



THE UNIVERSITY OF
ALABAMA IN HUNTSVILLE

SUMMER ISSUE 2014

SMARTER EVERY DAY

UAH alumnus brings
science to life through
YouTube series

INSIDE:

ACADEMICS

Trio retires
from teaching



RESEARCH

Senior project
takes flight



ALUMNI

Alumnus heads
AL Power Co.



HIGHLIGHTS: STUDENT ORGANIZATIONS, ALUMNI PROFILES, RESEARCH, AND MORE!



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EXCITING CHANGES FOR FUTURE CHARGERS!

The Office of Admissions wants you to know about some exciting changes at UAH that will benefit you as a future Charger! We've made these changes in support of the university's commitment to helping you complete your degree in four years and make the most of your college experience:

- ▶ **AP scores in more subjects will be accepted.** AP credit award criteria have been revised so that UAH accepts more scores for admitted students beginning Fall 2014! Visit uah.edu/admissions/AP_IB for details.
- ▶ **The credit hour limit for Merit Tuition Scholarships will increase.** UAH has increased the credit hour limit from 16 to 18 hours per semester for its Merit Tuition Scholarship! Learn more about our scholarships at uah.edu/scholarships.
- ▶ **Block tuition will replace per-credit-hour tuition.** UAH is in the process of transitioning to a block tuition structure, which will allow full-time students to pay a flat rate per semester for 12 to 18 credit hours instead of paying by the credit hour. Learn more about UAH's transition to block tuition at on.uah.edu/1ePp9SN and view its impact for 2014-15 in the tuition table at uah.edu/bursar/tuition.
- ▶ **Summer semester classes will be available at the fall semester rate for first-time, full-time freshmen.** UAH has created a Freshman Summer School Incentive Program, which will enable all first-time, full-time admitted students to take classes this summer and include them with the fall semester when computing tuition for the summer and fall. This may result in a tuition refund in the fall. Learn more about this summer program by contacting the Office of Admissions. If you are a UAH Merit Tuition Scholarship recipient, you may use a portion of your 2014-15 scholarship for these summer courses. For more information, please visit the uah.edu/finaid or call 256.824.6650.

Please contact your Admissions Counselor or anyone in the Admissions Office with questions about how these changes will positively impact your future at UAH. Call 256.824.2773 or email uahadmissions@uah.edu.




THE UNIVERSITY OF
ALABAMA IN HUNTSVILLE

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SCIENCE 101: UAH Alumnus is making people Smarter Every Day

“I just look at the world differently, and every day I teach other people to do so as well.”

– Destin Sandlin



Teaching may be the noblest profession, but for Destin Sandlin, it is also an excuse to light cigarettes with a laser, fire an AK-47 underwater, and get leafcutter ants to carry a sign. That’s because Sandlin is the host of Smarter Every Day (SED), a YouTube series that seeks to make science accessible – and interesting – to the average person.

“People think I make videos about things that I already understand because I’m so smart, but they’re wrong because I’m not smart!” says Sandlin, whose videos regularly log hundreds of thousands of views. “And that’s the point of the videos – they’re a voyage of discovery for me as well.”

And indeed, discovery has long been Sandlin's passion. Some might even say it's in his blood, given his own grandfather's interest in the world around him. "Granddaddy didn't have a set of encyclopedias at his house," he says, "so he would come over to our house, sit on the floor, and read ours."

Sandlin's father, meanwhile, would often challenge his son to take a closer look at everyday things. "We used to play a game called 'Do you know?' where my dad would ask me questions like, 'Why are leaves green?'" he says. "He knew a lot of the answers, but when he didn't, we'd look them up."

So it's no surprise Sandlin ended up majoring in mechanical engineering in college, before earning a master's in aerospace engineering from The University of Alabama in Huntsville (UAH). "I've always known I was going to be some type of engineer," he says.

That may explain the impetus behind the video that ultimately launched SED, "How to Light a Bonfire with Rockets," which Sandlin filmed in 2007. "I just made it because I wanted to," he says, figuring the only other people interested in it would be the dozen or so friends he shared it with.

But once it started racking up hits, he knew he had something special on his hands. "I realized that the only difference between what I was doing and a formal brand was a name to associate it with, so I came up with Smarter Every Day," says Sandlin. "And once I did that, it exploded!"

Since then, he's made more than 100 SED videos, including "The Physics of Skating on Ice" and "Slapshots in Slow Motion." Production for both allowed Sandlin to return to his alma mater, where he met up with UAH's Director of Hockey Operations Nick Laurila and several Chargers. "Since people have a personal connection with me because of the series," he says, "I thought they would be interested in players from the school I went to."

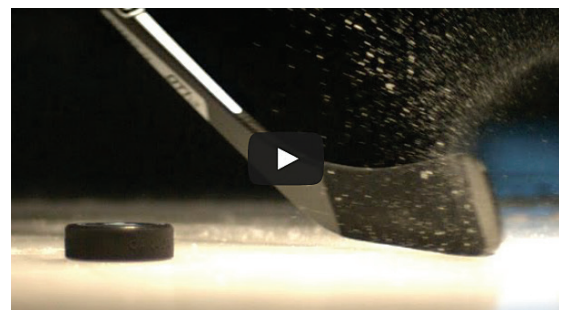
And no doubt these two videos, like his others, will be viewed by hundreds of thousands around

the world. But no matter how big SED becomes, Sandlin says his goal is the same as it was six years ago – to have fun and to teach people. "I'm not trying to build the 'Empire of Destin'," he says.

He's not relying on SED to get rich, either. Although he has garnered sponsors like Amazon's Audible.com and generates ad revenue from YouTube, Sandlin's real income comes from his day job as a flight test engineer at the Redstone Test Center. All of which doesn't leave the married father of three with a lot of free time.

"I don't sleep very much," he says with a laugh, before adding that he is fortunate to get a lot of help – and support – from his wife. "She is my sounding board, so she watches my Smarter Every Day videos and tells me what's good and bad!"

As for what's next for this self-declared "tinker-thinker," Sandlin says that's the most popular question he gets asked – and even he doesn't know the answer. "I just look at the world differently," he says, "and every day I teach other people to do so as well."



You can see "The Physics of Skating on Ice" and "Slapshots in Slow Motion," as well as more than 100 other SED videos, by visiting <https://www.youtube.com/user/destinws2>.

Above:
Destin Sandlin,
UAH alumnus,
is host of the
online video series
Smarter Every Day.

End of an Era

As the university's newly minted graduates make their way out into the world this summer, so too will three slightly more seasoned members of the UAH community.

Drs. Daniel Schenker, Julie Early, and David Neff, all professors in the Department of English, are retiring – and with almost 100 years of service between them. “It’s a natural progression,” says Dr. Neff. “The baton has been passed.”

Here the longest of the three, Dr. Neff received an offer from UAH shortly after graduating from the University of Illinois. “It was supposed to be a one-year job, but it turned out to be a 35-year job!” he says.

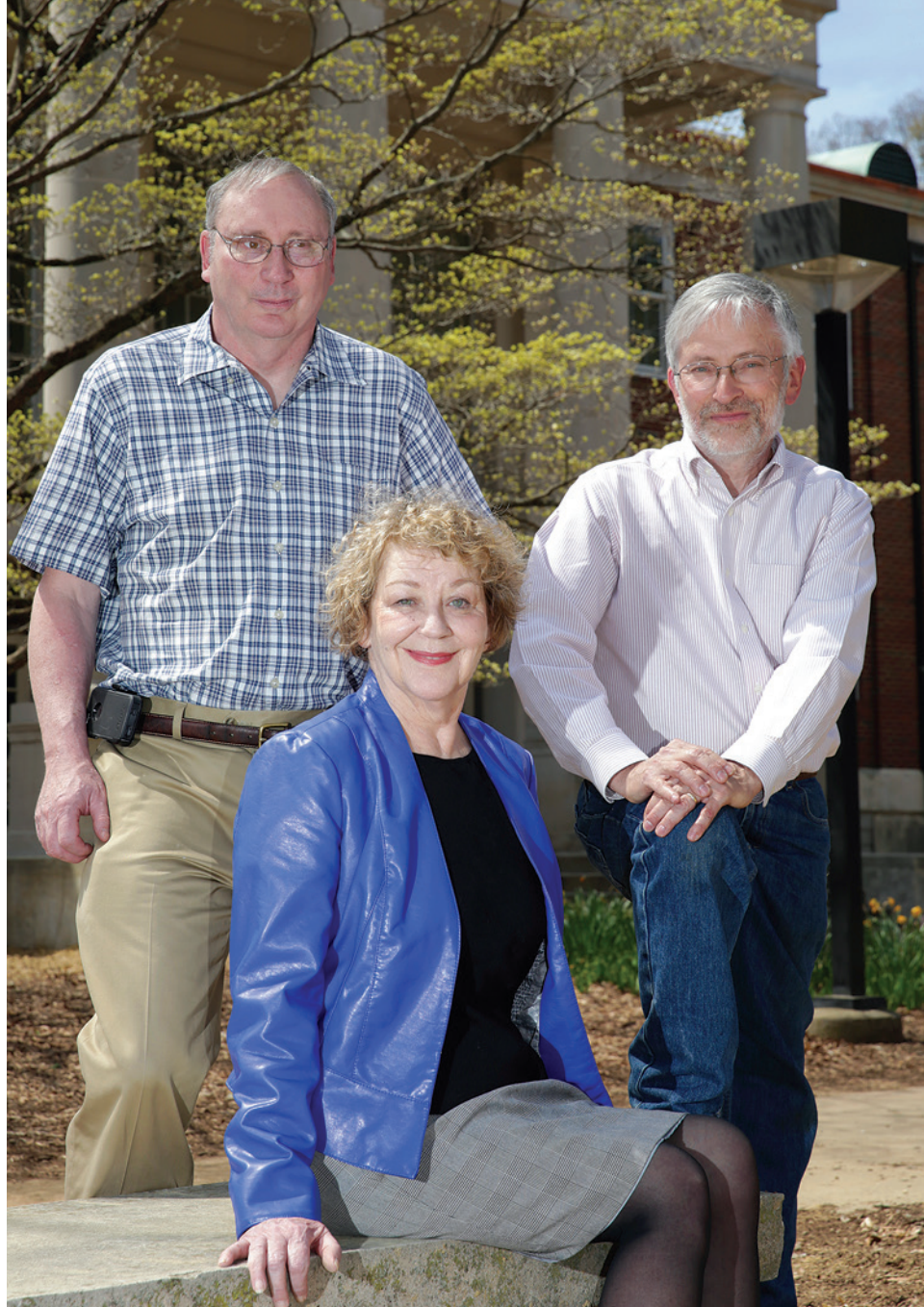
Next comes Dr. Schenker, with 30 years. His interview at UAH coincided with a rare snowfall, which he took as “a good omen” since it reminded him of home. “I thought I wouldn’t take the job unless it was a place where I could imagine staying a long time,” says the Syracuse, NY, native.

And with 24 years, Dr. Early rounds out the total. She came to UAH after “a whole other previous life” raising a family, working as an archivist, and then earning her Ph.D. from the University of Chicago.

Regardless of their length of tenure, however, all three of these erstwhile Yankees say they have no plans to return north once their retirement begins in June. One thing they will do? Read more!

That may sound surprising given that they are all English professors who have spent the last century combined focused on books. But then none of them have really been able to read for pleasure since they began teaching – which is why each of them already knows what’s first on the list.

Dr. Schenker, who is “used to having to read things as a forced march,” intends to tackle Wordsworth’s *The Prelude*. Dr. Neff, who is excited that “I actually will get to read what



Drs. David Neff, Julie Early, and Daniel Schenker.

“It’s a natural progression.
The baton has been passed.”

– Dr. David Neff

I want when I want,” plans to take on the Chinese classics. And Dr. Early, who has had to be “a greedy reader” after teaching lengthy Victorian books for so long, hopes to transition to contemporary fiction.

Of course, all three say there is much they will miss about UAH. But there’s no doubt in any of their minds that it is time to move on. “It’s a wonderful career,” says Dr. Neff. “But after 35 years, I’ve done it long enough.”



Joy Agee and Kenya Wallace were selected to attend the 2014 Clinton Global Initiative University.

RISING STARS

Two Selected to Attend CGI U

Two UAH graduate students – Joy Agee, a doctoral candidate in Biotechnology Science and Engineering, and Kenya Wallace, a doctoral candidate in Materials Engineering – were sponsored by the UAH Office of Diversity to attend this year’s Clinton Global Initiative University (CGI U), held March 21-23 at Arizona State University.

Established in 2005, the CGI U is a growing community of student innovators and entrepreneurs working to turn ideas into action. At the organization’s annual conference, students from across the globe converge to discuss global issues, develop practical skills, identify potential partners, and formulate concrete plans of action for the future.

This year’s event was hosted by Bill Clinton, Hillary Clinton, and Chelsea Clinton. It also featured a broad range of experts, entrepreneurs, and civically engaged celebrities, including Bill Drayton, Chief Executive Officer of Ashoka; Gabrielle Giffords, former U.S. Representative and founder, Americans for Responsible Solutions; Mark Kelly, former astronaut and founder, Americans for Responsible Solutions;

Jimmy Kimmel, host and executive producer, “Jimmy Kimmel Live!”; John McCain, U.S. Senator from Arizona; Cindy Hensley McCain, founding member, Eastern Congo Initiative; Maria Elena Salinas, anchor, Univision News; Jimmy Wales, founder Wikipedia; and Lauryn Williams, U.S. Olympic Gold Medalist in sprinting and Silver Medalist in bobsledding.

While pursuing her doctorate degree at UAH, Agee works as a graduate research assistant at HudsonAlpha Institute for Biotechnology. Excelling academically as well as professionally, Agee’s involvement in numerous activities and societies include the UAH Minority Graduate Student Association, Alpha Kappa Alpha Sorority, Inc., Phi Beta Kappa, the American Association

for University Women, the National Science Foundation Graduate Research Fellowship Program and Louis Stokes Alliance for Minority Participation, the Gates Millennium Scholars Program, Leadership Huntsville/Madison County, and the UAH Alumni Association.

She also earned a bachelor’s degree in Biology from Spelman College and is a member of the Morehouse/Spelman Professional Network. Agee is expected to complete her Ph.D. in December 2014.

While pursuing her doctorate degree at UAH, Wallace holds memberships in several professional organizations, including the National Organization of Black Chemists and Chemical Engineers, the American Association for University Women, the UAH Minority Graduate Student Association, the Alabama Women Student Leaders Conference, and the UAH Alumni Association.

She also earned a bachelor’s degree in Chemistry from Alabama State University. Wallace is expected to complete her Ph.D. in May 2016.

Additionally, Agee and Wallace are on the planning team for Tech Trek, a STEM-centered summer residence camp for girls that will take place in Huntsville July 20-25.



**CLINTON GLOBAL INITIATIVE
UNIVERSITY**



Dr. Beth Barnby is assisted by student researchers Ranya Zahran, Megan Hillgartner, and Jennifer Navarro.

Professor takes personal interest in research

Dr. Elizabeth Barnby didn't attend UAH so she could get a job; she already had one as an emergency room nurse. She attended so that she could learn more about Tyrosinemia type 1 (TT1), a rare and often fatal metabolic disorder that affects 1 in every 50,000 babies born in the U.S.

Dr. Barnby, it turns out, has two children with TT1. She's also now an assistant professor and the undergraduate program director of UAH's College of Nursing. But when she and her husband moved to Huntsville in 2009, all she wanted to do was help her son and daughter.

"I realized if I became more educated about the science of TT1, it would help me design research studies," she says.

"So I started taking biology classes here." Before long, she was invited to work in Dr. Gordon MacGregor's mouse lab, where she had the resources needed to pursue her hypothesis about TT1.

That hypothesis? That if a mouse with another inborn error of metabolism, called alcaptonuria, could be bred with a mouse with TT1, the offspring who inherited both would be prevented from dying because the alcaptonuria would block the TT1.

Unfortunately, the cost of inducing alcaptonuria in otherwise healthy mice turned out to be prohibitively expensive. So Drs. Barnby and MacGregor instead focused on improving the treatment of TT1, which is currently limited to the use of 2-[2-nitro-4-(trifluoromethyl)benzoyl]cyclohexane-1,3-dione (NTBC).

"NTBC is the only pharmaceutical to use for these kids, but it's a drug that might introduce neurocognitive changes," says Dr. Barnby. "So we're experimenting on the dosage in mice to find out if a lower dose will work and avoid cognitive decline."

Assisting her in the effort are student researchers Megan Hillgartner, Jennifer Navarro, and Ranya Zahran. But it's still a frustratingly slow process. "I want everything right now!" she says. "I'm all about the kids that are out there right now with the disease."

As for Dr. Barnby's own kids, "they're ok today," she says. But one day, she hopes, her research will prevent future generations from enduring what they did. "If we learn about this," she says, "there's a potential to cure it."



SPIDER-MAN to the Rescue!

Trying to explain a complex scientific concept like lateral gene transfer in three minutes so that the average person can actually understand it is a task most of us wouldn't even consider undertaking. But not only did David Gray rise to that challenge, he blew it away – twice.

A graduate student at UAH, Gray took the top spot in last November's Three Minute Thesis and Dissertation (3MT) competition at UAH before going on to win the grand prize at the regional 3MT competition in San Antonio, TX.

How did he do it? Well, first he got a little help from a well-known superhero.

"I watched videos of past winners and I noticed that almost everyone had come up with an analogy to explain their research," says the biochemistry major. "So I decided to use Spider-Man as my analogy, because Spider-Man gets his powers in a way that seems a lot like lateral gene transfer."

That analogy, along with a few presentation pointers from UAH Communication Arts professor Kristin Scroggin, landed Gray in first place at the November competition. "I got a \$300 cash prize and all-expenses-paid trip to the regional competition in San Antonio," he says.

But celebration soon gave way to preparation. "Up to the night before my presentation in San Antonio, I was juggling things around and trying to get it just right," he says. And while Gray felt optimistic about his chances, he felt far from confident.

"These things are so hard to judge, and they told us the difference in scores was usually a point or two, so it's hard to say who would win." In the end, however, he prevailed. "When they announced the other guy was second, I knew I'd won!"

As the regional victor, Gray received

a \$1,000 cash prize. But he says he took home something even more valuable from the experience: an understanding of how important it is not just to grasp complex concepts, but to also be able to share them with others.

"Graduate students spend all of their time presenting to experts in their field, and it's really difficult to turn that around and present to anyone who wants to follow what they're doing," he says. "So I think everybody in graduate school ought to do a competition like this."

And maybe by doing so, says Gray, they can help make science more accessible to those who are put off by its perceived complexity or more popular among those who already have a burgeoning interest. After all, he points out, "show me a kid who doesn't want to catch bugs or love dinosaurs."

Or, for that matter, Spider-Man!

UAH'S ECONOMIC DEVELOPMENT IMPACT INSPIRES SIGMATECH FOUNDER

DR. GURMEJ S. SANDHU ('79, PHD), FOUNDER OF LOCAL HIGH TECHNOLOGY SERVICES COMPANY SIGMATECH INC., KNOWS THE ECONOMIC DEVELOPMENT IMPACT THAT UAH HAS IN THE REGION AND BEYOND.

"UAH is primarily a predominantly scientific and technical school, which is closely associated with Team Redstone Arsenal organizations and offers excellent academic and research opportunities addressing arsenal issues," Dr. Sandhu says. "Many of the faculty members involved in Army and NASA programs have provided a robust academic and research environment."

Dr. Sandhu's doctoral thesis at UAH, "Length Estimation of the Space Re-entry Vehicle by Radar Scattering," provided the basis for continued research in Army programs at the Advanced Technical Center of the U.S. Army Space and Missile Defense Command and Advanced Simulation Center of the U.S. Army Aviation and Missile Command.



“Several of our early Sigmatech employees were either UAH graduates or students pursuing graduate degree programs at UAH.”

– Dr. Gurmej S. Sandhu

Left: Dr. Gurmej S. Sandhu, UAH alumnus, is founder of Sigmatech Inc.

The experience gained at UAH in supporting the Arsenal helped him to start Sigmatech in 1986, Dr. Sandhu says. Today, Sigmatech employs over 300 professionals with \$80 million dollars in annual revenue. In 2012, Sigmatech received the Alabama Small Business Prime Contractor of the Year Award from the U.S. Small Business Administration. Sigmatech also received the SBA’s Administrator’s Award for Excellence in Area III / Region IV, which covers Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

“During the first two years at Sigmatech, nearly \$1 million of its business came from the Army’s Small Business Innovative Research program, in the areas of sensors and seeker signal processing,” says Dr. Sandhu. “Several of our early Sigmatech employees were either UAH graduates or students pursuing graduate degree programs at UAH. In some cases, there was collaboration with the UAH faculty associated with the UAH Research Institute.”

Later on, Sigmatech worked with UAH on joint Army and NASA programs. A co-op program for UAH students became a valuable source of technical assistance to Sigmatech. The university was also supportive of him personally, Dr. Sandhu says.

“My induction to the UAH Distinguished Engineering Academy in 2001 and my receiving the Distinguished Alumni Award in 2004

were a source of motivation to succeed, both in technical skills and management expertise at Sigmatech,” he says.

In 2012, Sigmatech provided a \$1 million gift to establish the Baba Budha Eminent Scholar Chair in Global Understanding at UAH. With emphasis on Indian Studies, the position is a unique effort that is wholly in concert with a City of Huntsville initiative for international trade coordination and cooperation. This dual-concept chair – with the second reciprocal chair at Punjab Agricultural University in India, with emphasis on American studies – is the first step in establishing economic and educational cooperation between friendly countries at the student level while enhancing business efforts with the City of Huntsville and Team Redstone Arsenal.

Eventually more reciprocal chairs will be established with other interested nations and universities across different geographic regions, Dr. Sandhu says, with the objective of developing an international center at UAH to serve the students, the tenants at Redstone Arsenal, and the business community in Huntsville.

“The goal of this effort,” Dr. Sandhu says in conclusion, “is to promote better understanding, to build stronger ties between nations and universities, and to foster global economic development.”



Members of the MAE 494 aircraft design class with their creation.

UAH Senior Design Project Takes Flight

Take two UAH professors with cross-discipline interests, add a group of enthusiastic senior aircraft design students, mix well, and what do you get? A blimp-like airship that's the mother ship for a smaller quad-rotor unmanned aerial vehicle (UAV) – and a project that won the team second place at the 65th American Institute of Aeronautics and Astronautics (AIAA) Region II Student Team Design Competition in Memphis, Tenn.

The helium-filled airship has a remote-controlled capture and release

docking mechanism that also charges the UAV from batteries aboard. And because the airship provides long-distance flight to position the UAV for shorter and closer scanning flights, it's an ideal choice for Dr. Rob Griffin, assistant professor of atmospheric science, who wants to use it to do aerial agriculture mapping.

When Dr. Griffin and Dr. D. Brian Landrum, associate professor of mechanical and aerospace engineering, discussed the idea, Dr. Landrum found a potential project for his MAE 494 aircraft design

class that would involve more than just his student engineers.

“We realized there was a need for long-endurance, but also agile, aerial platforms for agricultural applications,” Dr. Landrum says. “When I proposed the idea of an airship with a smaller UAV that could be deployed, re-docked, and recharged, the senior design students immediately picked it for their project.”

“The concept potentially has a great deal of utility, as acquiring timely and thematically appropriate high-resolution imagery for precision agriculture becomes increasingly important in the U.S., and specifically for our region,” adds Dr. Griffin.

The mother ship has a 20-foot-long by 6-foot-wide helium-filled polyurethane envelope that was donated by Southern Balloon Works. An active weight distribution system keeps the

“The quality of my senior design students the last two years has been exceptional.”

– Dr. D. Brian Landrum

craft level, and it is directed using a rudder and light-weight fins.

The remote control software was written by students from CPE 495, a senior-level computer engineering design class under the direction of Dr. Earl Wells, professor of electrical and computer engineering.

A 750 kilovolt slow-turning motor on the airship drives a 10-inch propeller for forward motion. The airship is equipped with a camera for docking imagery. The UAV, supplied by UAH's Systems Management and Production Center, carries a Go-Pro camera payload. Both feed live video to ground monitors.

Special guards were engineered and fabricated to protect the UAV's four rotors from damaging the airship or being damaged by impacts. The UAV was tested for flight performance on the grounds of Westminster Academy.

The ship's final testing took place inside Huntsville's von Braun Center, where it flew by remote control while maintaining proper attitude and released the UAV as planned. The UAV flew independently by remote control for over 11 minutes, exceeding its five-minute requirement, then successfully docked.

“The quality of my senior design students the last two years has been exceptional,” says Dr. Landrum. “These are not only very academically gifted students, but they also have an amazing work ethic. The student team leaders led by example to produce close-knit, effective teams to accomplish projects that would challenge engineers with many more years of experience.”

The finished airship has future prospects, since Dr. Landrum has been talking with Norven Goddard, a principle research scientist at UAH's Systems Management and Production Center, and it sounds like they're cooking up a few new ideas.

“I would like to continue to enhance the airship/quadcopter system capabilities, including autonomous docking,” Dr. Landrum says. “I have had preliminary discussions with Norven about future applications in precision agriculture, public safety and weather monitoring.”

Briefs

UAH, the US Army Aviation and Missiles Research, Development, and Engineering Center, and NASA's Marshall Space Flight Center recently conducted a series of technical interchange meetings (TIM) to review ongoing collaborations and areas of mutual interest. The TIMs reviewed several areas of common interest and focused on logistics, production, system engineering, reliability, software, and sensors. Several new areas for the establishment of collaborations were also considered, including additive manufacturing, or 3-D printing, while a joint interest in composites, supply chain management, and nondestructive evaluation (NDE) was also identified among all three groups.



Dr. Suzy Young, Director of UAH's Office of Proposal Development, was named to the Order of Prometheus during the Pathfinder Chapter Unmanned Aircraft Systems Symposium in Huntsville, Ala. The conference highlighted the Army's Unmanned Aircraft Systems Roadmap to the Future, and included many other service and industry updates.

Four students from UAH's Propulsion Research Center (PRC) are working with local industries as part of the Industry/University Cooperative Graduate Student Research Program. This seed program is sponsored by competitive grants from the UAH Office of the Vice President for Research. “At the participating companies, the students are gaining practical, hands-on experiences with a research flavor,” said PRC Director Robert Frederick. “This is all about developing relationships between UAH and local businesses and understanding how we can fulfill specialized research needs that will benefit our partner companies.”

Team Spirit Powers UAH Rowing Club



UAH's women's four, known as the Dinofour+, includes coxswain Rachel Gregory and rowers Audrie Hamann, Brooke Hamann, Cece Raffo, and Rachael Fleischmann.

Neither Logan McEwen nor Rachel Gregory gave much thought to rowing before attending UAH. But today that disinterest is a thing of the past. Now the two students share an unbridled love of the sport, serving as president and treasurer, respectively, of the UAH Rowing Club.

McEwen, a veteran of the Navy and a Fort Payne, Ala., native, has always had an athletic bent. "I played football in middle school and then I was a cyclist," he says. So for him, rowing was a natural progression. "I saw ads when I came to UAH, and I tried it out and loved it."

For Gregory, meanwhile, the motivation was more social. "I worked with a girl who was a member of the Rocket City Rowing Club and she was telling me about it," she says. "I thought that it would be a great way to meet people and get fit at the same time."

Little did she know! "It turned out to be a lot more technique involved than what is apparent when you watch rowing as a sport," she says with a laugh. McEwen agrees. "A good crew will make

rowing look easy," he says, "but it's so far from the truth."

And things get even crazier when it comes time to compete. "It looks smooth on the outside but inside is total chaos with water flying all over the place and you're pushing as hard and as fast as you can," says McEwen. "It's like getting stabbed and set on fire at the same time."

That feeling is slightly different but just as electric for Gregory, who transitioned to being a coxswain following a back injury. Her goal is two-fold: to guide her rowers to victory and to keep them focused on their task. "I tell the rowers, Don't look at the other boats! Focus on your technique! Keep rowing!" she says.

Of course, sweat equity is just half of the equation when it comes to success. The other half is equipment – and unfortunately, the UAH team is sorely lacking in this area. They have only five boats, most purchased back in the mid-1960s when rowing was a Division I sport at UAH.

That's hardly enough to ensure their

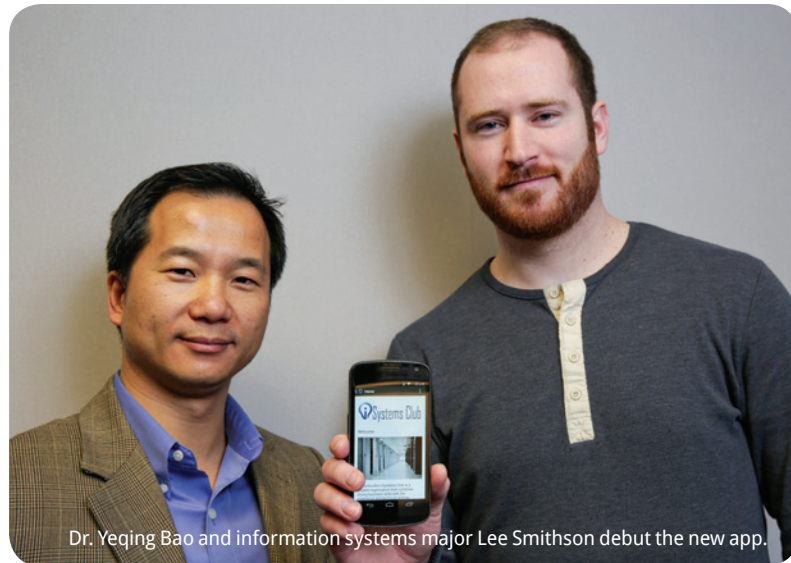
20+ members can get on the water at any given time. "We would love to have the whole crew go and race in every regatta, but we don't have the resources or equipment to do it," says McEwen.

As a result, they're often forced to borrow boats from their competitors, and even then, there's no guarantee they're the right boats. Take, for example, the recent Row Tide Regatta, which was held on the Black Warrior River.

UAH's women's four team should have been racing in a lightweight boat, but instead had to borrow a heavyweight boat. "We weren't heavy enough to sink the boat so these girls basically rowed the Titanic to the finish," says Gregory, laughing. And yet in spite of the odds they won, as did the UAH men's single, women's pair, and mixed-eight.

That's because whatever they lack in material support, the UAH Rowing Club more than makes up for in spirit. "No matter what, we're going to be good," says Gregory. "Yeah, we want to win, but we love hanging out and we want to have fun."

UAH's iSystems Club debuts new app for Android



Dr. Yeqing Bao and information systems major Lee Smithson debut the new app.



The new iSystems Club app is available for free from the Google Play store.

Though it's one of UAH's newest student-run organizations, the iSystems Club is one of the most productive. Members have already donated their time to helping local non-profits redesign their websites. And now, the club is the first on campus to have its own app.

The project actually began last semester when the club's faculty advisor, Chakri Deverapalli, recruited information systems major Lee Smithson to join the club and serve as project manager. The goal was to create an app to present all the content of the iSystems Club website in a mobile-friendly format.

Smithson, who works full-time as a mobile applications developer for SAIC, began by helping team members Josh Deaton and Clay White with programming basics. "I showed them templates and then I wrote out brief tutorials for them for each of their sections," he says.

After that, each person worked on their section, emailing weekly to keep the others apprised of their progress. "Sometimes it was kind of stressful because we only had a certain amount of time," says Smithson. But as it often does, the hard work paid off, and today the app is available for free from the Google Play store.

"What they have been doing is a wonderful opportunity for students to use what they learn in class to solve real-world problems," says Dr. Yeqing Bao, who serves as the College of Business Administration's Associate Dean of Undergraduate and International Programs. "That gives them an advantage in their careers and a leg up on their competitors."

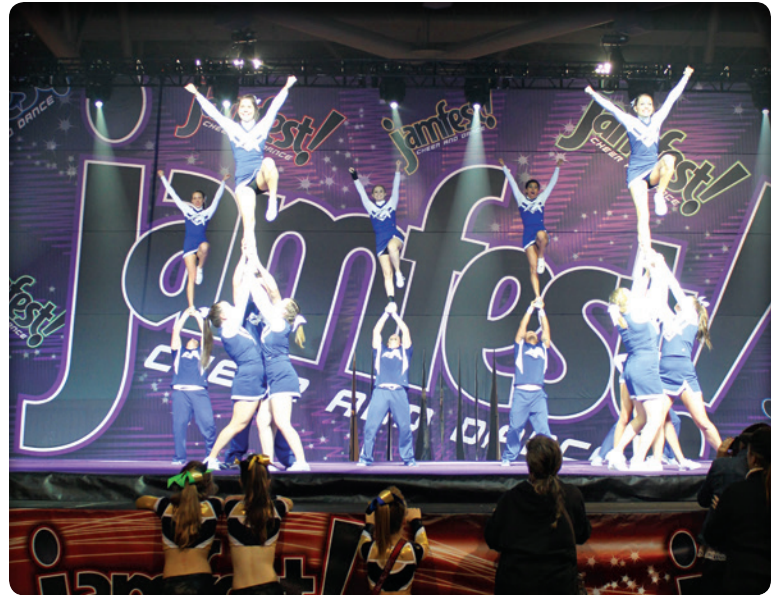
It's also why the College of Business Administration is now in the process of introducing a formal experiential learning component. "The world is becoming more competitive and the economy itself is demanding more from the students," he says. "Employers want students who come ready to work on problems."

As for Smithson, there's no doubt the project management experience and confidence he gained from the project will one day prove useful in his work place. But for now, the married father of three is ready for his life to become a little less busy – as is his wife.

"It was suggested to me to run for officer of the iSystems Club, but after having so little time for being a project manager, I don't think my wife would appreciate that!" he says with a laugh.

CHARGER PRIDE

UAH Cheerleaders Take Top Spot



“I was so proud of the squad and what they were able to accomplish at JAMfest.”

– Nikki Goode

Recently, the Charger Cheerleaders at UAH decided to take their spirit on the road. Their destination? The JAMfest Nationals Series in Mobile, where they won first place in the International Open Co-Ed Cheer and the Open Partner Stunt events.

“I was so proud of the squad and what they were able to accomplish at JAMfest,” says Nikki Goode, Director of Student Activities and the squad’s advisor. “Most of our cheerleaders have little or no background in cheerleading, so it is amazing to see the development that occurs in each of these students in such a short period of time.”

The feat is all the more impressive when you consider that the Charger Cheerleaders aren’t a competition team. “We start each season understanding that our purpose is to support athletics and spread Charger spirit across campus,” she says. “Competition is a perk, and one that the team has grown to enjoy and appreciate.”

It’s also one that must be squeezed into a rigorous schedule that includes two-hour practices four days a

week, making campus and community appearances, and supporting all 14 of UAH’s athletic programs. Not to mention, adds Goode, making the occasional road trip with the UAH basketball team to away games.

That limits the squad to just a handful of competitions each year, which in the past has comprised Universal Cheerleaders Association, CHEERSPORT, and Cheer Ltd. This year, however, “the team wanted to participate in two smaller competitions,” says Goode, “so they chose CHEERSPORT in Atlanta, where they placed third, and JAMfest.”

As for their two first-place finishes there, Goode says she is not surprised. “Their dedication to the squad and to the university is second to none,” she says. “Every year, they want to be better than they were. They challenge one another and have an amazing team bond.”

All of which bodes well for the Charger Cheerleaders’ next competition, wherever it may be. And in the meantime, it’s back to a busy schedule keeping spirits high right here in the Charger Nation.



Social Media

Check out our most popular social media posts from the last few months.

Google Maps Street View Trekker collects images to create "Street View" of UAH campus <http://on.uah.edu/1fI6bE5>

Students turn \$250 wheelchair into geo-positioning robot. <http://on.uah.edu/1m5ni4n>

The Weather Channel conducted a series of interviews with various teams of scientists at UAH for segments that will air in the near future. <http://on.uah.edu/1sm7MkV>

Two UAH researchers have developed an add-on to simple 3D printers that could change the way biomedical research is done. <http://on.uah.edu/1d0cxHy>

UAH was given the distinction Tree Campus USA for the planting of a diverse tree population. Representatives for Chargers for Sustainability, faculty and staff were on hand for the Tree Campus USA Award ceremony on February 27, 2014. <http://on.uah.edu/1oqXg9I>



UAH made the list of
Top 50 Most Affordable Schools with the Best Returns!
<http://on.uah.edu/1fVxLOq>



Athletics

Highlights from the past season

BASEBALL

UAH's Baseball team won its second-ever Gulf South Conference Championship with a 9-3 victory over top-seeded Delta State, winning the last four games to capture the trophy. Blake Massey was named the Tournament's Most Outstanding Player while Conner McCain and Cody Burton were named to the All-Tournament Team.

SOFTBALL

UAH's Softball team finished runner-up at the Gulf South Conference Championship, but earned the No. 1 seed in the NCAA South Regional Tournament after going 43-9. Tyler Harrison was named GSC Freshman of the Year and Les Stuedeman was named GSC Coach of the Year for the ninth time in her career.

WOMEN'S TRACK & FIELD

UAH's Women's Track & Field team won the Peach Belt Conference Championship while the men finished runner-up. Nationals qualifier Katelin Barber finished first in the 100 meter dash with a time of 11:99, Briyonna Scroggins finished first in the 400 meter hurdles with a time of 1:03.04, and Michelle Kruse finished first in the 5000 meter run with a time of 17:59.82.

You can read more about UAH Athletics and find upcoming season schedules by visiting uahchargers.com or by following the Chargers on social media: facebook.com/UAHChargers and [@UAHChargers](https://twitter.com/UAHChargers).



POWER PLAYER

UAH alumnus takes reins of Alabama Power Company

As president and CEO of Alabama Power Company (APC), Mark Crosswhite ('84, BA, History) quickly discovered there is “no average day on the job.” And that is a good thing, says the UAH alumnus. “I’m going somewhere different most days.”

One of his key roles is to be an advocate for the company. “We serve 1.4 million customers from Gadsden to Mobile and have offices and employees throughout that area,” he says. “Most days, I am meeting with employees, community and civic leaders, and customers.”

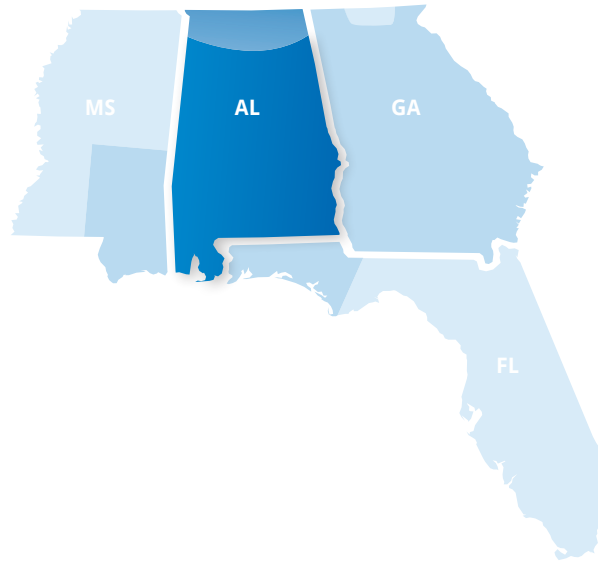
A native of Decatur, Ala., and graduate of Decatur High School, Crosswhite says his decision to attend UAH was easy. “UAH enjoyed and still does enjoy

a great reputation.” While here, he was inducted into the Phi Alpha Theta History Honor Society, received the History Department Award of Merit, and was consistently on the dean’s list. He was also a recipient of the Frances C. Roberts Scholarship and William Penn Nichols Memorial Scholarship.

After graduating *magna cum laude* with a bachelor’s degree in history in 1984, Crosswhite earned a law degree from the University of Alabama. “I expected that I would be practicing law my entire career,” he says. Instead, as president and CEO, Crosswhite is now responsible for Alabama Power Company’s overall strategic direction and performance.

“We focus on five key areas,” he says. “First, safety: nothing is more important than the safety of the public and our employees. Second, customer service. Our business strategy is to keep customers at the center of everything we do. Third, employees. I’m determined that we treat all of our employees fairly and with respect. Fourth, economic development. We work closely with the state and local economic development organizations to attract new businesses and retain those that we have. And fifth, community service. We have a long history of supporting the community.”

Crosswhite credits his degree in history with helping him maintain such a “broad perspective” as CEO. “It helps



SOUTHERN COMPANY

- AL** Alabama Power
- FL** Florida Power
- GA** Georgia Power
- MS** Mississippi Power

me organize information and communicate to different audiences and consider the ‘big picture’ as we set corporate strategy and direction,” he says.

He also praises UAH history professors Dr. Carolyn White and Dr. Johanna Shields for their guidance during his time on campus. “Dr. White influenced me greatly – I signed up for every class of hers that I could,” he says. “I also enjoyed classes that Dr. Shields taught.”

And both, in turn, remember Crosswhite as a studious student with a bright future.

“It goes without saying that Mark was very intelligent,” says Dr. Shields. “It was clear that he would be a successful adult, and I remember thinking that a law degree was just right for him. It’s wonderful that he has achieved such a position of distinction, but it isn’t surprising.”

Dr. White agrees. “Mark never made less than an A in any history course I taught,” she says. “I am not surprised that he has had such a distinguished legal and business career, for he was an outstanding student.”

But while Crosswhite’s liberal arts degree has helped him excel as a CEO, he is the first one to point out that it’s not the only factor when it comes to career success. Just as important, he says, is passion for what you are doing.

“You must be true to yourself,” he says. “STEM backgrounds are typically more

lucrative and immediately marketable, but if your passion is history, or English, or music, you must decide whether you would enjoy spending your life pursuing a different career.”

Also helpful, he continues, is a mentor. “I’ve been fortunate to have a number of great mentors who taught me much about APC, legal practice, and life,” says Crosswhite, listing Charles McCrary, former president and CEO of APC; Rod Mundy, former counsel at APC and a former law partner; and Jerry Stewart, former senior vice president and chief production officer at APC among them. “They were always available to provide wise counsel and friendship.”

That’s something Crosswhite values greatly, and why he makes sure to spend quality time with his family – wife Jane Emily and sons Will and Jim – despite his busy schedule. “I try to always make time for the most important people in my life, or anyone else’s, and that’s family and friends,” he says, adding that he still loves to read about history when he has the time.

Otherwise, he’s hard at work, helping guide APC through what he refers to as “a great transformation” in the energy industry. “We are working to develop and retain a full portfolio of energy resources, ranging from traditional sources to renewables,” he says. “It is an exciting time to be involved in energy.”

Above: Mark Crosswhite is a UAH alumnus and CEO of Alabama Power Company.

A Case of “DIVINE INTERVENTION”

Divine intervention. That’s how UAH alumna Chelonnda Seroyer (’02, BA, English) describes her chance meeting more than 10 years ago with education rock-stars Drs. Harry and Rosemary Wong.

The husband and wife duo are renowned educational consultants and the authors of the groundbreaking how-to book for teachers, *The First Days of School: How to Be an Effective Teacher*. The book has sold four million copies, been published in six languages, and implemented in thousands of collegiate education curricula.

After graduating from UAH in 2002, Seroyer was offered a teaching position at Bob Jones High School in Madison, Ala. It was during her first year as a high school teacher that Seroyer began implementing classroom management procedures from *The First Days of School*. She had the opportunity to attend one of Harry Wong’s workshops in Grand Prairie, TX. After the workshop, Seroyer and hundreds of other teachers had the same idea: meet with Wong, get personal copies of the book autographed, and perhaps chat with the education icon for a moment or two.

“The longer I stood in that line and saw all of those teachers waiting, I knew my chances of meeting with Dr. Wong were dwindling fast,” says Seroyer. Determined to meet with Wong personally, and realizing she was running out of options, Seroyer did the only thing she could do: she went out the side door of the building and approached Dr. Wong as he got into his car to leave.

Long story short: Dr. Wong invited Seroyer to share the national and international stage with him and Rosemary, giving presentations to thousands of teachers on classroom management and student motivation.

“The journey from that point until now is absolutely littered with success stories and life-changing experiences,” says Seroyer. “There are certain things in my life that I know for sure...one of those things is that Drs. Harry and Rosemary Wong were always meant to be in my life. It is humanly impossible for me to put into words how much they mean to my family. I can say, with absolute certainty, that I have learned more from them than I have learned from anyone in my adult life. They have given me my wings and taught me how to navigate so many aspects of life that it would be impossible to list them all – and the list is still growing.”

In addition to conducting teacher workshops with the Wongs, Seroyer conducts solo presentations both nationally and internationally for numerous school districts. “Last year I was in 38 different



Seroyer shared education strategies on a recent visit to the UAH campus.

cities during the summer months,” she says. She is featured in the fourth edition of *The First Days of School* DVD, and has contributed to the Wongs’ new publication, *The Classroom Management Book*.

Professionally and personally, Seroyer is in a good place. She credits UAH for helping to achieve her career goals and fondly remembers her time as a student.

“Quite simply, I would not have been able to establish my career without the liberal arts degree that I received from UAH. Morton Hall was my home. Many of the classrooms in that building are filled with memories of learning, laughing, and growing. Each of these experiences helped to provide me with the foundation that I needed to succeed after graduation,” Seroyer says.

She cherishes memories of the people who were extremely important to her during her UAH years. “Delois Smith (vice president of Diversity), and Dr. Lee Williams (retired history professor), were a constant source of support and always available when I needed advice and words of encouragement.”

But her “undeniably fondest memories” of her years at UAH are associated with becoming a member of the Omicron Gamma Chapter of Delta Sigma Theta Sorority, Inc. and establishing “lifelong and airtight friendships” that have withstood the test of time.

“As the chapter president, I was given the opportunity to learn and grow on so many levels. Our chapter advisor, sorority sister Sheila Baxter, likely has no idea how much she influenced my life.”

As Seroyer travels the country helping educators improve their school culture, she believes steadfastly that the K-12 public education curriculum is indeed due for a universal makeover.

“We must adopt an unwavering commitment to stay laser focused on the only people that matter in this equation – the students,” Seroyer stresses. “So often I see educational fads, programs, and initiatives that seem to stray from what is best for students. However, if we put our resources into hiring and training the best teachers, we must provide them with quality, relevant, purposeful, and ongoing support.”

It is Seroyer’s family, husband Steve (a high school teacher and football coach) and their teenage twins Lauren and Grant, that keeps her grounded and brings her joy.

“Never in my wildest dreams did I envision this career path,” Seroyer reflects. “My only objective was to help as many students as I could.”



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