt. Col. Rachel Evans, Maj. Michael Forgione and Capt. Vince Myers.

◆ Debra Coffman, P.J. Showe and Lee Sult received certificates of achievement for their work with the SHORESH Conference.

◆ Contractors recognized with letters of appreciation for their work with the SHORESH conference include Dr. Lynn Kitchen, David Smart, Dr. Dennis Goodes and Dr. Sam Howerton.

News to use

Smaller files

An article on the Microsoft Web site offers advice on how to decrease the size of PowerPoint files to make them more portable and easier on an e-mail system. The piece offers advice on how fast saves, graphics, image size, master slides, saving, unseen elements, fonts and other features in PowerPoint can increase a file's size.

The article is available at http://office.microsoft.com/en-us/powerpoint/HA011168821033.aspx?pid=CL100626991033.

The U.S. Army Medical Information Technology Center estimates a nearly 76 percent increase in available network bandwidth if all observe these best business practices, said Lt. Col. Joseph Bentley, commander of USAMITC.

Activity granted agreement authority

Claude M. Bolton Jr., Assistant Secretary of the Army (Acquisition, Logistics and Technology), authorized the U.S. Army Medical Materiel Development Activity to directly participate in the Army domestic technology transfer program Jan. 3. This authorization, permitted by Army Regulation 70-57, gives the commander of USAMMDA the authority to execute technology transfer partnerships, such as cooperative research and development agreements, partnership intermediary agreements, commercial test agreements, educational partnership agreements and patent licensing agreements.

Prior to Jan. 3, USAMMDA did not meet the criteria required to enter into agreements. All of the activity's technology transfer efforts were managed by the U.S. Army Medical Research and Materiel Command's Office of Research and Technology Applications. Once written and negotiated, agreements required staffing through six to eight offices at headquarters before ending with the commanding general's signature, on behalf of USAMMDA.

Now that USAMMDA can now manage agreements through its own Office of Research and Technology Applications, agreement staffing times should decrease and staff can be dedicated to supporting USAMMDA's technology transfer efforts. Judy Holian has been designated to execute technology transfer policies and manage USAMMDA's Office of Research and Technology Applications.