Changes taking place as a result of climate survey

When the overall results of UAB's first Faculty and Staff Climate Survey came in at the end of 2010, they showed that UAB exceeded the higher education norm in 20 out of the 24 items for which a norm is available.

UAB faculty and staff gave a 96 percent ranking to the question, "I find my work interesting," compared to the national norm of 82 percent and the higher education norm of 91 percent.

Employees also posted positive scores on two questions regarding overall satisfaction, ranking "I am satisfied with my job" at 76 percent compared to the national norm of 74 percent and higher education norm of 72 percent. Faculty and staff also gave a 76 percent ranking to "I would proudly recommend UAB as a good place to work," compared to the national norm of 72 percent and the higher education norm of 63 percent.

The survey, administered Sept. 21-Oct. 4, 2010, by HR Solutions Inc., also revealed that UAB has the opportunity to improve with regard to providing more opportunities to faculty and staff for development, growth and reward, said Chief Human Resources Officer Alesia Jones. More than 3,450 faculty and staff participated.

As detailed results at the school and administrative unit became available, Human Resources (HR) representatives held meetings with deans and vice presidents to discuss their unit-level results, interpret their meanings and begin developing plans to further make improvements.

"We have had very positive meetings with every dean and vice president about the survey results," says Jones. "They've all been pleased with the areas they rated high, and they are enthusiastic about focusing on opportunities for improvement." UAB President Carol Garrison says the decision to conduct the survey, and the work since then, are important in the context of a shared commitment to the strategic goal of making UAB a place where all faculty and staff can excel.

"We wanted to know how faculty and staff felt about working at UAB and we wanted to identify areas in which we could improve, so we asked," Garrison says. "This type of survey is considered a best practice by the National Education Association."

UAB employees pledged a record $1,860,212 to this year’s Benevolent Fund campaign, enabling the campaign to surpass its $1.85 million goal. Lisa Higginbotham, Benevolent Fund program manager, announced the results of the campaign at the Benevolent Fund Campaign Luncheon, held in July. “We were able to make our goal because of the generosity of UAB employees,” Higginbotham says. "Special recognition also is deserved for all of the coordinators in the hospital, schools and the Health System for all of their hard work." The Benevolent Fund is UAB’s own system for supporting charitable health and human service agencies by providing a mechanism for employees to help those in need in the Birmingham area. Monies pledged supports more than 120 non-profit organizations in the Birmingham metro area, including United Way, American Cancer Society, Big Brothers Big Sisters, Childcare Resources, Alabama Kidney Foundation, the American Heart Association and more.

Hands-on research gives students in UAB Crime REU program opportunities

One of the first things Kent Kerley, Ph.D., expressed to his UAB Crime Research Experience for Undergraduates (REU) Summer Research Program students this summer was how fortunate they were to have an opportunity to conduct real-life, hands-on research. "I told them my story — that I spent my summers as an undergraduate working at Subway," says Kerley, associate professor of Justice Sciences and the UAB Crime REU program director. "Making sandwiches for minimum wage doesn't really prepare you for graduate school. This REU program is a fantastic opportunity, and they realize that."

UAB's Crime REU is an eight-week National Science Foundation (NSF) program designed for undergraduate students to conduct hands-on research; it’s for those interested in pursuing post-graduate degrees in the computer sciences, forensic sciences, and social sciences. The NSF funded UAB’s program for a three-year period at a total of $333,000.

The interdisciplinary program, which consists of faculty from the Department of Justice Sciences and the Department of Computer & Information Sciences, is divided into three tracks. Gary Warner and Chengui Zhang, Ph.D., are mentors of the Computer Forensics track; Heath Copes, Ph.D., Kathryn Morgan, Ph.D., and Kerley are mentors of the Criminal Justice Track; and Elizabeth Gardner, Ph.D., and Jason Linville, Ph.D., are mentors of the Forensic Science track. The seven REU faculty members are nationally recognized for their expertise in working with large data sets, thus hands-on research.
Longer tendons make faster runners, suggests UAB research

What makes a faster runner? There are many factors that may play a role, says UAB exercise physiologist Gary Hunter, Ph.D., and tendon length may be an important one. In findings just published in Medicine & Science in Sports and Exercise, a journal of the American College of Sports Medicine, Hunter shows that a longer Achilles tendon leads to greater energy efficiency in running, which in turn might enable better running performance.

“Longer Achilles tendons appear to generate more power because they stretch more,” said Hunter, a professor in the UAB Schools of Education and Health Professions. “It’s like a rubber band: the longer the stretch, the more force that can be generated to provide forward velocity while running.

When describing running, Hunter says muscles and tendons work together in a muscle/tendon complex. During the landing phase of running and jumping — as the foot hits the ground — the tendons, particularly the Achilles tendon, stretch. Longer tendons have more capacity to stretch than shorter ones. During the push-off phase while running, energy from the stretched Achilles tendon (similar to the elastic energy developed in a stretched rubber band) adds to the force generated by the contracting muscle. The addition of this elastic energy during the push-off, added to the energy created by the muscles’ own contractions, means more potential for speed.

“We found a strong correlation between tendon length and running economy, or energy expenditure, in our subjects at both the six and seven mph running speeds and at a walking pace of three mph,” said Hunter. “Coupled with our previous studies, I’m convinced that tendon length contributes to running efficiency and probably performance.”

Unfortunately, Hunter says, aspiring athletes just can’t grow a longer tendon in hopes of running faster. Hunter’s previous research indicates that ethnic groups such as African-Americans tend to have longer limbs and shorter calf muscles and thus longer Achilles tendons than Caucasians, which may be a contributing factor to why some African-Americans seem to excel in sports involving running.

The study was funded by the UAB Department of Human Studies. Research collaborators include John McCarthy, William Ogard, Marcos Bammann, Jan Den Hollander, Yamalde Bluedue and Bradley Newcomer, of UAB, and Konstantina Katsoulis, University of Toronto and David Wood, California State Polytechnic University, San Luis Obispo, Calif.

At-home self-test helps identify risk of kidney disease

UAB researchers have developed a self-assessment tool people can use at home as a good indicator of possible kidney disease long before obvious physical symptoms of the illness appear. Findings were reported in the August issue of the American Journal of Kidney Diseases, the journal of the National Kidney Foundation.

The tool is aimed at identifying people who are at risk of having excessive protein in their urine, or albuminuria, one of the markers of kidney disease that affects 10 million Americans. Albuminuria is also a risk factor for kidney failure, heart disease and death, but can go undetected until symptoms — including increased urination, swelling, fatigue or a skin rash — occur, because a diagnosis requires a trip to the doctor for a urine test.

Study authors, led by Paul Muntner, Ph.D., a professor in the Department of Epidemiology in the UAB School of Public Health, developed a questionnaire based on the most common risk factors for albuminuria, including age; history of diabetes, hypertension or stroke; being older than 75; races other than white; and being female. Being older than 75 earns someone six points and having diabetes gets five points. Poor health, smoking and hypertension all earn three points each.

“Anyone who scores 10 or above — which is not that hard to do — has a high probability for having excessive protein in their urine and should talk to their doctor about getting screened with a urine test,” Muntner says. “Those tests are painless, and effective treatment is available for those who test positive.”

Having this tool available to the public is important because it’s something simple and easy for anyone to do at home. Muntner says. It provides them the information necessary to know if they need to be screened by a doctor, and could help people begin treatment with medication that can reduce their risks of developing kidney failure and other diseases.

“Albuminuria is emerging as an important risk factor for end-stage kidney disease, cardiovascular disease and all-cause mortality. However, early treatment may decrease the risk of these events,” he says. “Despite its importance in the disease process and the availability of effective treatments, awareness of albuminuria in the general population is low.”

Muntner and his colleagues used the database from Reasons for Geographic and Racial Differences in Stroke (REGARDS), a population-based investigation, funded by the National Institute of Neurological Disorders and Stroke of the National Institutes of Health and based at UAB, to develop the assessment. They used the National Health and Nutrition Examination Survey (NHANES) to validate the tool. Participants completed the study questionnaires and were examined by a health care professional.

Muntner’s co-authors on the paper are April P. Carson, Ph.D., Suzanne E. Judd, Ph.D., Emily B. Levitan, Ph.D., and David G. Warnock, M.D., of UAB; Mark Woodward, Ph.D., of the University of Sydney, Australia; Devin M. Maas, M.D., Boston University, and William McClellan, M.D., of Emory University.
Hospital Auxiliary awards first-ever nursing scholarships

Awardees have “a passion for nursing”

It was a hard choice, and if we had had enough money, all six would have gotten a scholarship,” Frantz says. “Victoria and Adam received high praise from their managers and lots of support from their family, friends and co-workers. When they interviewed, for some reason they just stuck with us. You could tell they really have a passion for nursing.

Larry Dean, nurse manager in the Neuroscience Intensive Care Unit, wrote a nomination letter on behalf of Grinfield, who has worked the night shift in the NICU since September of 2009 while attending Jefferson State Community College. Dean says Grinfield works well with his peers and seeks out the opportunity to be in the room during busy times. “I will hear families compliment his diligence and attention to the patient’s needs,” Dean says.

While rounding with his staff, Dean learned that Grinfield was struggling with school expenses. Dean suggested Grinfield apply for the Auxiliary scholarship. Dean’s staff was excited to learn of his selection. “We were able to present the scholarship to Adam at shift change a few weeks ago,” Dean says. “Adam was totally surprised and the staff also were equally as excited that he received this scholarship. Nursing is such a rewarding profession. The majority of people who enter this profession have a drive to want to help others. Adam definitely reflects that caring attitude. Our entire staff shares in his joy in this award.”

Anderson started her employment at UAB in January 1991 as a unit support specialist and was promoted to patient care technician in June 1999.

The UAB Hospital Auxiliary Scholarship Program was established this past fall to help employees who are going to nursing school address the challenges of work, home and school.

The scholarship is open to all full-time or part-time UAB Hospital or Health System employees if they have completed a minimum of one year of service and are in good standing. Recipients are required to maintain their employment at UAB while pursuing their degree. Recipients also are asked to commit to continuing their employment at UAB Hospital or in the Health System for one year following graduation.

Awardee Jennifer Joyce chaired the UAB Hospital Auxiliary Scholarship Committee. Others instrumental in the establishment of the scholarships were Amanda Dubois, manager of Volunteer/Guest Services; Charlotte Becker, administrator of the director of Food and Guest Services; Jordan DeMoss, associate vice president of UAB Hospital; Vellinda Block, chief nursing officer and senior associate vice president of UAB Hospital; and Carol Hunter, president of the UAB Hospital Auxiliary.

Two scholarships will be awarded again next summer.

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A link to overall survey results can be found on the UAB Human Resources website at www.hrm.uab.edu

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Lower level Bartow seats: out with the old, in with the new

Seats in Bartow Arena have been cracked, split, twisted and broken numerous times since 1988. Piling up home victories — more than 200 since 1988 for men’s and women’s basketball and 160 for volleyball — has given UAB fans and students reason to jump up and down and in some cases, take a step up in the seats and yell.

“The students, sometimes they don’t just stand on the seats, they jump on them,” says Stephen Mitchell, former men’s basketball player and director of the arena. “It makes for a great crowd, but it’s not good for your seats.”

Now, after 23 years of loving abuse from the green and gold faithful, the lower-level seats in Bartow Arena have been ripped out, recycled and are in the process of being replaced. The new, state-of-the-art, semi-automatic seats are expected to be installed and ready when the Blazers volleyball team opens its 2011 home schedule Sept. 23 against Marshall.

“It was just time,” Mitchell says of replacing the seats. “The seats take a beating during the course of a basketball season, and they don’t make that particular chair anymore. Obtaining parts for them was impossible; the parts are obsolete. It got to the point where we didn’t have a choice.”

All of the new seats will have chair backs. The end zone seats will remain all plastic, and the seats on the sidelines behind the benches will have padding on the bottom and backs. The new cushioned seats will be a nice upgrade, Mitchell says. He researched all of the available seating options, and the seats that have been purchased are easy to keep clean.

“I was very concerned about how they would look five years from now if you’re spilling mustard and ketchup all over them,” Mitchell says. “But we picked something that could be easily wiped down and cleaned. They’re pretty durable.”

The other significant upgrade is the ability to electronically protract and retract the seats. The previous seats had to be moved manually, which meant Mitchell had to schedule a team of people to complete the task — a chore that could take up to two hours.

“We had to use a lot of manpower before,” Mitchell says. “We will be able to press a button and move them in and out now. That process should take only 20 to 30 minutes. That’s a big upgrade.”

There are no current plans to replace the upper deck seating. Those seats, Mitchell says, haven’t taken quite the same abuse as the lower-level seats.

“People don’t stand and jump on the upper level seats,” Mitchell says. “Downstairs with the students is a different story. I guess if their tactics cause our opponents to miss some crucial free throws down the stretch it was well worth it.”

Other Bartow changes

The new seats are the third significant upgrade to Bartow, aside from the new scoreboard in 2009. This past year, 60-inch televisions were mounted over each concession stand so patrons could keep up with the action on the floor when making a trip for food and drinks. Team photos also were added to the concourse entryways.

Other changes are taking place behind the scenes. The arena’s original chiller is in the process of being replaced. And Mitchell is working towards at least some of the concession stands to accept ATM and credit cards beginning this fall.

Add those projects to the ongoing Steam System Distribution Project — which is affecting the concourse outside of Bartow next to Campbell Hall — and it has been a busy, constructive summer (pun intended).

CRIME REU

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The students involved in the prestigious program apply and are awarded an opportunity to study at an institution of very high research activity like UAB, with benefits including a stipend, free food and access to the Campus Rec Center and on-campus libraries.

The program is targeted to undergraduate students from underrepresented groups, including non-research universities and universities with a higher percentage of racial and ethnic minority populations throughout the United States.

“We’re trying to give students the opportun- ity to do research who might not otherwise have it at their home universities,” Kerley says. “In the process, we’re trying to encourage them to attend graduate school in these different fields.”

Only 12 students are selected to be a part of the program, which is in its second year. More than 70 students applied for the 12 spots in 2010. More than 160 applied this year, which shows the growth in popularity of the program after just one year.

This year’s students make up a diverse group: Majors represented include biology, chemistry, criminal justice, computer information systems, computer science, engineering, psychology and sociology. The program originally was intended to target students from the Southeast, but this year’s class also has six students from outside the South, including attendees from California, Delaware, Kansas, Minnesota and New York.

Real data collection, real analysis

What makes UAB’s Crime REU program unique is that students are able to do real data collection and analysis. Normally when students take a research methods class, they are not able to engage in any real data collection for several reasons; lack of time and money are two of the biggest. If they do gather data it’s not high quality and they can’t publish from it. And, they often perform simulations and don’t really learn how to use various research techniques and skills.

UAB Crime REU students receive hands-on experience in every facet of research.

“There’s a big difference between students reading a book in chemistry class about GC-MS (gas chromatography-mass spectroscopy) or watching a YouTube video on DNA analysis and what we do here,” Kerley says. “For students to do these things with the guidance of a professor is huge. It prepares them well for graduate school. And it prepares them well for their careers. We’re giving them the tools they need to be accepted and even funded in top graduate schools.”

Marilyn Tom, an undergraduate at Northern Kentucky University, has spent the summer working with Gardner to identify chemicals found in what experts call legal highs — alleged psychoactive substances she legally purchased online. Her research is critical because without it there is no way to know what really is in these drugs.

“It’s been fantastic,” Tom says. “The work is really interesting and the projects are more interesting than I could have hoped for. The program has actually exceeded my expectations.”

The computer forensics students had an opportunity to go to the FBI field office to conduct a presentation for agents on Iranian hackers after they uncovered information about nefarious computer activities.

“Where else are undergraduate students going to have access to this data, analyze the data, and prepare a report to present to the FBI?” Kerley says. “It’s pretty impressive.”

The students in Kerley’s group worked with The Lovelady Center — a faith-based treatment facility in Birmingham — where they performed quantitative and qualitative research. The students picked a specific area of focus and wrote a literature review on different topics. They designed and conducted surveys and in-depth interviews with women who had a history of drug and alcohol addiction. They analyzed the data and prepared a final presentation.

“We’re really interested in their recovery stories,” Kerley says. “We want them to understand their whole lived experience with drugs, their religious and family backgrounds and how they perceive the Lovelady Center can help them recover. And what are they doing to keep from relapsing? The relapse rate is high for most treatment facilities, including those that are faith-based. We want to know what in their minds makes them different from people who won’t make it.”

“It’s in-depth, qualitative research,” he says. “It’s interesting to dig in and hear the narratives and to try to make sense of their stories.”

Kerley’s students submitted an abstract of their research for a conference in Nashville in the fall while they were here, and two of them will give a major presentation on their findings for the first time. That’s something that’s typical in each of the three research areas of the UAB Crime REU program.

“We’ve already had one publication from our criminal justice project from the summer of 2010, and we’re hoping to get at least one more from this and then a couple from this year, as well,” Kerley says.

Next summer is the end of the NSF grant for the program, but Kerley says the group will apply for an extension of at least three more years. He says that while there may be modifications, real research work will continue to get done.

“We’re cramming a lot into a two-month time period, but we’ve got students who are very talented, and we’ve got talented faculty members working with them every day,” Kerley says. “It’s really compressed, but it is amazing what you can accomplish when you have a great team.”

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