

Toe-thumb transplant gives patient's active lifestyle a boost

Cary Ramey has the word *Carpe* tattooed on the underside of his right wrist and *Diem* tattooed on the left.

He loves extreme sports, especially mountain biking and “rock climbing without the ropes.”

He is fearless.

The life of the energetic 24-year-old from Sneed almost ended two summers ago in an August car crash. Ramey was left lying on his stomach on the roof inside his car. His left hand was outside the vehicle, pinned under the roof. He didn't know his thumb was crushed and half his index finger was gone. Ramey was rushed to UAB Hospital, but his thumb was not salvageable.

In the days immediately following the accident, Ramey didn't care that his thumb was missing; he was alive. But as time passed, he thought about an option UAB Surgeon **James Long**, M.D., had mentioned in the hospital — he could get a new thumb by transplanting one of his toes.

“Before this happened, if someone had told me, ‘If you ever lose your thumb, we can use one of your toes to replace it,’ I probably would have said I'd never have that surgery,” Ramey says. “Most people don't want a toe on their hand. After it happens, though, everything changes.”

After several consultations with Long and much deliberation, Ramey decided to have the rare surgery. Long, associate professor of plastic and reconstructive surgery, transplanted the



Cary Ramey lost his left thumb and a portion of his left index finger in an August 2009 car crash. UAB surgeons recently completed a rare and complex surgery where they harvested the second toe from Ramey's right foot and transplanted it to his left hand, giving the 24-year-old a new thumb. STEVE WOOD

second toe from Ramey's right foot into the thumb position on his left hand in a 13-hour surgery Aug. 24 — two years and nine days after Ramey had lain in the wreckage of his Subaru Baja.

Even with his hand heavily wrapped, Ramey was moving his new thumb ever so slightly two days after surgery. One week later, Long and resident **Christi Blakkolb**, M.D., unwrapped his left hand for the first time, giving him the first glimpse of his new appendage.

“It's beyond what I imagined,” Ramey says. “I can't believe how incredible everything looks. I can move my thumb a little bit. It's fantastic.”

Ramey was more impressed with his foot. He assumed there would be a gap between his big toe and the next; instead, he saw four toes spaced equally.

“I had no idea my foot was going to look that good,” Ramey says. “I don't even have a gap. Unless you sit there and look at my toes and count them, it's hard to tell I even had one removed.”

Rare surgery

Long says UAB is one of the few hospitals in the country — and the only one in Alabama — to perform toe-to-thumb transplants. Ramey is the second UAB patient to have the surgery in the past two years.

See **TOE-THUMB** p4

School of Nursing's Bailey named Employee of the Year

Angel Bailey was on the phone in her office recently when she looked in the hallway and saw **Doreen Harper**, Ph.D., dean of the School of Nursing, standing in front of her door. She also saw the associate dean, the director of operations and the director of administration and financial affairs.

“I didn't know what was going on,” Bailey says. “Then I saw Dr. Harper holding flowers, and I thought there was a chance everything was going to be OK.”

Indeed, the foursome of Harper, **Karen Meneses**, Ph.D., **Karen Buckner** and **John Coles** were visiting Bailey's office with great news — she had been selected UAB's 2010-11 Employee of the Year.

“It was overwhelming,” says Bailey, who was April's Employee of the Month. “UAB has a lot of great employees, and it is an honor for me to be selected UAB Employee of the Year.”

The UAB Employee of the Month/Year Committee chose Bailey from the 12 Employee of the Month award winners during the fiscal year. UAB President Carol Garrison will host an invitation-only presentation ceremony and reception



Bailey

honoring Bailey with the highest non-academic employee award Nov. 10.

Bailey has been a positive and influential presence as administrative associate in the

See **BAILEY** p7



The experienced dancers, climbers and riggers of Project Bandaloop blend dance, sport, ritual and environmental awareness into breathtaking aerial performances. SPECIAL

Project Bandaloop scales new heights at Stephens Center

It isn't every day you see people dancing off the walls on campus, but it will happen this week when UAB's Alys Stephens Center opens its 15th season with aerial artists Project Bandaloop.

The experienced dancers, climbers and riggers of Project Bandaloop blend dance, sport, ritual and environmental awareness into breathtaking aerial performances. The troupe will spend a week in residence here Sept. 19-23, and there will be several oppor-

tunities to see them:

- Monday, Sept 20 Project Bandaloop members will lead a community yoga session 6 p.m. for a \$5 donation.
- Tuesday, Sept. 21 Alys Stephens Center's ArtPlay will host a dance master class with Project Bandaloop members.
- Thursday, Sept. 22 Free rehearsals open to the public at noon and 5:30 p.m. Bring your lunch or food will be available from

See **BANDALOOP** p3

Alabama Launchpad to host conference

Alabama Launchpad, a program of the Economic Development Partnership of Alabama Foundation, will present its first statewide conference on innovation and entrepreneurship Sept. 23.

National-level speakers and Alabama innovators will speak about the progress of tech-based economic development in the state and support for those activities. UAB is a founding partner of the Alabama Launchpad Program. Register online at www.innovatealabama.com.

Learn to recognize the signs of gang activity Sept. 28

Birmingham Police Academy Instructor Charles Singletary will discuss signs of gang activity with the UAB community at noon Wednesday, Sept. 28 in the UAB Hospital West Pavilion Conference Center Board Room.

The class is open to all UAB and UAB Health System employees and their family members. Space is limited; call 934-2281 to register.

The program is sponsored by the UAB Resource Center Employee Assistance and Counseling Program, which provides UAB and UAB Health System employees and family members a variety of free programs to support work/life balance and health in all areas of life.

More information about Resource Center services is online at www.uab.edu/eap.

New breast cancer support group to meet Oct. 1

New Light Support Group for triple-negative breast-cancer patients, survivors and their families, is being established with funding from the Susan G. Komen North Central Alabama Affiliate Craft Grant and led by **Andres Forero, M.D.**, a professor of hematology and oncology. Triple-negative breast cancer is one of the most aggressive forms of breast cancer because its tumors progress quickly.

The next meeting will be held from 11 a.m. to 1 p.m. Oct. 1 at Homewood Park and UAB nurses **Valerie Caterinicchia** and **Cheryl Mattrella** are the featured speakers. Registration begins at 10:30 a.m.

For more information, contact **Kimberly Robinson** at 975-7912 or krobinson@dopm.uab.edu. Lunch will be provided, but please bring lawn chairs.

Click and earn money for UAB's ArtPlay

Each "Like" click made now through Wednesday, Sept. 28 will earn \$1 for ArtPlay. To start the donations, visit Drive 4 the Music on Facebook, "like" the page, then "like" the Alys Stephens Center to help more Birmingham students receive an excellent music education, regardless of their financial resources.

"Ugly Betty" actor to speak at UAB Oct. 5

Emmy award-winning actress and champion for hu-



STEVE WOOD

Share Your Bowl to feed Alabama UAB Campus Restaurants is partnering with Kellogg's in its national Share Your Bowl Program to help fight hunger. For every bowl of cereal purchased at the Commons on the Green through Oct. 14, Kellogg's will donate a bowl of cereal on UAB's behalf to the local Community Food Bank of Central Alabama. For more information about the Food Bank, visit its website at www.feedingal.org.

man rights America Ferrera will give a free, public lecture at 7 p.m. on Oct. 5 in Bartow Arena during UAB's observance of Hispanic Heritage Month.

Ferrera is an artist ambassador for Save the Children and helped raise more than \$44,000 to build a new elementary school in Mali. In 2010 she received the Hispanic Heritage Foundation's Inspira Award, which recognizes her contributions as a role model through her work as an actress and activist. She also received the 2011 Global Action award for Childhood Development and Education.

Funding available for translational research

The deadline for submission of a pre-proposal to the Translational Research Intramural Grant Program is 4 p.m. Oct. 17.

A partnership between the Center for Clinical and Translational Science and the Council of Center Directors, the program seeks to develop investigator-initiated pilot projects with a focus on creating interdisciplinary translational research projects. Up to six awards of \$60,000 apiece are available.

The application is a two-step process; scientifically meritorious projects will be invited for full applications. Direct questions to **Melissa McBrayer** at mcbrayer@uab.edu.

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Catch the free shuttle bus to home games

Free shuttle buses will be available to all UAB fans from UAB to Legion Field for all home games during the season. One handicapped-equipped bus also will be available. Buses will leave from the Blazer-Camp Hall circle to Legion Field beginning two hours prior to each home game.

Buses will begin loading for the return trip with five minutes left in the fourth quarter. For more info, email dhg@uab.edu or call 975-5376.

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LGBT Alliance awards inaugural scholarship to student

The Lesbian, Gay, Bisexual and Transgender (LGBT) Alliance for Equality at UAB formed more than a decade ago to support faculty and staff within UAB's LGBT community.

Now, it has taken the mission a step further.

The alliance established and began raising money to fund a scholarship to a deserving student in March 2010. The group raised the \$10,000 needed to endow the scholarship by June and recently awarded its first \$1,000 scholarship to Whitney Shea Julian, a junior majoring in political science and sociology with a minor in foreign languages.

"I'm so thankful and honored," Julian says of the award. "This is important to me because it is not just about me. It is something beyond just me. It is about how this particular civil rights movement is progressing. This award is the first of its kind at UAB; it's historical. It is making a statement that students can benefit from standing up for what is right."

The alliance is hosting a reception for Julian at 3 p.m. Thursday, Sept. 29 in the Administration Building Penthouse Conference Room. The event, which is co-sponsored by UAB Safe Zone and Gay/Straight Student Alliance (GSSA), is free and open to members of the UAB community. RSVP to alliance@uab.edu.

James Raper, D.S.N., J.D., associate professor, director of the 1917 Clinic and president of the LGBT Alliance, says the scholarship award is an important step.

"Our organization wanted to do this so we could make a contribution to someone within our own community and bring awareness to LGBT students at UAB who are striving to make a difference," Raper says. "The scholarship says we care about members of our community, and we want them to do well. We are very proud to select such a wonderful inaugural awardee in Whitney."

David Morris, a graduate assistant in microbiology and the LGBT Alliance scholarship committee chair, has led the group's fundraising efforts. Members of the scholarship committee include **Karen Placke**, programmer/analyst for UAB IT Web Services and president-elect; **Roberto**

Mayoral Hernandez, assistant professor of Foreign Languages; and **Elizabeth Casswell**, GSSA president.

The LGBT Alliance scholarship is endowed, but Morris says fundraising is ongoing.

"We've raised the minimum to be able to give \$500 per year," Morris says. "We need to raise additional funds to ensure we're able to give \$1,000 or more every year. All funds we raise at this point go directly into the endowment and earn interest for the endowment itself."

Information about making contributions can be found online at www.uab.edu/alliance/index.html. Donations are tax-deductible.

Applications for scholarship for the 2012-13 academic year will be opened early next year. Students eligible for the scholarship must be enrolled in or admitted to a degree-granting program at UAB, earned at least a 3.0 GPA and demonstrate service to the LGBT community.

Julian is an outstanding student who contributes her time and energy to non-profit organizations, particularly those advocating for women's and LGBT rights. She is the vice president of the GSSA and involved in Equality Alabama, the Alabama National Organization of Women and Birmingham's Young Nonprofit Professionals Network.

"I do spend the majority of my time thinking about, researching and advocating for women and the LGBT community, because I have been negatively affected my whole life just for being a part of both of those communities," Julian says. "Activism is something that will always be a coping skill for me — being proactive rather than reactive."

Future scholarships

Placke says the group hopes to increase its scholarship in coming years.

"I personally would love to extend more scholarships," says Placke, who would like to offer at least two scholarships next year.

Raper says the support of UAB and the Birmingham community has been extremely important to its early success.



STEVE WOOD

(Standing from left) David Morris, Elizabeth Casswell, Jim Raper, (seated) Whitney Shea Julian and Karen Placke are excited about the first LGBT Alliance Scholarship. Julian is the first recipient of the award.

"Raising \$10,000 was a bit of a challenge, but we were able to do that and get it endowed within a two-year period," Raper says. "I think that speaks pretty well to the community on campus and in Birmingham that contributed. We encourage anyone who has a desire to be a part of our efforts to join our group."

The alliance has approximately 150 members. Send an email to alliance@uab.edu

uab.edu for membership information; there is no fee to join, and membership is confidential.

Monthly business meetings are held at noon on the second Thursday of the month, and social events and special presentations are held occasionally.

More information is online at www.uab.edu/alliance/index.html.

BANDALOO

CONTINUED from page 1

Cantina; a cash bar will be included for the evening rehearsal.

The Project Bandaloop residency will culminate Friday, Sept. 23 when the troupe performs its unique, site-specific show just for the Alys Stephens Center, "Outside/In." The evening will begin at 6:30 p.m. with a free pre-party featuring Blue Galaxy String Project and food and drinks for sale.

At 7:30 p.m., Project Bandaloop will begin its performance outdoors, dancing on the brick walls of the building for the audience gathered below; during a brief intermission, the audience will move inside the Alys Stephens Center's Jemison Concert Hall for the remainder of the show.

A variety of tickets are available, including VIP, outside or inside only, both, or kid-friendly. For information, or to purchase tickets, call 975-2787 or visit www.AlysStephens.org.



Fall UAB Resource Center classes help manage stress

Feeling stressed and tense? Learn new skills for relaxing and managing stress with The Resource Center's popular Meditation, Tai Chi and Yoga classes.

Meditation classes will begin Oct. 11 and will meet each Tuesday from 12:10 to 12:50 through Dec. 13, except Nov. 22. Discussions are led by Resource Center counselor **John Quenelle**. Research has shown that meditation is one of the best ways available to deal with stress, improve clarity and increase your level of satisfaction with life.

Yoga classes began Sept. 15 and will continue each Thursday through Nov. 17 from 4:45 to 6 p.m. Classes will be taught by **Diane Reid**, Resource Center counselor and Yoga Fit instructor. This class is great for individuals of all levels of experience. Classes conclude with a period of deep relaxation.

Tai Chi session will begin Oct. 20 and

continue each Thursday through Nov. 17 from 12:15 to 12:45 p.m. Classes are taught by New Forest Tai Chi instructor and Resource Center Counselor **Alesia Adams**. The class uses simple, easily accessible movements that are adaptable for individuals at all levels of fitness.

All classes meet in the Resource Center Classroom, Suite 330 at 2112 11th Ave. South. Participants are not required to attend all sessions of a class and may join any time. Space is limited; call 934-2281 to register.

The Resource Center, UAB's Employee Assistance Program, provides free counseling and wellness programs for employees and their family members.

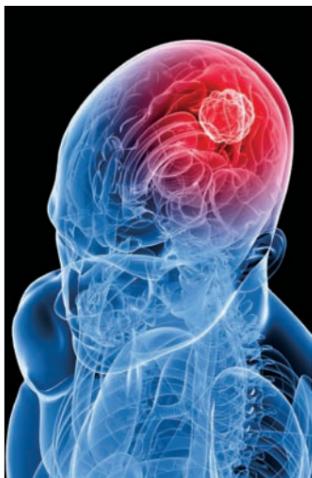
For more information about Resource Center services, a class schedule, directions, or to register for a class call 934-2281 or visit www.uab.edu/eap.

Research supports new therapy for deadliest brain tumors

New research from UAB pinpoints the relationship between primary brain tumors and the onset of epileptic seizures and reveals that a drug used to treat Crohn's disease inhibits those seizures and may be able to slow a tumor's growth.

The onset of seizures is a common symptom in gliomas and often is the first sign of

a brain tumor. The late Sen. Ted Kennedy had a seizure in May 2008, and three days later doctors confirmed that he had a malignant glioma; he



died the following year.

The UAB team shows that malignant glioma cells release a tremendous amount of a neurotransmitter called glutamate into healthy neurons surrounding the tumor site, in its findings published online Sept. 11 in *Nature Medicine*. Neurons normally use glutamate to communicate with one another, but not in the staggering amounts released by the glioma cells.

"These tumor cells produce an enormous amount of glutamate, 100-fold beyond normal," says **Harald Sontheimer, Ph.D.**, professor of neurobiology and lead investigator. "This leads to a state of hyperexcitability that overwhelms healthy neurons and leads to their death."

The death of neurons in proximity to the glioma gives the malignant cells room to grow and expand into the space previously occupied by the neurons. "The brain is a dense, closely packed space," says Sontheimer, who directs the UAB Center for Glial Biology in Medicine. "For the

glioma to grow, it has to make room for itself, which it does by clearing out surrounding neurons with this blast of glutamate."

Excess glutamate also can cause abnormal electrical activity in the brain, which is the basis for epileptic seizures. The UAB team discovered that mice with human glial cells developed abnormal brain activity and behavioral signs consistent with seizures.

The good news, Sontheimer says, is that sulfasalazine, a drug used to treat Crohn's disease, irritable bowel disease and some types of arthritis, seems to inhibit the glioma from releasing the large amount of glutamate. In mice, sulfasalazine stopped the release of glutamate and prohibited seizures.

Without the release of abnormal glutamate, the glioma's growth is compromised. Sontheimer says evidence suggests that tumor cells that cannot grow tend to die.

But sulfasalazine, as formulated to treat

Crohn's disease and other conditions, is not an efficient way to treat gliomas; because it is designed to break apart in the intestines, only about 20 percent of the drug gets into the blood stream where it can be carried to a glioma site in the brain. Sontheimer says, however, that the drug could be re-formulated to make it more efficient and effective.

"The drug could be re-designed so that it does not cleave apart in the intestine, keeping more of it in the blood stream for a longer period of time," he said.

Sontheimer thinks a clinical trial of sulfasalazine in humans is warranted, and sulfasalazine should be considered an adjunct therapy to inhibit seizures in patients with glioma in the meantime.

"While we are waiting for the development of a new drug, the existing one will work to some degree. It's nice to have a sharp knife, but a dull one will work," Sontheimer said.

TOE-THUMB

CONTINUED from page 1

The majority of publicized toe-to-thumb transplants around the country involve the surgeon relocating the big toe to the hand. But the new thumb isn't proportioned like a regular thumb, and the lack of a big toe can affect balance significantly, Long says.

Though aesthetics play a role in the transplant decision, Long prefers that not be the primary reason for surgery.

"I always emphasize to patients that function comes before appearance," Long says. "However, when it's feasible for us to achieve both goals, we always aim for that."

For Ramey — a young man with an active lifestyle — removing his big toe was not an option. He favored the transplant only if it could be done using his second toe.

"Cary's goal was to return to the things he was doing before he got hurt," Long says. "He never would have been able to do them if his big toe had been used to replace his thumb."

"I was thinking more about functionality than what it would look like," Ramey says.

Planning, mechanics

Long and his team used specialized angiograms of Ramey's left hand and right foot to examine the blood vessels and map the toe-to-thumb transplant. X-rays of the foot and hand enabled Long to structure the bones at the time of the transplant.

The mechanics of the transplant include joining the arteries at the original thumb position and at the donor site so that blood flow can be reestablished. This is done using vessels that typically are only about two millimeters in diameter with sutures that are less than the width of a human hair. Additionally, the bone from the foot must be stabilized onto the recipient bone of the thumb. Surgeons also must ensure adequate venous drainage, which means they must reconstruct veins and connect them to others. Sensory nerves across the surfaces of the toe are connected to ensure sensation at the tip of the toe-thumb.

The tendons that supported the thumb are repaired and connected across the joints of its replacement to provide range of motion to the new appendage.

"It is a challenging task," Long says.



These X-rays show work UAB surgeons performed on Cary Ramey, who had his second toe on his right foot transplanted to his left hand as his new thumb. The foot image shows the second metatarsal bone removed.

The hand view shows the toe mated to the base of the thumb bone.

Transplanting the second toe is technically more demanding — a fact that proved to be true in Ramey's case.

Long says Ramey had an unusual arterial architecture in his foot that added significant complexity.

"It probably added four hours to the surgery," Long says. "This was an interesting case because it involves all of the super-specialized disciplines that fall within the purview of plastic surgery — bringing tiny nerves, arteries and veins together, fixing bones and repairing tendons. And then there exists the additional puzzle of designing the toe harvest so that it seamlessly takes its place as the new thumb."

The future

Long says the future of plastic surgery is in

transplanting body parts like hands, faces and other body parts for patients with amputations and severe injuries due to accidents and battlefield wounds.

In fact, there is a desire to develop tandem research at UAB in this area by plastic and transplant surgery teams.

"This toe-to-thumb transplant surgery is fascinating to me because it is a technical proof of concept for all the surgeries we have yet to devise in the replacement of lost limbs," Long says.

"As of today, we are limited by the medicine side of the equation; health problems from lifelong immunosuppression tend to offset the benefits of limb transplantation. I believe we are approaching the ability to minimize the negative effects of

immunosuppression — at which point the emerging field of limb transplantation will explode."

Patients like Ramey provide the key technical foundation for these future endeavors.

Ramey still has several weeks of physical therapy ahead — some of which will be on his Xbox video game console. Meanwhile, he anticipates a better grasp on the handlebars of his bike and finding another rock wall to conquer.

"I can't wait," Ramey says. "I'm confident about what's to come. I think I'll be able to do all the things I did before, and it's going to be so much better."

Carpe diem, indeed.

New facility spurs biomedical research, faculty recruitment

UAB is opening a new, state-of-the-art zebrafish research facility.

“The zebrafish shares 90 percent of the genome with humans and has become the No. 3 model for the NIH behind mice and rats,” says **Stephen Watts**, Ph.D., professor of biology and co-director of the facility. “With this new facility, the elements are here to form a research group.”

The co-principal investigators of the HSF-GSF grant include **Sam Cartner**, Ph.D., assistant vice president for Animal Research Services and director of the Animal Resources Program; **Mary-Ann Bjornsti**, Ph.D., chair of Pharmacology & Toxicology; and **Susan Farmer**, D.V.M., Ph.D., senior clinical veterinarian in Animal Resources, and Watts.

Leaders from the schools of Medicine and Dentistry, UAB Comprehensive Cancer Center and the College of Arts & Sciences comprise an oversight committee that will ensure all investigators have access and that infrastructure needs are met, Bjornsti says.

Cartner says equipment and technical support will be available to all UAB investigators using the facility.

“The researchers this will benefit have immediate needs to further their research in a variety of diseases,” Cartner says. “A zebrafish facility within the UAB biomedical research community is a key step.”

The facility initially will provide critical infrastructure needed for research programs in developmental biology, genetics, metabolism and cancer. This also will enhance the efforts of current UAB scientists who are poised to apply this model to high-priority studies of tumor promotion, skeletal abnormalities and nutrition.

“We have had interest from 10 investigators,” Cartner says, “and we expect more to come forward.”

Why zebrafish?

The zebrafish was determined to be a model system for studying vertebrate development and genetics almost 40 years ago.

Since that time, zebrafish embryos have become very popular worldwide as a means of understanding how all vertebrates — including people — develop from the moment that sperm fertilizes an egg.

The eggs are clear and develop outside the mother’s body, enabling scientists to watch a zebrafish egg grow into a newly formed fish under a microscope. Researchers can watch in real time while the cells divide and form different parts of the fish’s body.

In the span of two to four days, zebrafish can form eyes, heart, liver, stomach, skin and ultimately grow into a newly formed fish. Watts has watched all of this from a small satellite facility he has been maintaining for several campus researchers.

“Their regeneration time is very short,” Watts says. “I can get 100 eggs every other day from a female zebra fish, and I can watch full development of every major organ and every major component necessary under a microscope.”

Because zebrafish are closely related to humans, they are more likely to be similar to us in many biological traits than a more distantly related organism. These traits include genes, developmental processes, anatomy, physiology and behaviors.

There are other advantages:

- Transparent embryos enable researchers to monitor the behavior of single cells in live embryos and watch the cells divide and trace each cell and its offspring in the making of the complete organism.
- Single cells or groups of cells can be transplanted into host embryos, which allows investigators to analyze the behavior of cells at different stages or ask how mutant cells behave in wildtype embryos.
- These are less expensive models to house and maintain long term.

Recruitment tool

Thirteen entities have committed significant funds to the project: Office of the Vice President for Research and Economic Development; the schools of



STEVE WOOD

Sam Cartner, assistant vice president for Animal Research Services, and Mary-Ann Bjornsti, chair of Pharmacology & Toxicology, were among many faculty and staff members instrumental in the creation of UAB’s new zebrafish lab.

Medicine and Dentistry; College of Arts & Sciences; Comprehensive Cancer Center; Alabama Drug Discovery Alliance; Center for Clinical and Translational Sciences; Nutrition and Obesity Research Center; Comprehensive Arthritis Center; Cystic Fibrosis Research Center; and the departments of Pharmacology & Toxicology, Cell Biology and Genetics.

The facility also is considered a recruitment tool. Two researchers — **John Parant**, Ph.D., assistant professor of Pharmacology & Toxicology, and **Peter**

Jezewski, D.D.S., Ph.D., assistant professor of Dentistry — were successfully recruited to UAB this past fall in part because of the new facility.

“The need to build a facility to recruit top faculty was a driving force,” says Bjornsti.

Watts says he and his colleagues have extensive expertise in aquatic animal husbandry. They will be responsible for optimizing use along with facility co-director **Susan Farmer**, D.V.M., Ph.D., senior clinical veterinarian in Animal Resources.

Upcoming October performances presented by the ASC

• **Patty Griffin** with special musical guest **Buddy Miller** will perform at 8 p.m. Friday, Oct. 7. For this one night, see Griffin with fellow friend and musician, **Buddy Miller**. Miller will be backing Griffin on guitar and vocals as she performs songs, both new and old, in an acoustic setting. Tickets are \$59, \$52, \$39; student tickets \$20.



events. This season, the ASC and Sidewalk Film Festival celebrate the art of film with these special events designed to get you up close and personal with the country’s hottest new directors.

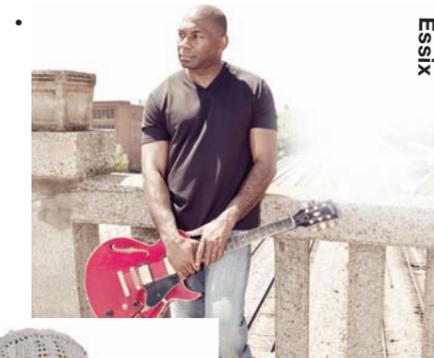
See the film, then meet the filmmakers and discuss the work. Every year, more than 600 teenagers from 60+ Chicago-area schools gather for the world’s largest youth poetry slam, a competition known as “Louder Than a Bomb.” Founded in 2001, it’s the only event of its kind in the country, a youth poetry slam built from the beginning around teams. Tickets are \$10, \$8 students.

• **Cyndi Lauper** with **Dr. John & the Lower 911**, “From Memphis to Mardi Gras,” will perform Sunday, Oct. 9 at 7 p.m.

Sure to be one of the most entertaining nights of musical fusion ever to be presented by the Alys, “From Memphis to Mardi Gras” celebrates the quintessential music of Memphis and New Orleans with two of music’s most celebrated and colorful artists, who bring together their diverse and special talents.

Tickets are \$69.50, \$59.50 and \$49.50. A limited number of VIP meet-and-greet tickets are available.

• **Southern Circuit Film Screening & Director Q&A**: “Louder Than a Bomb,” will take place Thursday, Oct. 13 at 7 p.m. This will feature Southern Circuit Independent Film Screenings and Meet the Director



ESSIX

5 Men on a Stool Thursday, Oct. 27 at 7:30 p.m. Hometown favorite **Eric Essix** reunites the Atlanta-based super group for an evening of contemporary R&B and jazz combined with inspirational spoken word as part of the Alys Stephens Center’s Homegrown Weekend. Take the Jazz History 101 class at ArtPlay and receive an A-Level ticket to each jazz performance. Tickets are \$42.50, \$34.50, \$25.50; student tickets are \$20.

• **Rickey Smiley** with special guests will perform at 8 p.m. Friday, Oct. 28. Birmingham native **Smiley** is back with a cast of zany characters and clever observations. Tickets are \$63.50, \$54.50, \$39.50; student tickets \$20.

• **Ovation: A Special Engagement** with Alabama Ballet, shows at 3 p.m. and 8 p.m. Saturday, Oct. 29 and 3 p.m. Sunday, Oct. 30. Join the ASC for this culminating performance of Alabama Ballet’s 30th anniversary season as the state’s premier professional ballet company. Tickets are \$51, \$39, \$27; student tickets \$20.

For more information on other upcoming shows, call 975-2787 or visit www.AlysStephens.org.



SMILEY

Young Concert Artist **Bella Hristova**, violin, will perform Thursday, Oct. 20 at 7 p.m. The ASC continues to showcase young, up-and-coming talent with this very special performance. **Hristova** made her debut in the Young Concert Artists Series at Merkin Concert Hall in New York and the Kennedy Center in Washington, D.C., and was first-prize winner in the 2008-09 Young Concert Artists International Auditions. Tickets are \$32; student tickets \$20.

• The ASC Jazz Café presents **Eric Essix &**

ADHD doubles the risk of injury in grade-school kids

Injury kills more 11-year-olds in the United States than all other causes combined, and a new study from UAB reveals ADHD almost doubles the risk of serious injury among this age group.

“We found that children with more ADHD symptoms, those in the 90th percentile, are nearly twice as likely to get hurt as those with symptoms in the 10th percentile,” says **David Schwebel**, Ph.D., director of the UAB Youth Safety Laboratory and lead author. Boys, he said, are nearly twice as likely to be injured as girls.

The research, published in the September/October edition of *Academic Pediatrics*, studied 4,745 fifth-graders from Houston, Los Angeles and Birmingham. Serious injury is defined as one that requires medical attention; more than half of the injuries included broken bones.

“These are children who no longer have adults or parents or teachers watching over them all the time, which means they have to make decisions on their own,” Schwebel said. “Children with ADHD are impulsive, inattentive; they may not notice things because their mind is wandering, and they’re hyperactive so they’re always moving and getting into things.”

The Center for Disease Control and Prevention says 9.4 percent, or 5.4 million, kids ages 4-17 in the United States have been diagnosed with ADHD. Schwebel, professor in the UAB Department of Psychology, says this study will improve injury-prevention strategies for millions of mental health practitioners, pediatricians, parents and children.



A new UAB study reveals ADHD almost doubles the risk of serious injury among 11-year-olds. The study, which evaluated 4,745 fifth-graders from Houston, Los Angeles and Birmingham, will improve injury-prevention strategies for millions of mental health practitioners, pediatricians, parents and children.

“Medication, seeing a psychologist and getting treatment for ADHD will reduce

the risk and the symptoms,” Schwebel said. “In some cases you can make the

child aware and get them to think about what they’re doing so they will slow down and be more careful. It won’t work for everyone, but it certainly can’t hurt to try.”

This study is part of UAB’s Healthy Passages research, a decade-long program funded by the CDC, designed to help families, health-care providers, schools and communities develop effective policies and programs to keep children and adolescents healthy. The participants’ gender was 52 percent male. The mean age was 11.12 years. The racial/ethnic breakdown for the youth is 30 percent African-American, 42 percent Hispanic, 23 percent white non-Hispanic, 5 percent multiracial or other ethnicities.

Schwebel also analyzed the effect of Conduct Disorder. CD is a disorder marked by chronic behavioral problems like breaking rules without reason, physically or psychologically abusing people or animals and destruction of property, symptoms that go beyond simple mischievousness. Researchers wanted to know if the combination of CD and ADHD had a multiplier effect on a child’s chances of injury.

“What we found in the past, with younger children, is that ADHD and oppositional behaviors mattered equally. But in this study with fifth-graders, we found that ADHD is more relevant,” says Schwebel. “When you put ADHD and CD together statistically, we did not see multiplication at all. ADHD is the primary issue.”

Epigenetics shapes the future of healthful possibilities

Trygve Tollefsbol, Ph.D., believes you can change your destiny — with broccoli. The UAB biologist, a pioneer in the booming field of epigenetics, has the data to make his case. In a widely publicized review paper published in the spring 2011 edition of the journal *Clinical Epigenetics*, Tollefsbol and colleagues at UAB explained the ways in which a diet rich in broccoli, green tea, grapes and other key ingredients can fight cancer and other aging-related diseases.

UAB scientists are hardly the first experts to tout the health benefits of “superfoods” such as leafy vegetables and wine. But epigeneticists like Tollefsbol examine their effect on a genetic level, and their investigations offer new insights on ways to slow the aging process, reduce cancer risks and more. They study factors that affect your genes without changing the underlying DNA code — to understand how the genetic instructions are executed in the real world.

Tollefsbol, who earned doctorates in molecular biology and osteopathic medicine, has published eight books on epigenetics. He is a leader in a discipline that contains a heartening message of biochemical empowerment.

“The most important concept of epigenetics is that you can take control of your genes,” Tollefsbol says. “What you do affects your genes. In other words, you’re not predestined to a certain life because of your genetics, as we once thought. The genes you get from your mother and father aren’t going to necessarily limit you for the

rest of your life.”

In the grand nature-versus-nurture debate, epigenetics offers a surprising middle ground. Genes are profoundly important, epigeneticists say, but so are environmental factors. The food we eat, the viruses we catch and the cigarette smoke we breathe all have the power to shape the body’s underlying structures, even when they don’t directly alter the genetic code.

Chemistry, consequences

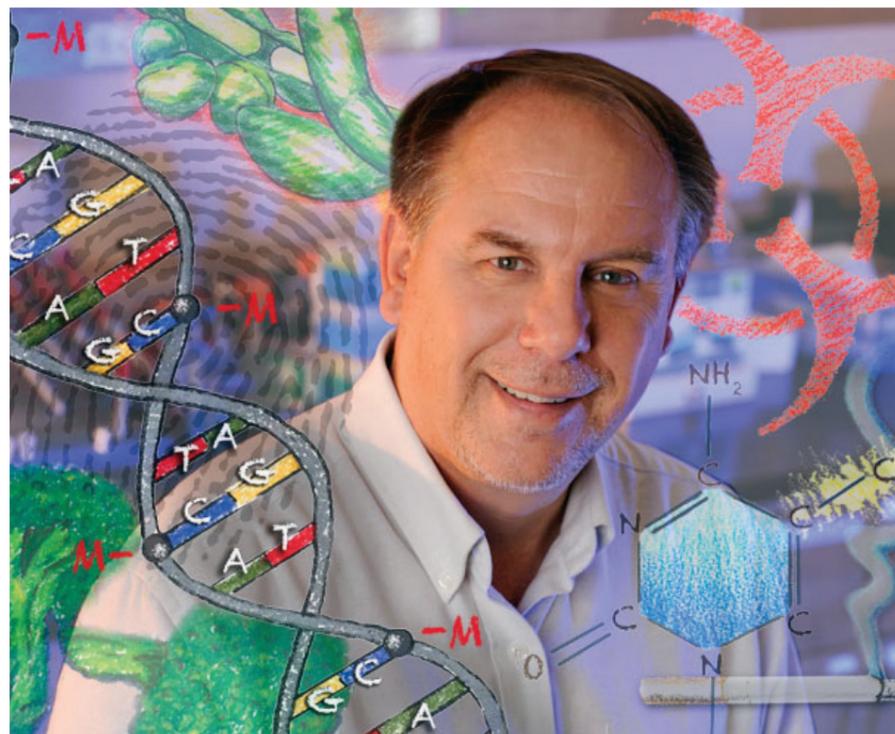
Scientists now know that DNA doesn’t have to change in order to create serious problems. The outside of the DNA helix is covered with a series of chemical markers that are crucial crib notes for the body’s cellular machinery. One common marker, DNA methylation, is created when the enzyme DNA methyltransferase adds a methyl group to the DNA base cytosine. Although the cytosine remains cytosine, the added methyl increases the likelihood the affected gene will be suppressed.

These epigenetic markers tell the body to speed or slow gene expression or the production of key proteins. DNA also is wrapped around large proteins called histones; its properties also have a significant effect on gene expression.

These factors are referred to as the epigenome, because they are above and beyond — but directly linked with — the genome.

Epigenetics and cancer

“Epigenetics does not get much hotter than it is right now,” Tollefsbol says. “And probably the biggest area is cancer research.”



In a review paper published this spring in the journal *Clinical Epigenetics*, Trygve Tollefsbol and colleagues at UAB explained how a diet rich in broccoli, green tea, grapes, and other key ingredients can fight off cancer and other aging-related diseases.

Scientists once thought that mutations were the most important factor causing cancer, Tollefsbol says. “Now the prevailing opinion is that epigenetic modifications probably cause cancer more often than mutations do.”

The body has a host of tumor-suppressor genes that “put the brakes on cells and keep them from proliferating,” Tollefsbol says. “Research has shown these genes can

undergo key epigenetic changes so that we become more predisposed to developing cancer.” The gene p53, for example, plays a role in at least 50 percent of cancers, Tollefsbol says. “Essentially, epigenetics turns the genes on or off, and a lot of cancer, and aging for that matter, has to do with turning on or off particular genes.”

Read the entire story online at www.uab.edu/uabmagazine.

David Allison receives top faculty award



Allison

David Allison, Ph.D., professor and associate dean in the School of Public Health, was named the 2011 UAB Distinguished Faculty Lecturer, the highest award presented by the Academic Medical Center to its faculty.

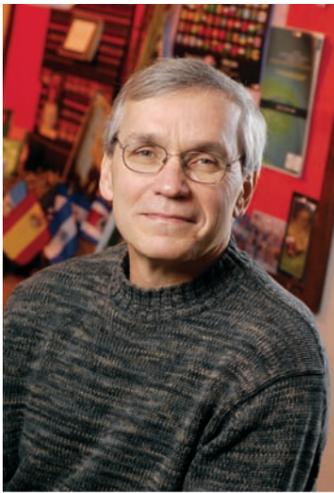
The award recognizes faculty who have advanced the frontiers of science or otherwise made a significant contribu-

tion to the health of people or have made an outstanding contribution to the Academic Medical Center through education, research or public service. Allison will deliver the Distinguished Faculty Lecture later this fall.

Faculty named to national AIDS council

Craig Wilson, M.D., professor in the UAB Department of Epidemiology in the School of Public Health and director of the Sparkman Center for Global Health, has been appointed to the National Institutes of Health Office of AIDS Research Advisory Council for the term beginning Oct. 1 and ending Sept. 30, 2015.

Wilson's expertise in global health is related to HIV infec-



Wilson

tions in adolescents, particularly those infected through risky behaviors, and sustainable interventions for HIV prevention and control in resource-poor areas. He supports and facilitates ongoing HIV research and management work through the UAB-affiliated Center for Infectious Disease Research in Zambia.

Uswatte named Fellow of American Psychological Association



Uswatte

The American Psychological Association has awarded fellow status to **Gitendra Uswatte**, Ph.D., associate professor in the Department of Psychology in the UAB College of Arts and Sciences.

Uswatte has developed a new, objective measure of arm movement in real-world environments using portable, wireless accelerometers

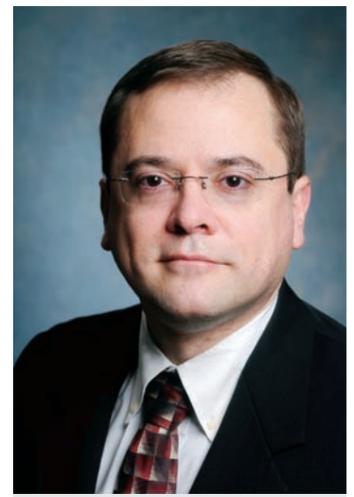
that measure movement in real time. It was adopted as an outcome measure in a multi-site trial of constraint-induced movement therapy, a behavior-based intervention for rehabilitating arm use after stroke.

Vance named editor of nursing journal

UAB School of Nursing Associate Professor **David Vance**, Ph.D., is editor-in-chief of the new online journal *Nursing: Research and Reviews*.

Vance is a scientist in UAB's Alzheimer's Disease Research Center and Center for AIDS Research and

has a secondary appointment in the Department of Psychology. He earned his doctorate in developmental psychology and completed a National Institute on Aging postdoctoral fellowship studying cognitive aging, mobility and cognitive remediation therapy.



Vance

Christian receives Cancer Nursing award



Christian

Becky Christian, Ph.D., professor at the UAB School of Nursing, has received the Cancer Nursing annual Research Award for 2011 for an article she co-authored, titled "Characteristics of the nighttime hospital bedside-care environment (sound, light, and temperature) for children with cancer."

The report reveals that a bedside-care environment with persistently elevated sound levels and abrupt increases in sound intensity throughout the night is not conducive to restful nighttime sleep and may serve as an additional source of physiological and psychological stress for hospitalized children with cancer. *Cancer Nursing* selects one research article each year for this award.

Received an honor or award? Let us know using the Request Publicity form at www.uab.edu/reporter.

BAILEY

CONTINUED from page 1

Center for Nursing Research in the School of Nursing for more than 11 years. Her kindness, willingness to help others and tremendous work ethic are praised by her co-workers.

Chris Atkinson experienced Bailey's desire to help others eight years ago under hectic circumstances, and it left an indelible impression.

Atkinson, now an information systems specialist in Infrastructure Services, had been employed at UAB as a computer technician for two weeks when a virus hit campus machines. Atkinson was running through the School of Nursing to find computers to install the patch each one needed.

"I was in a total panic due to the gravity of the situation, and it didn't help that I didn't know where all the computers were," Atkinson says. "This was the first time Angel came to my rescue. She eagerly pointed me to every computer on her floor and unlocked the doors so that I could get to them. I became a fan of Angel that day."

Bailey has made a habit of endearing people to her during her 17 years at UAB.

CNR Program Manager **Lauren Antia** has worked with Bailey for more than 12 years and says she always has displayed the attributes of an excellent employee: professionalism, efficiency and courtesy.

"I was immediately impressed by her warmth, intelligence, ability to communicate and eagerness to improve processes," Antia says. "Angel has been promoted into positions with increasingly higher responsibility through the years and always has

performed with excellence."

Antia describes Bailey as "a woman who is in perpetual motion and activity.

"Need a huge file cabinet moved? A room organized? The printer, fax machine, shredder, door, floor or computer fixed? A requisition processed through Oracle? Kind words and encouragement? A hug? The answer is Angel."

Bailey's primary role is to assist **Meneses**, the associate dean, and support CNR activities, including 17 active research and training grants.

She is the go-to person for a variety of CNR activities, large and small. For example, Bailey coordinates CNR scheduling, communicates with faculty, staff and service personnel, orders software and products needed and contributes to the SON's efforts to raise money for the annual Susan G. Komen Race for the Cure.

"During our event for Race for the Cure, I encourage everyone to wear pink and give donations to fight this horrible disease," she says. "Having family and friends who have had this awful disease, it's important to me to help in the support of finding a cure."

Because she embraces so many different roles within CNR, every day is a new day — something Bailey says she enjoys.

Co-workers say Bailey's character shines in her interactions with others.

"I know Ms. Bailey to be a person of integrity and high moral standards," says **Yvonne Eaves**, Ph.D., assistant professor of nursing. "She has a quiet demeanor and often works behind the scenes preferring to shun

publicity, and she does not usually garner the recognition that her performance deserves. However, I cannot think of anyone in the school more deserving and qualified for recognition."

Bailey says she enjoys her job and the people she works with immensely. She loves that everyone works with one goal in mind — to make the school the best it can possibly be.

"It's a great, uplifting environment," Bailey says. We strive to work together to accomplish the mission of the school, and we all pull in the same direction so we can be successful in completing that mission."

When Bailey is not at work, she enjoys spending time with her husband, UAB Police Officer Larry Bailey, and her daughters LaToya and Jayda.

2010-11 honorees

September 2010 — Gail Owens
 October 2010 — Gwen Marshall
 November 2010 — Della Daniel
 December 2010 — Angela Rembert
 January 2011 — Margaret Feller
 February 2011 — Christy Lievens
 March 2011 — Amanda Watts
 April 2011 — Angel Bailey
 May 2011 — Tracy Sims
 June 2011 — Steve Wood
 July 2011 — Matt McLain
 August 2011 — Richard Bennett

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