

NOV 02 2011

COLUMBIA DAILY
TRIBUNE

MU gets funds for combat medical research



[August Kryger](#) | [Buy this photo](#)

Brian Goldiez of the University of Central Florida and Lisa Schwartz of the University of Missouri development office look at a simulation dummy used to train combat medics Tuesday at Reynolds Alumni Center. MU Tuesday announced a \$5.3 million grant from the Department of Defense to assess combat medical techniques.

By [Janese Silvey](#)

With blinking eyes, a breathing chest and a steady pulse, the simulation mannequin now used to train combat medics is pretty realistic — down to the Army fatigues and leg tourniquet.

But does it — or other current models used in medic training — actually help servicemen and women when they're responding to injuries on the battlefield? The University of Missouri has been awarded a \$5.3 million grant from the U.S. Department of Defense to find out.

“We need to get away from the ‘gee-whiz, wow’ factor and actually have scientific data to show us whether it’s effective in training,” said Stephen Barnes, chief of the division of acute care surgery at the MU School of Medicine.

Barnes is the principal investigator leading a team of 30 military and medical experts across the country to form the new Combat Casualty Training Consortium. The group will analyze medical information collected on the battlefields of Iraq and Afghanistan over the past decade. These are the first conflicts in which the military has recorded in real time the treatment soldiers received from the point of injury to the hospital.

Once they narrow down which strategies proved most effective in real-life combat situations, researchers will then determine how to train future medics to use those techniques.

Within two years, the group hopes to have a standardized training curriculum that will replace the various curricula now used to train medics in the Air Force, Army, Navy and other military agencies.

Barnes expects that work also will shed light on how current training models, such as the mannequin soldier or virtual technology, should be improved to make training more reflective of what medics experience in combat.

MU administrators today announced the grant at the Reynolds Alumni Center, joining representatives from partner institutes including the University of Alabama-Birmingham, the University of South Florida and the University of Central Florida.

MU is leading the project, in part, because of its existing Level I trauma center and the state-of-the-art simulation center, said Bob Churchill, dean of the medical school.

For the Department of Defense, the project represents a significant new initiative, said Col. Karl Friedl, director of the U.S. Army Medical Research and Materiel Command’s Telemedicine and Advanced Technology Research Center.

“The elements of this consortium bring together the best of medical training and modern technologies” to “enable more effective, agile and affordable options to meet future training requirements,” he said in a statement.

Although the study is expected to improve the medical care soldiers receive, Barnes said he expects the findings to translate into improved care for other patients back home.

“These training methods will find their way into university hospitals,” he said. “More effective care on the battlefield will equal more effective and safer care in our hospitals.”

Reach Janese Silvey at 573-815-1705 or e-mail jsilvey@columbiatribune.com.

COLUMBIA MISSOURIAN

\$5.3 million federal grant establishes MU combat training program

By Christina Trester

November 1, 2011 | 2:57 p.m. CDT

COLUMBIA – The Great Room at the Reynolds Alumni Center was filled with the sound of heavy breathing. One quick scan of the room revealed the source of the noise: a dummy dressed in army camouflage with an amputated leg.

The dummy is a simulation model used by the MU Combat Casualty Training Consortium. The consortium was created with a \$5.3 million U.S. Department of Defense grant, which was announced Tuesday.

"Funding will support our researchers in evaluating the effectiveness of existing combat medic training methods in three critical research areas: hemorrhage control, airway management and emergency medicine skills," said Stephen Barnes, principal investigator of the consortium.

Simulation models can be used to simulate various medical scenarios while giving feedback to participants in real time, according to a MU School of Medicine news release.

Robert Bell, a clinical instructor, demonstrated how to use the simulation model after the announcement. The model's chest rose and fell as he pumped air into its "lungs." He explained how the vital signs can be controlled by a laptop and pointed out a military specific tourniquet on the stump leg that helps control hemorrhaging in the field.

Barnes said this grant can help improve the care of wounded soldiers and standardize the way medics are trained.

"Combat medics are the first responders to help our wounded warriors, so it is critical that these health care providers receive the absolute best training," he said.

Barnes and his colleagues will lead a team of more than 30 civilian and military experts across the country on the project, according to the release. The primary grant partners include the University of Alabama at Birmingham, University of South Florida, University of Central Florida and Information Visualization & Innovative Research, a program and system management firm in Florida.

The program will assess the effectiveness of current methods and recommend how the U.S. Department of Defense will train combat medics, Barnes said.

"We're optimistic that findings from our studies will improve efforts to save lives and drive development of military medical training for the next decade," he said.



Big 12 welcomes West Virginia

ASSOCIATED PRESS | Posted: Wednesday, November 2, 2011 12:05 am

MORGANTOWN, W.Va. • Interim Big 12 Commissioner Chuck Neinas said Tuesday he fully expects West Virginia to start play next season despite a hard-line stance from the Big East.

Neinas attended a reception in Morgantown officially welcoming the Mountaineers into the Big 12 on Tuesday, a day after the university filed a lawsuit against the Big East seeking to clear the way for West Virginia to start Big 12 competition next fall.

Neinas, West Virginia athletics director Oliver Luck and university President James Clements were peppered with questions about the lawsuit and the timetable on the Mountaineers' Big 12 debut.

"I'm not concerned because I trust the two gentlemen on each side of me, that's why," Neinas said.

The Big East has said it plans to keep West Virginia from leaving for 27 months under the league's bylaws.

Luck and Clements declined comment on the lawsuit. Filed in Monongalia County Circuit Court, it seeks to declare the Big East bylaws invalid.

West Virginia becomes the Big 12's easternmost member, joining Texas, Texas Tech, Oklahoma, Oklahoma State, Kansas, Kansas State, Baylor, TCU and Iowa State. **Missouri, which was left off the Big 12's list of members for 2012-13, is expected to finalize a move to the Southeastern Conference soon.**

Neinas said Missouri is considered a Big 12 member until it withdraws and the league will accommodate 11 football teams if necessary.

"We can do it," Neinas said. "We don't have it on paper. But our computers will work out to provide a schedule that will accommodate 11 teams."

West Virginia wouldn't simply move into Missouri's Big 12 football schedule if the Tigers leave.

Instead, "we're going to have to redo the schedule for a variety of reasons," Neinas said. "We're going to have to do some adjusting."

BIG EAST TO ADD SIX

The Big East is ready to start adding members after spending the past month and a half losing them.

A person familiar with the decision said the Big East will invite Boise State, Navy and Air Force for football only and SMU, Houston and Central Florida for all sports in upcoming days. The person spoke on condition of anonymity because the conference was not ready to announce its plan.

Commissioner John Marinatto declined to elaborate on the Big East's next moves.

Veterans and Shelter Dogs program helps both ends of the leash

By Heather Riske

October 31, 2011 | 8:02 p.m. CDT

COLUMBIA — Opie knows that he's done something right.

With his eyes closed, tongue lolling and his tail wagging slowly back and forth, the sandy brown, wiry-haired Great Pyrenees mix accepts his rewards for mastering the night's tricks. He lets Trista Corbin scratch behind his ears and ruffle the bristly hair along his spine as she croons "good boy."

Opie and Corbin are learning basic obedience skills as part of the first phase of the Veterans and Shelter Dogs program, which started in September. The study, conducted by MU nursing professor Rebecca Johnson, pairs veterans recently returned from Iraq and Afghanistan with shelter dogs from the Central Missouri Humane Society.

"The goal is to help these veterans readjust to post-deployment life in their family and in their community, and to help the dogs become more adoptable," Johnson said.

Corbin, one of seven veterans currently participating in phase one, served in the Army National Guard for seven years as a combat medic and has done one tour of duty in Iraq.

"My own dog, a Jack Russell terrier, has helped me with sleeping and noise issues since I've been back," Corbin said. "I was interested in helping train dogs to help others go through what I went through — separation anxiety, and being alone without a support system."

The Veterans and Shelter Dogs program is divided into three phases — basic obedience training, mentorship to families who adopt the dogs and training as service dogs for veterans with post-traumatic stress disorder.

During the first phase of the program, the veterans teach the dogs basic obedience skills for 24 weeks. The dogs participate in this training for four weeks, unless they are adopted. If they are adopted, they are replaced with new dogs from the shelter.

During the basic obedience classes, which take place twice a week, the dogs and their handlers train in two separate sessions for about 20 minutes.

“It’s exciting to watch the dogs’ progress over the evening and from one obedience training class to the next,” project coordinator Charlotte McKenney said. “It’s incredible how quickly they make strides in their behavior.”

Judy Steiner, an instructor at the Columbia Canine Sports Center and a retired nurse, helps the veterans teach the dogs basic obedience skills during the first phase of the program.

“During the first group, the guys shared information with each other and really became a support group for each other,” Steiner said. “It was such a positive hour in their life.”

The study is conducted through the MU Research Center for Human-Animal Interaction, which conducts several research studies to show the benefits of putting humans and animals together.

Johnson devised the project after seeing the number of veterans returning from Iraq and Afghanistan and reading about the high incidence of post-traumatic stress disorder.

“The research we’ve done with people and animals showed that potentially it would be beneficial for these veterans to work with the shelter dogs,” she said.

In order to participate in the program, the dogs from the Humane Society must be at least 1-year-old and pass a nationally recognized behavior test to rule out aggression.

Since the start of the first obedience training session in January, more than 100 dogs have been trained, Johnson said.

“So many of our dogs have been getting adopted,” Corbin said. “And besides just being cute dogs, I like to think that what I’m doing here — teaching them sit, stay and not to pull on the leash — will make them more adoptable.”

And, it seems, the benefits of the program are on both ends of the leash.

“We’ve seen some really great things,” Johnson said. “One veteran told us he hadn’t felt anything since coming back until he began working with the dogs.”



Missouri food science symposium seeks first lady

Posted: Nov 02, 2011 4:08 AM CDT Updated: Nov 02, 2011 4:08 AM CDT

COLUMBIA, Mo. (AP) - Organizers of a 2012 food science symposium at the University of Missouri have launched a social media campaign to bring first lady Michelle Obama to campus

"Food Sense" is the theme of the school's annual Life Sciences and Society event in March. Obama's "Let's Move" campaign pushes for better school lunches, more access to fruits and vegetables and more physical activity among children.

The Obama recruiting effort includes weekly mass tweets on Twitter each Tuesday afternoon.

A web page called "Help Us Bring First Lady Michelle Obama to Mizzou" also encourages supporters to court her through Facebook and email messages to the White House.

The event is scheduled for March 16-18 and features food scientists, authors and government officials.

Study: Infants can follow others' thoughts

COLUMBIA, Mo., Nov. 1 (UPI) -- University of Missouri researchers say babies 10 months old can understand the thought processes of others, offering clues to how people acquire knowledge.

"Understanding other people is a key factor in successful communication, and humans start to understand this at a very young age," Yuyan Luo, professor of developmental psychology, said. "Our study indicates that infants, even before they can verbally communicate, can understand the thought processes of other people -- even if the thoughts diverge from what the infants know as truth, a term psychologists call false belief."

Infants in the study were monitored during a common psychological test in which an actor indicated preference for certain objects. Researchers timed the infants' gazes, an indication of infant knowledge, and found they watched longer when the actor's preferences changed.

This led the researchers to believe infants understood how the actor interacted with the objects, a university release said Tuesday.

"When the actor did not witness the removal or addition of the preferred object, the infants seemed to use that information to interpret the person's actions," Luo said. "The infants appear to recognize that the actor's behavior comes from what the actor could see or could not see and hence what the actor thinks, and this finding is consistent with similar false belief studies that involve older children."

THE MANEATER

THE STUDENT VOICE OF MU SINCE 1935

MU program gives teachers tools to stop teen suicide

The program was recognized nationally for its efforts in preventing suicide in teens.

By Emmy Boyd Published Nov. 1, 2011

In the wake of highly publicized teen suicides across the country, the College of Education's Missouri Partnership for Educational Renewal has given school districts across Missouri the tools they need to prevent tragedy before it happens.

"Teenage suicide and other mental health issues are still the 'elephant in the room' for many school districts," said Julie Harrison, coordinator of guidance and counseling for the Parkway School District, which has teamed up with MPER. "MPER encouraged us to examine mental health issues in every school. As a result of the training MPER provided, we developed a systemized suicide prevention program and plans following a tragedy."

According to a news release, MPER is a collaboration of 22 school districts representing 178,000 students and is in charge of improving education throughout the state. MPER administrators developed the Mental Health Leadership Academy to educate teachers about student mental health.

"Education in the United States has undergone a dramatic shift throughout the last 40 years," MPER co-director Dan Lowry said. "A school counselor once talked to students about their career options. Today, school counselors must treat an array of student mental health issues and be aware of legal requirements concerning how to handle problems such as depression, over-medicated students and student suicide. MPER did the background work and research on the policies that work, so the school districts could focus on safety and the total needs of students."

Through the Mental Health Leadership Academy, teachers in the Parkway School District have training that allows them to differentiate between normal adolescent behavior and potential suicidal actions.

Parkway now has a student suicide policy that clarifies the process any school in the district would take in the event of a student suicide. According to a news release, these steps include the principal verifying the suicide, circulating answers for potential student questions, notifying friends of the deceased in person and contacting school administrators, the school's crisis team members, teachers and social workers throughout the district.

The policy also suggests making an announcement over the school intercom, establishing a crisis room and follow ups including counseling referrals, reviewing the curriculum for topics that might recall the suicide and ongoing staff development for student suicide and depression.

“We’ve helped Missouri students receive a better education, and education translates into a better job, higher earnings, better health and a longer life,” Lowry said.

For its effort, the Mental Health Leadership Academy was presented with the “Michelli Award for Promoting Social Justice” from the National Network for Educational Renewal on Oct. 20. The award letter states that MPER “provided multiple levels and domains of support for vulnerable students and staff who too often have few options or resources that promote their holistic wellbeing.”

“To have MPER’s work in mental health be recognized with this national award is quite an achievement,” said Lowry, who accepted the award on MPER’s behalf. “(Student well-being) is the ultimate mission of MPER.”

Nuclear agency to share cost of developing Beloit plant

By Kathleen Gallagher of the Journal Sentinel Nov. 1, 2011

NorthStar Medical Radioisotopes LLC said Tuesday it has signed a \$4.6 million agreement with the National Nuclear Security Administration that will help the Madison company develop architectural and site plans for a Beloit plant to produce medical isotopes.

The company will also use the funding to continue developing its production technology.

Under the agreement, the federal agency and Northstar will split the costs evenly, said Glenn Isensee, a senior vice president at NorthStar.

"NorthStar is pleased to have the National Nuclear Security Administration recognize the potential of NorthStar's technologies to solve the molybdenum-99 shortages that for the past four years have intermittently created shortages that limited some diagnostic testing and may continue to do so," said George P. Messina, NorthStar's president, in a statement.

Production issues at several nuclear power plants outside the United States and worries about nuclear proliferation prompted the federal government in 2009 to look for ways to produce a critical medical isotope more safely and closer to home. The agency has partnered with four groups that are trying to create a domestic supply.

The isotope - technetium-99m - is necessary for medical imaging tests that diagnose, monitor and treat some cancers as well as heart and brain diseases. Experts estimate roughly 50,000 diagnostic procedures using the isotope are done in the U.S. each day.

NorthStar has developed a device it calls TechneGen that nuclear pharmacies would use to separate technetium-99m from Mo-99.

The company has an agreement with the University of Missouri Research Reactor to produce Mo-99 for those pharmacies to begin using next year.

NorthStar also has a tentative agreement with GE Hitachi, one of three other companies that received a grant from the National Nuclear Security Administration to work on the isotope problem. Under that agreement, NorthStar would process GE Hitachi's irradiated material into Mo-99 for nuclear pharmacy use.

NorthStar would process that material in the plant in Beloit, where it plans to eventually move its headquarters.

The company plans to produce as much as half of the required U.S. supply of the isotope within the next two to three years, Messina has said. It also could eventually hire as many as 150 people, mostly for scientific positions, he has said.

NorthStar, founded in 2006, has raised \$6 million from Hendricks Holdings Co. Inc. in Beloit and \$5 million from its founders and early partners. Also, in October 2010 the National Nuclear Security Administration, the division of the Department of Energy that is trying to solve the isotope problem, awarded the company \$1 million through another cooperative agreement where each party provided half the funding.



ST. LOUIS POST-DISPATCH

Missouri students fail to gain ground in math, reading

[Associated Press](#) | Posted: Wednesday, November 2, 2011 12:00 am | [\(3\) Comments](#)

No MU mention

While students in most states showed improvement on a national test, Missouri held steady in some areas and lost ground in others.

The results released Tuesday from the National Assessment of Educational Progress, which is conducted every two years, show the nation's fourth- and eighth-graders are doing the best ever in math. In reading, eighth-graders showed some progress.

But in Missouri, the average math score for eighth-graders in 2011 was 282 on a scale of 0 to 500. That's down four points from 2009, when the state made big gains. The Missouri Department of Elementary and Secondary Education noted in a news release that the state lags the nation in the percent of math test-takers enrolled in Algebra I in the eighth grade — a class that leads to higher scores.

At the fourth-grade level, the average math score was 240, almost identical to the 2009 score of 241.

In reading, eighth-graders held steady with a score of 267, while fourth-graders dropped four points to 220.

"The NAEP report confirms to me our state's urgent need to raise the bar academically and to focus on results," said Missouri Education Commissioner Chris Nicastro in a news release. "Too many students are not learning and progressing as they should in the most basic subjects."

The Missouri scores were above average in eighth-grade reading, and similar to the national averages in the other areas.