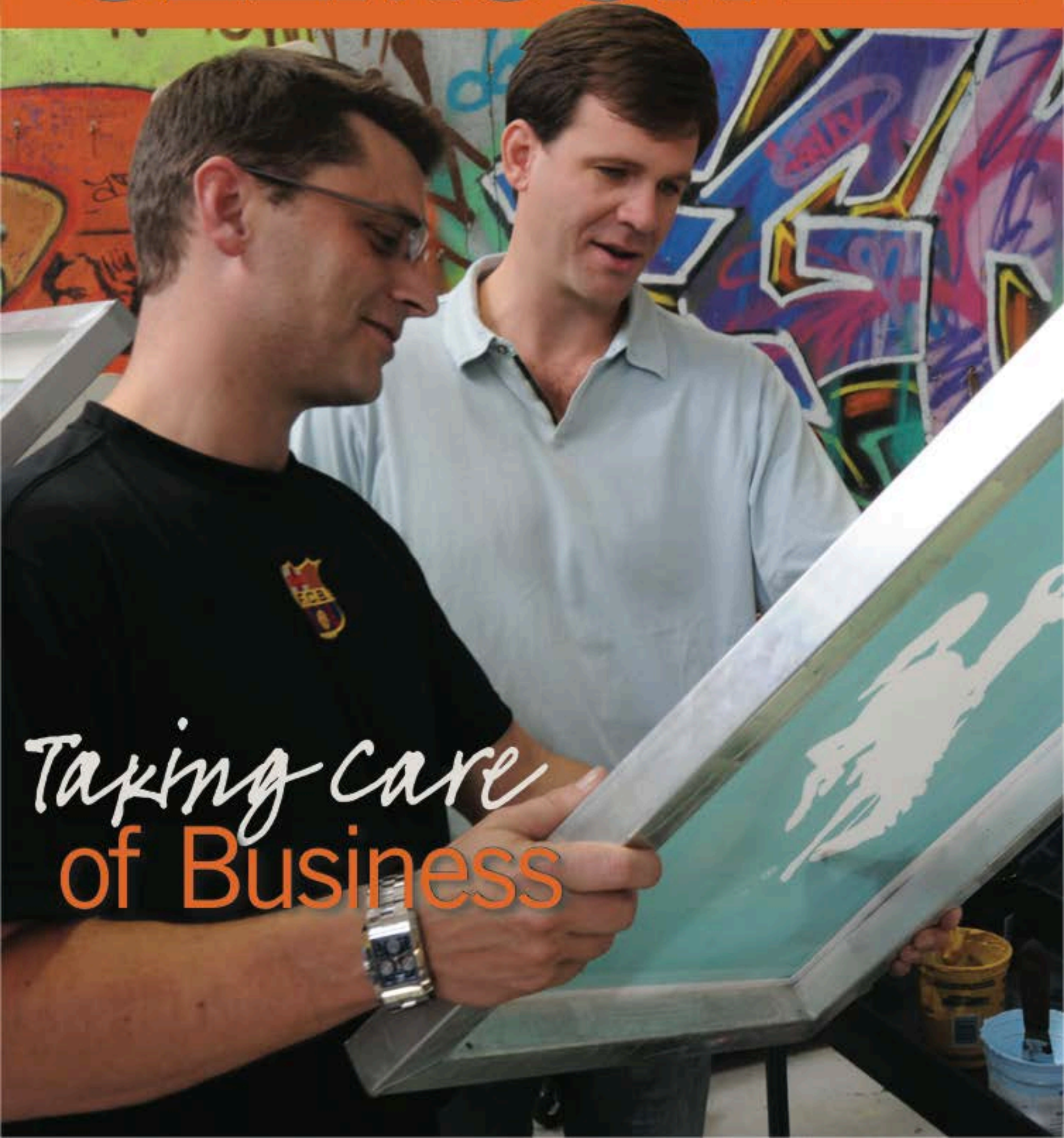


Business in the New Economy | Bricks of Promise | Great Minds Collide | MY CLEMSON

CLEMSON WORLD

MAGAZINE

WINTER 2011



Taking Care
of Business

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WINTER 2011 Volume 64, Number 1



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Cover photo: Chris Bernat '93 and Jackson Burnett '94, M '95 of Vapor Apparel — photography by Patrick Wright

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Needed: A Serious Conversation about Higher Education in South Carolina

We believe there should be a genuine conversation about the role of higher education, focused on the outcomes South Carolina should expect from its colleges and universities — young people ready to seize the opportunities before them, jobs and prosperity for our citizens, and solutions to the problems facing our communities.

South Carolina inaugurates a new governor in January. When I first drafted this column, we didn't know who that would be, but we knew it would be a Tiger! Both Governor Nikki Haley and the Democratic nominee, Sen. Vincent Sheheen, are proud Clemson alumni.

In the days leading up to the vote, University of South Carolina President Harris Pastides and I co-authored an open letter to the new governor that ran in all of the state's leading newspapers.

Our key message was this: No matter who won the election, **higher education stands ready to be an engaged partner with the state as, together, we face the challenge to create jobs, stabilize the state budget and articulate a clear vision for South Carolina's future.**

We believe there should be a genuine conversation about the role of higher education, focused on the outcomes South Carolina should expect from its colleges and universities — young people ready to seize the opportunities before them, jobs and prosperity for our citizens, and solutions to the problems facing our communities.

The conversation might begin by recognizing the facts about current levels of support for the state's public universities. According to the S.C. Commission on Higher Education and the State Higher Education Finance Survey — the most reliable, apples-to-apples comparison of data — **in 2009, South Carolina ranked 46th in the nation and 16th of the 16 Southeastern states in per-student support for public higher education institutions.**

Despite these challenges, however, higher education in South Carolina is not "broken." Thanks to state scholarships and a focus on strategic planning and quality improvement, Clemson has improved academically while remaining both affordable and accessible. Because of South Carolina's generous scholarship program, every entering in-state freshman at Clemson gets a scholarship, and 40 percent of nonresident freshmen do, too.

Demand is high, and public colleges and universities are educating more South Carolinians than ever before. Both Clemson and USC set new records for undergraduate applications this year. More importantly, the number of degrees earned statewide has increased by 26 percent since 1998-99 — largely because of public institutions, which awarded eight out of every 10 degrees earned in 2008-09. More and more South Carolinians are recognizing that higher education is a path to good jobs and a healthier economy for South Carolina.



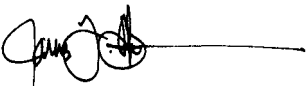
Higher education is also making a major contribution to economic development. Colleges and universities can be powerful engines for economic growth and prosperity, and the governor should consider us allies in rebuilding the economy of South Carolina.

The S.C. General Assembly recognized this essential role when, in the past, it offered incentives to attract intellectual capital through endowed chairs, build facilities and upgrade technology at the three research universities (Clemson, USC and the Medical University of South Carolina). Those programs are working, yielding both short- and long-term returns on these investments in quality. This is about jobs.

Rather than dismantle what's working in higher education, let's focus on what's not: multilayered approval processes that add needless costs, regulatory policies that work for state agencies but not for differently managed colleges and universities, and unfunded government mandates as opposed to true accountability for our citizens' tax dollars.

We ask our new governor to give higher education an audience and a seat at the table. Give us the tools to manage budget cuts and thrive as more independently funded public institutions. Meaningful regulatory reforms can help make up for lost state funding by cutting operating costs without reducing service or accountability.

We're proud that Governor Haley is a Clemson alum. She will have a very full agenda as she works to build a brighter future for South Carolina, and we stand ready to be engaged partners in that effort.


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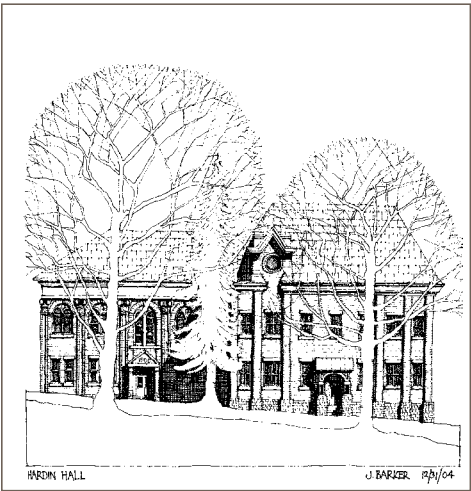
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Dignitaries turn orange sand to celebrate the beginning of construction for the new wind turbine drivetrain testing facility.

Large Wind Turbine Drivetrain Testing Facility under way

IN OCTOBER, CLEMSON MARKED THE OFFICIAL START OF construction on what will be the world’s largest wind turbine drivetrain testing facility, a one-of-a-kind \$98 million project at the Clemson University Restoration Institute in North Charleston.

Expected to begin operating in 2012, it will be capable of full-scale highly accelerated testing of advanced drivetrain systems for wind turbines in the 7.5 megawatt to 15 megawatt range with a 30 percent overload capacity. A drivetrain takes energy generated by a turbine’s blades and increases the rotational speed to drive the electrical generator, similar to the transmission in a car.

“South Carolina can combine the strengths of its top-ranked research university with its manufacturing sector to catapult the state into a leading role in the nation’s emerging and important wind-power industry,” says President Jim Barker.

In late 2009, the Restoration Institute and its partners were awarded a \$45 million U.S. Department of Energy grant, which was combined with \$53 million of matching funds, to build and operate the large-scale testing facility for next-generation wind turbine drivetrains at the institute’s research campus on the former Navy base.

The award was made possible by the American Recovery and Reinvestment Act of 2009. The University’s partners are the Charleston Naval Complex Redevelopment Authority; the S.C. Department of Commerce; the state of South Carolina; S.C. Public Railways; the S.C. State Ports Authority; and private partners RENK AG, Tony Bakker and James Meadors.

CW DYK?

Clemson alumni rank No. 3 in the nation in alumni support to public universities as measured by alumni giving, according to *U.S. News & World Report*. In fact, the past year Clemson alumni had a 27.4 percent rate of giving back to their alma mater, more than double the national average of 12.4 percent.

Clemson gets \$1.4M to improve cyberinfrastructure for S.C. researchers

THE NATIONAL SCIENCE FOUNDATION AWARDED the Clemson University Research Foundation \$1.4 million to support the University’s effort to improve and maintain cyberinfrastructure in South Carolina.

The grant will fund “Expanding and Improving the C-Light Regional Optical Network,” a project to augment inadequate and incomplete cyberinfrastructure facilities, providing researchers with greater access to high-speed cyberinfrastructure and the means to open new paths to scientific discovery.

“Networks like this are a catalyst to the research community,” says James Pepin, Clemson’s chief technology officer overseeing the project. “The state has world-class researchers in multiple fields. And our universities are recruiting leading researchers and support staff in all areas of science and engineering. The nation needs to have strong research programs all over the country to support a vibrant economy.”

The work will be done on the C-Light Regional Optical Network and the South Carolina Light Rail, which link researchers across the state with other national and international research entities, enabling full-speed access to national cyberinfrastructure.



THE NATIONAL CHILDREN’S MIRACLE NETWORK awarded Clemson University Dance Marathon with the Ryan White Award for Overcoming Adversity, one of the organization’s highest honors. Last year, the group hosted a dance event that lasted over 13 hours and raised more than \$23,000 for local children’s programs. The 2010 marathon involved 375 students and partnered with 28 campus organizations, five radio stations and 10 families to make the philanthropic goal a success. The 2011 marathon is set for March 4. For more information, go to cudm.org.

Hash family gift advances Clemson sustainable development

THE WILL TO LEAD
A CAMPAIGN FOR CLEMSON

MORE THAN A DECADE AGO, AS A SENIOR EXECUTIVE with one of the world’s largest engineering and construction firms, Tom Hash first embraced the concept of sustainable development. But it was the birth of his and wife Becky’s first grandchild that brought the issue home.

“Bechtel Corp. adopted sustainability as one of its core values and I became very interested in it,” says Hash ’69, a mechanical engineering graduate. “The birth of our first grandchild made it personal as we thought about the future of the next generation. That’s when Becky and I began looking at how we could help jumpstart the sustainable development program.”

Now, a week after their fourth grandchild joined the family, Tom and Becky Hash have made a \$2 million gift to endow a chair in the field at Clemson.

The Thomas F. Hash ’69 Endowed Chair in Sustainable Development will be the first such position in

Clemson’s Center of Economic Excellence in Sustainable Development, created this year to develop new technologies to foster sustainability, protect the state’s natural resources and encourage smart growth.

Research in sustainable development focuses on areas in which the “natural and built environments” meet, says Gene Eidson, professor of biological sciences and principal investigator of the new center. The result of that research will be tools, products and services to better monitor, manage and protect the environment while allowing for continued economic growth and development.

As a Center of Economic Excellence (CoEE), the sustainable research program gift is matched by \$2 million in state funds. The CoEE program was established by the S.C. General Assembly in 2002 and is funded through the S.C. Education Lottery. State and private funds are matched dollar-for-dollar to create Centers of Economic Excellence in research areas that will advance South Carolina’s economy.

The Hashes’ gift is part of the Will to Lead campaign, an effort to raise at least \$600 million by June 2012 to support Clemson students and faculty with scholarships, professorships and enhanced learning and research opportunities with top facilities and technology.

Becky and Tom Hash, benefactors of the Hash ’69 Endowed Chair in Sustainable Development, with Gene Eidson (center), principal investigator for Clemson’s Center of Economic Excellence in Sustainable Development

Students express talent through Gantt Center for Student Life

PREPHARMACY STUDENT

Janelli Saavedra takes part in The S.P.O.T. (Spoken-word, Poetry, Open-mic and Talent) — an opportunity for Clemson students to express themselves through song, rap, poetry and other art forms. The S.P.O.T. is sponsored by the Harvey and Lucinda Gantt Center for Student Life, Kappa Lambda Chapter of Kappa Alpha Psi Fraternity Inc. and Semantics. For more on the many programs sponsored by the Gantt Center for Student Life, go to clemson.edu/student-life.

CW DYK?

Clemson graduates are finding jobs at nearly twice the national average of other college graduates, according to a survey conducted between December 2009 and June 2010. The figures were compared to the national average reported by the National Association of Colleges and Employers.

Duke Energy empowers Clemson, new innovation center

A NEW FACILITY UNDER CONSTRUCTION AT THE Clemson University Advanced Materials Center in Anderson County will be named the Duke Energy Innovation Center.

Duke Energy has been a long-time partner with Clemson supporting students through scholarships, infrastructure (by improving the power supply necessary for Clemson’s high-speed computing) and creation of the new innovation center.

“Clemson University is developing the future technologies and students to fuel our economy,” says Jim Rogers, chairman, president and chief executive officer of Duke Energy. “We see our investment in Clemson as an investment in the economic future of South Carolina.”

The innovation center will serve as a high-tech business incubator focusing on the advanced materials industry. Space will be available for startup companies and “landing parties” of existing companies interested in exploring the viability of locating new businesses or relocating existing businesses in the area.

The center is a joint project with the South Carolina Research Authority, which will house its programs in a separate wing.

Strong academic, student life rankings

U.S. NEWS & WORLD REPORT RECENTLY ANNOUNCED THAT CLEMSON continues to be ranked among the nation's best public universities — No. 23 to be exact. This is our third consecutive year being ranked in the top 25.

Clemson ranks No. 12 among all national universities, public and private, on a new ranking of schools with a strong commitment to teaching. The list includes many of the nation's most highly regarded universities: Dartmouth, Princeton,



Yale, Notre Dame, William and Mary and the University of California at Berkeley. Clemson's programs for writing in the disciplines and learning communities were also recognized for quality.

Kaplan/Newsweek's 2010-2011 "Finding

the Right College for You" guide recognized Clemson in the categories of Most Desirable Rural Schools, Most Desirable Large Schools and Stocked With Jocks.

According to the guide, Clemson's small town location places it among the most desirable rural schools at No. 23, while its nearly 20,000-strong student body makes it No. 21 on the list of most desirable large schools. With four percent of its students participating in one of 15 varsity NCAA Division I sports, and an additional 61 intramural sports offered, Clemson is considered one of the top colleges for athletes at No. 20.

Tigers team up for student affairs

GRADUATE STUDENTS MAJORING IN STUDENT AFFAIRS are teaming up with new and seasoned Clemson alumni professionals for mutual opportunities. Students make connections and learn what's happening outside the classroom, while alumni stay up on the latest trends in education. The program, called Tiger Teams, started with Chi Sigma Alpha (student affairs honorary organization in Clemson's Eugene T. Moore School of Education) and already has 24 teams — each with two graduate students and two alumni (one a new student affairs professional and the other a seasoned one). Pictured are student Jay Hinner, Amber Mulkey M '07, student Lauren Layton and Brian Stuart M '06. For more information, contact Pam Havice at havice@clemson.edu.



CW DYK?

The University annually awards more than \$202 million in financial aid to more than 15,000 students. More than 7,000 students receive scholarships with awards ranging from \$500 to all-inclusive cost coverage.

Clemson researchers attract \$187M, highest funding ever

JUST HOW IMPORTANT IS THE WORK OF CLEMSON RESEARCHERS? TOTAL research funding for fiscal 2010, which ended June 30, was the highest in the University's history: \$187,292,161. The federal government provided the majority of external research funding, 86 percent, while state and local government accounted for 8 percent, and industry and other sources provided 6 percent.

More than half of Clemson's research funding was focused in two emphasis areas: sustainable environment (37 percent) and advanced materials (24 percent). The College of Engineering and Science continued to have the highest level of external support, with 39 percent.

"In these economic times, it is important to note that Clemson researchers aggressively continue to seek external support for a rigorous research program," says Gerald Sonnenfeld, Clemson's vice president for research.

Clemson & Campbell's — 'Mmmm good'



FOOD SCIENCE AND HUMAN NUTRITION students met Clemson alumni at Campbell's Soup Co. world headquarters in Camden, N.J., as part of a Creative Inquiry project. The University and Campbell Soup Co. have an extended history in that many Clemson alumni, as well as students, have worked or completed co-ops for the company. Each year, food science and packaging science students have the opportunity to interview for co-op positions with the company, which often translate into employment after graduation. For example, five Clemson graduates are currently at Campbell's world headquarters in product development, two in packaging and another in quality control.



Clemson helps to create Open Parks Grid

CLEMSON UNIVERSITY LIBRARIES RECEIVED A GRANT to make more than 3 million pages of resources held by the National Park Service (150,000 artifacts, photographs and other objects) and selections from park directors' papers available digitally.

The \$773,444 National Leadership grant from the Institute of Museum and Library Services will fund the collaborative Open Parks Grid. Clemson — one of 34 institutions to receive funding in this category — is contributing in-kind matching funds of \$799,167, for a project total of \$1.57 million.

The Open Parks Grid will supply information on parks in the southeast United States. It will let park professionals and researchers discuss parks issues and will allow the display of park research and project funding needs. The goal is to unite the highly distributed parks community and to provide access to materials that have never before been made available.


Faculty and staff members in the libraries; the parks, recreation and tourism management department; and Clemson Computing and Information Technology are collaborating with the Purdue University Libraries; the Southeast Region of the National Park Service; and the state parks in Georgia, North Carolina and South Carolina to develop an information gateway for parks information. Principal investigator is Emily Gore, director of digital initiatives and information technology for Clemson Libraries.

Clemson CSM rules!

Three Clemson construction science and management teams competed at the 2010 Associated Schools of Construction/Associated General Contractors of America Region II Student Competitions against Auburn, Georgia Tech, Georgia Southern, Mississippi State, Southern Polytechnic State, University of Florida, Virginia Tech and Western Carolina. Clemson's Design-Build team (coached by Shima Clarke) and Heavy/Civil team (coached by Erik Simon) finished first! And the Commercial team was among the top finishers.


CW DYK?


Clemson has received national recognition for its commitment to diversity and inclusion for the third straight year. Minority Access Inc. awarded Clemson at the 11th National Role Models Conference. **Leon Wiles, Clemson's chief diversity officer, was recognized at the conference with a National Role Model Award** for his leadership, dedication and success.



Will to Lead campaign goes on the road

THE UNIVERSITY IS TAKING The Will to Lead: A Campaign for Clemson on the road. So far the campaign has visited or has plans to visit Greenville, Charleston and Columbia, S.C.; Charlotte, N.C.; Washington, D.C.; Atlanta, Ga.; with other locations to be determined.





Repaying kindness through student support

MECHANICAL ENGINEERING GRADUATE DOUG SMITH '64 and his wife, Lynn Westmoreland Smith, have given the University \$500,000 to endow a scholarship and to provide academic support in other areas as part of Clemson's Will to Lead campaign.



Smith, who earned his Clemson degree on a scholarship, hasn't forgotten the generosity of those who provided support. In fact, he and Lynn are repaying the kindness many times over.

Half the gift will be used to fund the Smith-Westmoreland Scholarship Endowment, for four years of support to academically gifted students from North and South Carolina. A significant portion of the gift is to the University's Leadership Circle, an unrestricted fund that allows money to be directed where it is most needed.

The Smiths' gift also includes support for two quite different programs — WISE and Jungaleers. The Women in Science and Engineering (WISE) program offers mentoring and other resources to female students in the College of Engineering and Science. The Jungaleers Memorial Scholarship Endowment, for Jazz Ensemble members, was established by former members of the student-operated dance band that flourished at Clemson from the 1920s to the 1960s.

Formula SAE gets checkered flag



CLEMSON'S FORMULA SAE TEAM COMPETED AND WON IN THE first Xtreme College Rivals racing series competition in Atlanta, Ga. — going up against Mississippi State. The series was a fiercely contested battle of two drag-strip runs and two autocross runs, with the outcome down to a heads-up single lap run for the winner. The series should appear on Fox College Sports network sometime in the future.

Students design, build and race a new open-wheel style car each year through the Society of Automotive Engineers' engineering competition. Clemson Formula SAE thanks all sponsors and supporters, with special gratitude to Clemson Student Government, Michelin, Fluor and Earnhardt Technology Group. For more information, go to cufsae.com or contact Michelle Phillips, team leader, at clemsonfsae@gmail.com.

Marketing students earn Honda selection

A CREATIVE INQUIRY group of marketing students has gained the attention of international car manufacturer Honda. Christina Zoha, Ashley Lone and Amanda Hurt (pictured, left to right) developed a six-week public relations campaign for the Honda Sport Hybrid CR-Z.



Honda selected the students' project "What does your car say about you?" as one of 10 campaigns to move forward in a nationwide competition sponsored by Honda and EdVenture. EdVenture Partners programs blend academic theory with hands-on applications, creating a real-world marketing and learning experience for students and educators. James Gaubert is team adviser.

CW•DYK?

The S.C. Botanical Garden at Clemson has a Cherokee Worldview Garden, one of a few in the world that helps convey the relationship the Cherokee have with nature and, in particular, the role that plants play in this relationship. Members of the Eastern Band of Cherokees have been and continue to be involved in this garden to help ensure its accuracy.

Ensuring the fabric of our lives

COTTON PRODUCTION IN THE SOUTHERN U.S. IS worth an estimated \$6 billion a year. More than 440,000 U.S. jobs are directly associated with the cotton industry, which generates annual revenues of more than \$120 billion. But every year, about 10 percent of U.S. cotton production is lost to nematodes.

Clemson is working to stop these losses. **With a \$1.2 million grant from the U.S. Department of Agriculture's National Institute of Food and Agriculture, Clemson will lead a groundbreaking multistate, multidisciplinary study of key precision agriculture technology.** Precision agriculture is the practice of using remote-sensing, soil-sampling and information-management tools to optimize agricultural production.

Results of the project likely will have lasting environmental benefits while saving farmers thousands of dollars a year in reduced input costs. The project will develop and test technologies for site-specific detection and control of plant-parasitic nematodes.

Led by Ahmad Khalilian, Clemson researchers — from the departments of biosystems engineering, entomology, and soils and plant sciences; the Edisto Research and Education Center; and the Cooperative Extension Service — will work with partners at the University of Arkansas, Louisiana State University and cotton growers throughout the three states.

Genetically altered plants, not environmental pests

WE KNOW THAT PLANT geneticists can develop new plant varieties to flourish in harsh growing conditions. But what about undesirable consequences?



The newcomer might pass on unintended traits to other species and potentially impact the environment and ecology systems.

The U.S. Department of Agriculture is funding Clemson molecular biologist Hong Luo's research on how to improve plants without turning them into environmental problems. The USDA recently awarded him \$400,000 to continue his work. (Haibo Liu, an expert in turfgrass physiology, is the co-principal investigator.) It's the third time federal officials have funded Luo's project for nearly \$1.2 million to date.

Luo's research focuses on plants that are economically important, including turf grass. Other plants he and his colleagues study include switchgrass, which is used as a renewable biofuel, soybeans and cotton. The scientists look for genes in the plants that regulate traits to help them flourish, and they look for ways to genetically engineer crops, improving the plants' ability to perform under adverse conditions.

Luo and his collaborator, Liu, also are conducting field trial experiments to study the environmental and ecological impact of the genetically modified perennial species.

Clemson Army ROTC cadet near top of Order of Merit

ARMY ROTC

cadets from around the country hold their collective breath every September as they await news of the release of the national Order of Merit List (OML). Last fall, Clemson cadet Joshua Shane Miller learned that he ranked not only in the top 10 percent, but also as the No. 2 Cadet in the country of more than 5,000. The OML ranks all Army ROTC seniors across the nation, with the top 20 percent earning the designation of Distinguished Military Graduate.



CW•DYK?

You can take a virtual tour of Clemson athletic facilities through an interactive website allowing visitors to ClemsonTigers.com unprecedented access. The application combines 360-degree panoramas with exclusive video and audio content to deliver an experience beyond the standard virtual tour (clemsontigers.com/clemson360).

Scholarship from U.S. astronauts



PHYSICS AND ASTRONOMY MAJOR PATRICK JOHNSON (second from left) received Clemson's first scholarship from the Astronaut Foundation, presented during Homecoming last fall by Charles Moss Duke Jr., retired Apollo astronaut and U.S. Air Force brigadier general (second from right). He's also pictured with Neill Cameron, Clemson's vice president for advancement, and Linn LeBlanc, executive director of the Astronaut Scholarship Foundation.

Established in 1984 by the six surviving astronauts of America's original Mercury program, the scholarship is given to students who show motivation, imagination and exceptional performance in the science or engineering field of their major. More than 80 astronauts from the Mercury, Gemini, Apollo, Skylab and Shuttle programs support the foundation to help the U.S. retain its world leadership in science and technology.

CW•DYK?

Information about Clemson is available in the palm of your hand. The University's new mobile application, m.Clemson, offers campus maps and information on events, athletics, news and images. The application is available for iPhones, iPads and iPod Touches through Apple's App Store. BlackBerry and Android device users can access m.clemson.edu through their mobile browsers.

CW DYK?

Clemson's engineering program ranks 17th among those at the nation's colleges in a new study by *The Wall Street Journal*. The ranking is based on a survey of recruiters with the nation's largest public and private companies, nonprofit organizations and federal agencies. Clemson's ranking places it in distinguished company, ahead of California Polytechnic State University, UCLA, Carnegie Mellon, the Rensselaer Polytechnic Institute and many others.

Deep Orange debuts at Motorsports on the Main

AMIDST THE DIN OF ROARING RACECAR ENGINES, THE inaugural Deep Orange car — the first concept car created by graduate students at the Clemson University International Center for Automotive Research (CU-ICAR) — didn't make a lot of noise. But it certainly made an impression.

A range-extended electric vehicle expected to achieve the equivalent of 100 miles per gallon of gas, the first Deep Orange car was unveiled at Motorsports on Main in Greenville, a kickoff event for the Petit Le Mans race week at Road Atlanta.



The Deep Orange car is powered by lithium-polymer batteries that can be recharged either from a 110-volt wall socket or by a two-cylinder onboard gasoline engine. The result is an all-electric range of 20 miles, overall range of 400 miles, a top speed of 100 mph and acceleration from zero to 60 mph in 10 seconds.

Paul Venhovens, the BMW Endowed Chair in Automotive Systems Integration, leads the Deep Orange initiative. It's part of the graduate automotive engineering program in which students create and manufacture a new vehicle prototype, gaining experience in vehicle design, development, prototyping and production planning. For more on Deep Orange, go to clemson.edu/clemsonworld/2010/spring/article4.html.

Leading thinkers (and doers!)

More examples of why we're so proud of our leaders

Tony Cawthon of leadership, counselor education, human and organizational development was recognized by ACPA (College Student Educators International) as a 2011 Class of Diamond honoree, for outstanding and sustained contributions to higher education and student affairs. The Association of College and University Housing Officers-International also recognized Cawthon and Kathy Hobgood, director of residential life, for their contributions to the student housing profession.

Clemson professor Barry Nocks, director of the city and regional planning program, has been appointed as one of three planning educators on the national Planning Accreditation Board, the accrediting body in North America for university programs in planning.

Public health sciences professor Vincent Gallicchio recently became president of the International Federation of Biomedical Laboratory Science. The federation works with the American Society for Clinical Laboratory Science to recommend educational standards for biomedical laboratory scientists and with the American Society of Clinical Pathology to help standardize an international certification program.

The *Design Intelligence 2011 America's Best Architecture and Design Schools* rankings publication named Clemson President Jim Barker one of the Most Admired Educators of 2011. It also named Clemson's architecture graduate program among the top 20.

Jerry Tessendorf, winner of the Academy Award for Technical Achievement in 2008, is the new director of Clemson's Digital Production Arts program, a graduate program for professionals in the film, video and gaming industries. His credits include *Titanic*, the *X-Men* series, and *The Lion, the Witch and the Wardrobe*.

Executive director of the University's Charles H. Houston Center — Lamont Flowers, a Distinguished Professor of Educational Leadership in the Eugene T. Moore School of Education — has been appointed to the board of advisers for the National Education Finance Conference.

Thomas Kurfess, BMW Chair of Manufacturing in the automotive engineering department, has been elected a director of the Society of Manufacturing Engineers for 2011. The governing body of the international society is comprised of industry and academic leaders from diverse backgrounds representing a wide array of manufacturing disciplines.

C.P. Leslie Grady Jr., professor emeritus of environmental engineering and earth sciences, has been selected to receive the Industrial Water Quality Lifetime Achievement Award from the Water Environment Federation, an international technical and educational water quality organization with 36,000 members.

Diane G. Smathers, associate vice provost and director of the Emeritus College at Clemson, has been selected president-elect of The Honor Society of Phi Kappa Phi, the nation's oldest, largest and most selective all-discipline honor society. She will be president-elect for two years and become president in 2012.

CW DYK?

One of Clemson's most important off-campus research centers — the Pee Dee Research and Education Center in Florence — is turning 100 years old. It has grown from a historical agricultural experiment station into a modern world-renowned research facility, most recently attracting biofuels researchers from around the world. Stay tuned for the celebration.

It's your year to LEAD.



Clemson's success is a direct result of the thousands of Clemson Family members who step up to lead every year. We'd like to say **"Thank You"** for providing Clemson students and faculty with the resources necessary to succeed in the 21st century.

During the The Will to Lead: A Campaign for Clemson, we challenge all alumni and friends of Clemson to dig a little deeper — to help fund scholarships and fellowships for top students; attract and retain the best faculty; and fund initiatives that make a Clemson education exceptional, lead to economic development and foster innovation.

Your tax-deductible contribution to the Clemson Fund counts as a campaign gift and ensures Clemson's continued success. Use the enclosed envelope, call **864-656-5896** or go to clemson.edu/giving.

Get your exclusive Clemson calendar.

It's not too late to get your limited-edition calendar created for Clemson Fund donors who have the will to lead Clemson University in the 21st century. Make a gift to the Clemson Fund, and we'll send you this full-color wall calendar to show our appreciation for all that you do for Clemson. **See the enclosed gift envelope for details.**

Doing Business in the *New Economy*

From South Carolina to California, these alumni entrepreneurs are taking care of business.

by Liz Newall

In the world of small business, Vapor Apparel is BIG. While many companies, big and small, are struggling just to stay alive, this Clemson alumni-founded business is not only thriving in the new economy but also setting standards of its own.

Vapor Apparel, co-owned by Chris Bernat '93 and Jackson Burnett '94, M '95, manufactures athletic performance apparel that's engineered for digital print technologies.

If you haven't heard of it yet, you will.

Vapor Apparel is among the S.C. 25 Fastest Growing Companies (Capital Corp.) and the ninth fastest growing company in the Charleston region (*Charleston Business Journal*).

It's racked up top industry awards for product development and creative output including Digital Printing Industry's Product of the Year and Specialty Graphic Imaging Association's Magnus Award.

You've definitely heard of its customers — New Balance, Family Circle Cup, Cabela's, Boy Scouts of America, Paramount Studios, MTV/VH1 and many others.

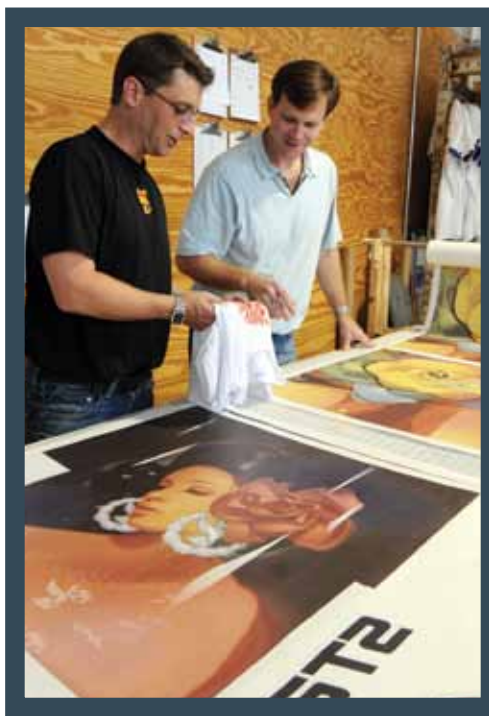
Vapor Apparel is distributed throughout the U.S. — from New York to California; in Europe — Belgium, Germany, Italy, the Netherlands, Portugal and the UK; and in Australia.

The company makes on-demand performance apparel using a digital printing process that binds ink at the molecular level for customization. It also uses a unique fabric that not only wicks away moisture, but that's microbial and stain resistant.

Both the product and the process make the company a standout. But the real secret to its success is its innovative leadership. Co-founders Bernat (chief revenue officer) and Burnett (president) bring a diversity of backgrounds, education and skill sets to the business.

Clemson connections

Chris Bernat came to Clemson from Navesink, N.J. He recalls visiting several schools and finding that Clemson "just felt right." He



Chris Bernat and Jackson Burnett, co-founders of Vapor Apparel in North Charleston

majoried in English and credits "great professors, Dr. Charney, Dr. Steadman" and others with having a major impact on his writing, speaking and marketing skills. As for the overall Clemson experience, he says, "Learning to balance school, work, fraternity (SAE) and the National Guard was great practice for today's demands."

Jackson Burnett grew up a Clemson fan in Greenville. He says, "I applied to several different colleges and universities, but Clemson was the first letter of acceptance I received. I didn't need any more."

Burnett majored in textile science with a concentration in environmental science. He also earned an international MBA (master's degree in business administration). "We have a performance apparel brand, we're working with a mill partner in Colombia, and we're selling in several international markets," says Burnett, "so you can see I'm definitely applying my education."

He too found time for fraternity life (KA) and met Bernat while socializing in front of Wannamaker on the Quad. After graduation, both men worked for a time with the same digital imaging technologies company. Once they decided to start their own company, they drew up a business plan that complemented core technologies and expanded the market.

In the past six years, Vapor Apparel, a subsidiary of Source Substrates, has gone from being managed out of the homes of its founders to its own custom-renovated, LEED-certified center at the old naval base in North Charleston. And its wares are now distributed throughout the U.S., Europe and Australia.

But the partners, avid Tiger fans, still have time for Clemson. In fact, several years ago, Burnett began the Tradd Gibbons Endowment for a Clemson fraternity brother who passed away. Supporters have already raised significant funds for the endowment, which will eventually grant an academic or athletic scholarship to a Wando High School student to attend Clemson.

Going green

Even as the economy has stalled over the past few years, Bernat and Burnett have remained determined not only to grow their business but also to try to enhance its commitment to the environment.

The company's clothing is made in Colombia, the 10th greenest country on the planet (according to the 2010 Yale University Environmental Index) where the national power grid is almost 70 percent renewable energy.

Vapor Apparel uses a water-based ink solution and works with a number of fibers including yarn made from 100 percent post-consumer recycled materials. But perhaps the biggest part of Vapor Apparel's green plan is its decision to operate in a LEED-certified building, a rarity in the industry, in the historic navy yard in North Charleston. It was the first private company to sign on with the Noisette Co. at 10 Store House Row, where the commitment to LEED had begun several years earlier.

In 2009, the business partners expanded from a 2,200-square-foot office to its current 22,000 square feet. The eco-friendly facility, which has been rid of lead paint, takes



Vapor Apparel's 100 percent post-consumer recycled shirt — winner of 2010 DPI Product of the Year award, digital textile division

advantage of natural light and green building materials. A water-based air conditioning system reduces energy costs, and the facilities reduce water usage by 66,000 gallons a year. Vapor's expansion and relocation also eliminated about 400 hours a year in work-related driving.

"Being part of the redevelopment of the Charleston Naval Base means a lot to us," says Bernat. "There's real change going on down here if you know where to look. And we are thrilled to be neighbors with the Clemson University Restoration Institute."

Shaping the industry

Along with nourishing its own growth and eco-responsibility, Vapor Apparel is helping to shape the industry by example and by education.

Bernat is a frequent speaker and educator on mass customization, sublimation and digital print technologies for many groups including The Imprinted Sports Wear Show, The Printwear Show, National Sporting Goods Association and Specialty Graphic Imaging Association (SGIA).

At SGIA, Bernat and Burnett spearheaded the creation of the Digital Apparel Production Zone to help educate the apparel market on digital printing. Bernat has since been invited to sit on the SGIA board of directors. In addition to presenting at conferences and trade shows, Bernat has written for *Impressions Magazine*, *Printwear* and the *SGIA Quarterly Journal*.

Reflecting on the current state of the industry and Vapor Apparel's success, he says, "Customization is one of the largest trends of our lifetime. The customization trend of clothing is only beginning. By working with clients to create vertical content — we have been able to harness its economic power into retail environments."

And holding on to their personal green-standard commitment is an added bonus for their business. When the 2010 Family Circle Cup named Vapor Apparel its official apparel partner, general manager Bob Moran said, "There are not many performance apparel brands that can offer Vapor's level of customization or their commitment to the environment."

ICON flying high

Meanwhile, on the West Coast, another young business co-founded by a Clemson alumnus — ICON Aircraft, a light sport aircraft manufacturer — is making news of its own.

By news, we mean NBC's "Today Show," CBS's "Sunday Morning," Fox News, Associated Press, *Popular Mechanics*, *Wired*, *BusinessWeek* and other high-profile media.



ICON Aircraft A5, light sport amphibious aircraft

The buzz is about ICON's A5, a light sport amphibious aircraft. It's built with a carbon fiber airframe and retractable landing gear, so it can take off from water or landing strips. It seats two people in an enclosed cockpit with wraparound canopy and is powered by a single internal combustion engine driving a pusher propeller. Its high-wing design allows folding for storage — think "garage."

And it's so ultra-cool, techno-sexy that it made the pages of the *2009 Neiman Marcus Christmas Book*.

Love of heights

One of its founders is Clemson mechanical engineering graduate Kirk Hawkins '91. Hawkins, who's also a graduate of Stanford Business School, founded ICON Aircraft in 2005 with Stanford classmate Steen Strand.

Hawkins got the idea soon after the Federal Aviation Administration's groundbreaking regulatory change in 2004 created the Light Sport Aircraft category and Sport Pilot license. He envisioned a spectacular sport aircraft to inspire pilots the way great sport cars inspire drivers.

An accomplished engineer, former U.S. Air Force F-16 pilot and longtime motorsport enthusiast, Hawkins began his love of flight at Clemson. As a student, he built an ultralight airplane on his own and equipped it with floats so that he could land it on Hartwell Lake.

Clemson classmate and friend David Crook '92, also a mechanical engineering graduate, is chief financial officer for the company. Crook, who holds an MBA from UCLA's Anderson School of Management, was a senior vice president at CWCapital before joining ICON.

Impressive demand

While the ICON A5 has been going through rigorous and comprehensive testing, the company has conducted an equally meticulous global supply chain analysis to choose the suppliers of structural composite assemblies — selecting Liberty Aerospace of Melbourne, Fla., and Flytech Kft. of Szombathely, Hungary.

"At ICON, we do our homework to ensure we get to great solutions — and this is just another example," says Hawkins. "Partnering with established suppliers allows ICON not only to reach production sooner, but also to accelerate the production ramp to meet the impressive demand we're seeing for the A5."

The first commercial A5s should be ready to take to the sky later this year. And they can't come too soon for the nearly 500 customers on the waiting list.

We can't say for sure who's on the waiting list, but we can tell you that the A5 has received high praise from top airline and boat executives, champion NASCAR driver Carl Edwards, seven-time Supercross champion Jeremy McGrath, world-renowned air show pilot Sean Tucker. And you may have seen it in blockbuster movies starring Robert Downey Jr. and Tom Cruise.

Back to Clemson

When Clemson mechanical engineering student Ross Epstein read about ICON Aircraft, he knew he had to meet Kirk Hawkins. After many e-mails, calls and conversations, he got an invitation to visit ICON in Los Angeles. And over a year later, he found himself in the dream position, managing to get an internship with the company last summer.

During his two-month internship, Epstein was tasked with building a motion flight simulator and flight simulator for the ICON A5. Two of these simulators were included in ICON's booth at EAA AirVenture Air Show in Oshkosh, Wis. (See "In his own words," p.16, for more on his project.)

As for the ICON internship, Epstein says he experienced "a business that combines great marketing, propelled by an award-winning product that can stand on its own, created by a phenomenal team of skilled individuals who seem like family."

Hawkins is a mentor to other Clemson students as well. Last year he returned to the Upstate to speak about entrepreneurship as part of Clemson's Spiro Institute for Entrepreneurial Leadership and to visit MBA classes at Clemson at the Falls in Greenville, home to the College of Business and Behavioral Science's MBA program and Small Business Development Center.

ICON Aircraft, like Vapor Apparel, will be interesting to watch in the coming years. Both are powered by tremendous energy, a "no fail" mindset and a passion for getting it right. And we like to think the Clemson experience, both in preparation and determined spirit, has a role, too.

For more on Vapor Apparel, go to vaporapparel.com. For more on ICON Aircraft, go to iconaircraft.com. 🌐

Kirk Hawkins, co-founder of ICON Aircraft in Los Angeles, with David Crook, CFO

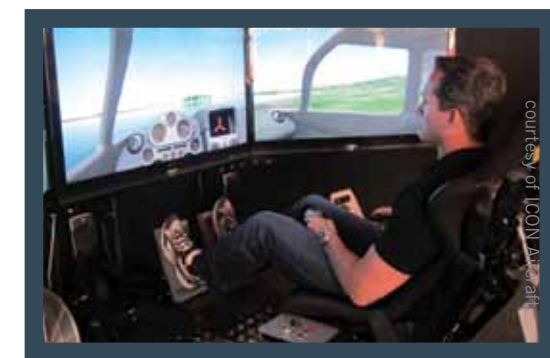


Hawkins at the controls

In his own words

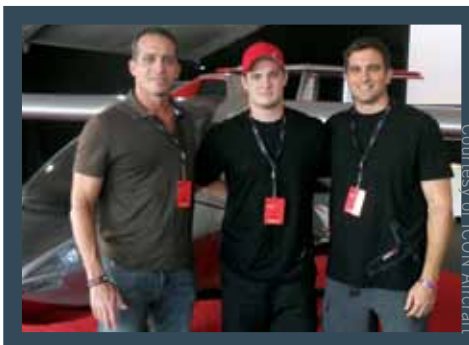
ROSS EPSTEIN, PRESIDENT of Clemson's student section of American Society of Mechanical Engineers, created simulators for ICON Aircraft during his internship. Here's his description of the project.

Rather than reinventing the wheel, I found a great company that built Formula 1 motion simulators, CXC Simulations. I took their production simulator and transformed it into a flight simulator. I designed the control panels (switch panels) and flight controls (stick, throttle & rudder). Some items were purchased and some were fabricated from scratch. The physical flight deck was equipped with 3 46" LCD screens.



A5 flight simulator

For the virtual display, we used a flight simulator computer game called X-Plane. The A5 had to be designed virtually in X-Plane. All of the flight characteristics had to be dialed-in so the virtual model would behave aerodynamically and hydro-dynamically like the A5. I made use of Dr. Figliola's aircraft design class in order to work with ICON's design engineers to develop the A5 virtually. Once two simulators were complete, they were included in ICON's booth at EAA AirVenture Air Show in Oshkosh, Wis. Nearly 600 people rode the simulators at the air show. It was a terrific experience!



Student Ross Epstein (center) with Hawkins and Crook during internship



Spiro Institute for Entrepreneurial Leadership

THE ARTHUR M. SPIRO INSTITUTE FOR Entrepreneurial Leadership at Clemson supports educational, research and outreach programs that promote entrepreneurial activity and economic development of the region, state and nation.

The institute assists inventors and entrepreneurs with market analyses and business planning, links entrepreneurs with experienced business executives, and oversees academic and executive education courses in entrepreneurship and new venture creation.

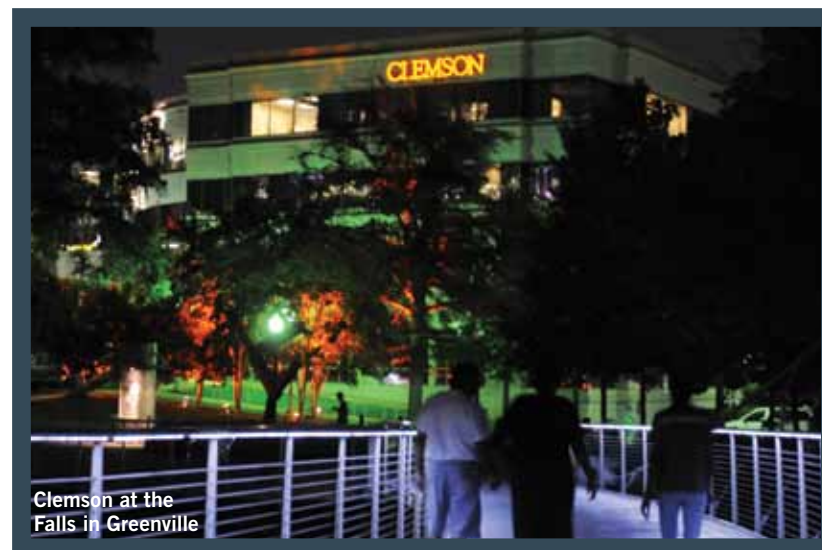
It sponsors the S.C. Collegiate Entrepreneur Awards for students and other award programs for inventors and entrepreneurs. It conducts seminars, provides research grants and supports a working paper series to encourage related research. For more information, go to clemson.edu/spiro.

Clemson at the Falls — hub for business education

CLEMSON AT THE FALLS — OVERLOOKING the Reedy River in downtown Greenville — is Clemson's innovative new hub for business education.

It combines all Clemson MBA programs, all Renaissance Center activities and programs, an office of the Spiro Institute for Entrepreneurial Leadership, the regional offices for the Small Business Development Center and Professional Advancement and Continuing Education under one roof.

The result is a dynamic synergy among students, faculty, business leaders, industry and the Upstate community. For more information, go to clemson.edu/cbbs/clemsonfalls.html.



Clemson at the Falls in Greenville



Our new looks have great taste.



Think you know all the eateries on campus? Think again.

We're always working hard to improve your dining options when you visit.

Those who are running short on time can visit the Eastside Food Court for a quick bite at the new Papa John's and POD Mini Mart.

If you're craving a burger just the way you like it, the Fernow Street Café now features the Burger Studio where you can build your own masterpiece with sirloin, chicken and vegan burgers. An interactive touch-screen kiosk allows you to celebrate your individuality by choosing from tasty toppings, wicked cheeses and insane sauces — all while you watch your sandwich develop on the screen. It's also open for breakfast so you can awaken with artful English muffins and biscuit sandwiches with all the fixings.

For those in the mood for something traditionally Clemson, drop by the Clemson House dining hall for an all-you-care-to-eat meal — it's been fully renovated for a modern experience with a comfortable feel.

Stop by the next time you visit campus to savor our new looks and great tastes!

CLEMSON
DINING SERVICES

Bricks of Promise

by Ross Norton



Architecture students help create the foundations of a village.

Okurase brick-makers with Powerful (center), Chris Moore (far right), his wife, Evan (back row, right), and Cynthia Swenson (back row, left) from MUSC

When Chris Moore '05, M '10 stood in the African sun and finally clutched a handmade brick, he felt the drum beat of unity. He had spent a great part of his graduate years in Clemson's School of Architecture working toward this moment.

It wasn't just a brick. It was a literal and figurative building block — a brick that promised sustainability, friendship and a better future for a small village in Ghana. It's a piece of building material that has unified people on both sides of an ocean, a brick that portends commerce, culture, health and home. A brick that heralds vocation, growth and change to a village named Okurase. But the first brick Moore held was the remnant of disappointment.



Project Okurase — Nkabom Centre

Project Okurase is a partnership among people in South Carolina; Okurase, Ghana; England; and others, including drummer Samuel Nkrumah Yeboah, also known as Powerful. The overall purpose of the project is to address the HIV/AIDS crisis in Ghana by helping susceptible and orphaned children who are affected by the disease. The objectives are to provide skills training and formal education to vulnerable children and women, and to connect orphaned children with families.

To that end, students and faculty of the Clemson Architecture Center in Charleston designed a 16-building Nkabom Centre for Skills Training and Formal Education. A program to train brick-makers would provide the basic building materials to start construction.

They eagerly learned their new craft but weren't able to keep the equipment. The people of Okurase found themselves with new skills but no machine, building plans but

no construction material except for a single pile of bricks. The latest new hope for self-sufficiency seemed to be snuffed.

The plight of Okurase is a familiar one: poverty, illness and a lack of water, infrastructure and education in a remote village of about 2,500 residents. The setback was just another in a long series.

1 x 4 x 2 = Hope

But the same architecture studio that designed the buildings had another idea: design, build and deliver another brick-making machine. Eventually, they would do even better. In October, four new machines arrived in the village. And while the old machine made one brick at a time, the new ones make two at a time.

Moore spent almost eight weeks in Ghana. He worked on site preparation for the first of the Nkabom Centre buildings while his wife, Evan, used her Winthrop University degrees in dance and in communications disorders to set up after-school workshops for the children, along with project coordinator Nana Ama Yeboah. Moore hoped to be there when the Clemson brick machines arrived, but the shipment was late and didn't reach Ghana until he was back in South Carolina.

No matter. There was plenty to do and the people of Okurase were eager to help. So Moore worked alongside the Ghanaians on site preparation to ensure proper placement and solid foundation.

"They received our help not as a handout but as a partner. It's our collective project. They were very receptive to that idea," says Moore. "*Nkabom* means *unity*, and the word really fits the people and the project. They love life, they love people, and there's a sense of community that's unparalleled here in the U.S."

The first building in the complex will not only be made *of* the bricks, it will also be made *for* the bricks. At 16,800 square feet, it will be, by far, the largest building in the village and home to the brick-making enterprise. The people of Okurase will use the building to produce the revenue that will lead to construction of the rest of the Nkabom Centre. Their textile crafts will be moved there, as well as drum-making — the tradition that led to the partnership in the first place.

A drummer named Powerful

Cynthia Cupit Swenson, professor of psychiatry and behavioral sciences at the Medical University of South Carolina and a volunteer with Project Okurase, helped connect Clemson and Ghana through a renowned drummer and drum-maker named Powerful. After a drum-making partnership that connected a community anti-violence project in Charleston to the drum-makers of Okurase, Powerful suggested a long-lasting partnership that could help the Ghanaians reach a level of sustainability.

"The idea is to work together for the people of Okurase to develop the means to help themselves," she says. "They're very open, honest people, and they are so eager for this chance to build something lasting."

Ray Huff, assistant professor and founding director of the Clemson Architecture Center in Charleston, says the brick machines and the center will have a ripple effect on the community.



"We hope this leads to a level of self-sufficiency for the people of Okurase. They can use the bricks to build the center. But it's more than that," he says. "They can teach people how to make compressed earth bricks, and they can train people in how to build, and when they have more bricks than they need, they can sell them."

Making a difference, Clemson-style

The project is a service-learning tradition that is the legacy of Robert Miller, who was director of the Clemson Architecture Center in Charleston for 10 years before accepting a position with the University of Arizona last summer. Miller's studios tied architecture to community service to bring about something good.

The studio connected with Project Okurase first to design the Nkabom Centre for Skills Training and Formal Education. The 16-building complex will give the village a place for health care, teaching, job skills training, child care and more.

Huff says the Clemson machines had to be manual because of the absence of electricity and durable enough to withstand years of heavy use. Time ran out for the students as the semester came to an end, but metal artisan Sean Ahern, a lecturer in the Clemson Architecture Center in Charleston, completed the design and construction of the machines that have been named the "Ahern Model."

Denis Brosnan of the University's materials science and engineering school tested the bricks for structural integrity.

"The Clemson professors and students have been incredible," says MUSC's Swenson. "It's an amazing gift that provides this village a means for a better life. In Okurase there is a saying: *You are invited*. The people of Okurase would like the people of Clemson to know that there is a feeling of kinship and that they are invited to be part of the family of Okurase from here forward."

For more on the Clemson Architecture Center in Charleston, go to clemson.edu/caah/architecture. For more on the Okurase Project, go to www.projectokurase.org.



Bowfire: Tuesday, March 1, at 8 p.m. at the Brooks Center for the Performing Arts

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More than 800 works of art and 75 performances this year. Make your picks, find your seats, and follow us online at clemson.edu/brooks and clemson.edu/cva. Or connect with us on Facebook: Search for the Brooks Center for the Performing Arts and the Center for Visual Arts at Clemson University.



Clemson National Print & Drawing Exhibition: Feb. 22-April 7 in the Lee Gallery
Detail: Rabbit Trap, Tar Baby, and Flood Waters by Ke Francis

HOW WILL YOU

LEAD?

Kevin Dejonckheere

Mechanical Engineering Student

Kevin Dejonckheere has learned to lead by serving, devoting himself to a cause both personal and meaningful. After being diagnosed with bone cancer at age 19, Kevin was forced to leave his studies in mechanical engineering to undergo extensive treatment. But with the overwhelming support he received from Clemson faculty and friends, Kevin made it through the ordeal and now supports cancer research, especially for pediatric patients like those he met while hospitalized, by organizing a charity race and other fundraisers. Today, Kevin is back on track for graduation and a future, he hopes, that will continue to benefit others.

Students like Kevin are sharing the strength of the Clemson Family with the world through dedicated service to valuable causes.



Scholarships and fellowships, provided through the generosity of Clemson donors, help attract the kind of students who exhibit determination in everything they do. That generosity instills in our students the desire to give back in order to make a difference in the lives of others.

Will you be the one to make a difference? Will you lead? Make your gift or find out more at clemson.edu/giving.

The Will to
LEAD
A CAMPAIGN FOR CLEMSON

This year, Clemson launched **The Will to Lead: A Campaign for Clemson**, an effort to raise more than \$600 million to support Clemson students and faculty by July 2012.

When great minds *collide*

By Liz Newall

Clemson University innovation allows the medical field to reach patients in leaps rather than small steps.



Oral and maxillofacial prosthodontist Betsy Davis (right) and assistant Kathy Hood of MUSC during procedure

An engineering graphics professor finds a way to help patients recovering from facial cancer. He teams up with a prosthodontist to customize and speed the production of facial prosthetics, helping restore patients' self-confidence and emotional health.



A bioengineer works with a veterinary sciences professor with expertise in mammary stem cells to improve understanding of breast cancer in humans and to create engineered tissue for pinpointed research and better treatment.

A chemist develops ultra-bright nanoparticles with fluorescent dye molecules that make it possible to track individual virus particles inside a living cell with amazing precision. His work will help other scientists tracking plaques and fibrils in the brain associated with Alzheimer's and other diseases.

An expert in engineering bone tissue works with an orthopedic surgeon on implants, creating bone plugs and developing ways to fix them into place in defects. Her work will help trauma patients regain mobility and function more quickly.

How do experts in seemingly unrelated fields discover these life-changing connections that affect us all? They cross paths, run into each other, find new possibilities outside their own boundaries.

New ideas frequently occur at the intersection of seemingly unrelated concepts or fields. Clemson professor and alumnus Karen Burg (M '92, PhD '96) takes it a step further calling it a welcome collision.

"Often it takes a collision of different perspectives to have that 'Aha!' moment," says Burg, whose team works with experts not only campuswide and statewide but also nationally and internationally. "Innovation at the boundary of disciplines allows a field to move forward in leaps rather than slow steps."

Burg directs Clemson's Institute for Biological Interfaces of Engineering — IBIOE, for short, pronounced "I-bio-E." **The institute's mission is to develop clinically relevant biomaterials technology and products for disease management and (this is where we come in) to apply this research to patient care.**

New model for medical leaps

IBIOE grew from this desire to facilitate the collision of different perspectives — bigger breakthroughs in the lab that are more quickly applied in the field.

The institute is a South Carolina-based interdisciplinary research and educational unit, spanning Clemson's academic colleges. And as you can guess by now — it's not your typical university research unit.

It isn't housed in a college or in a department or restricted by boundaries associated with academic units. And it doesn't depend on tenured or tenure-track faculty members who have allegiance to a discipline and who dedicate time to institutes only on an "as available" basis.

With the IBIOE model, research is built around permanent research faculty members who are 100 percent research-focused and who, therefore, understand and can meet timelines, goals, industry requirements and other constraints. These faculty members can then connect with tenured and tenure-track faculty, drawing them in as needed.

IBIOE faculty collaborators range from engineering to biological sciences, psychology to statistics, computer science to management.

Leading the researchers, along with Burg, is IBIOE deputy director Guigen Zhang, an expert in stem cell tissue engineering, multiphysics modeling and micro/nano bioengineering. He recently received a \$100,000 grant from the Bill & Melinda Gates Foundation through IBIOE to help fund work to create low-cost diagnostic tools for doctors in developing countries.

From scientist to surgeon

The collaborative nature of IBIOE is designed not only to make cutting-edge breakthroughs in biomaterials technologies, but also to get them into the hands of those who can use them to change lives.

In the process, the institute is becoming a go-to electronic research and training "collaboratory" to facilitate surgeon-researcher interactions and accelerate advanced technologies to the clinic.

To do so, the institute collaborates with foundations, other universities, industry and centers on various research initiatives and projects. In addition to the Gates Foundation grant for diagnostic tools, **the National Science Foundation has awarded \$2 million to IBIOE to build tissue models to study the relationship between low oxygen tumor environments and the progression of cancer.**

Avon Foundation for Women has granted IBIOE \$195,000 to support research aimed at improving reconstructive breast surgery using engineered tissue that contains anti-cancer properties. **And the Department of Defense has awarded \$2.9 million for developing engineered breast tissue that will be used to study the causes, progression and treatment of breast cancer.**

Another collaborator is the AO Foundation (Arbeitsgemeinschaft für Osteosynthesefragen), which supports basic scientific, pre-clinical and clinical research in all areas of trauma, surgery of the musculoskeletal system and related problems. This Swiss foundation has provided continued grant funding to IBIOE to build bone models and technology to test new methods of improving bone repair in large bone defects.

Synthes — a global medical device company specializing in the instruments, implants and biomaterials for the surgical fixation, correction and regeneration of the human skeleton and its soft tissues — is sponsoring IBIOE biomaterials research in the area of trauma management and reconstruction.

IBIOE also works with the Medical University of South Carolina (MUSC) Center for Functional Outcomes and Reconstructive Biotechnology, a clinical research center devoted to returning function and quality of life to patients who have lost oral/facial structures. MUSC clinicians are working with IBIOE faculty to develop hard and soft tissue cell-based reconstructive therapies.

Other IBIOE medical collaborators are found at the University of Miami Miller School of Medicine (Miami, Fla.), the Indiana University School of Medicine (Indianapolis, Ind.) and Carolinas Medical Center (Charlotte, N.C.). Research focus areas span from bone reconstruction to cancer therapy optimization, but the goal is the same — providing leading-edge research to benefit the patients. The diversity of medical partners allows the blending of ideas to create uniquely relevant research.

University of North Carolina (UNC) Department of Statistics and Operations Research researchers are working with IBIOE faculty in the development and analysis of tools to enable biomodeling and evaluation of cell-based systems.

IBIOE is also collaborating with the University of North Carolina at Charlotte (UNC-C) Department of Biology to develop new 3-D tissue systems for developmental biology studies, including mechanisms of cancer metastasis, vascular and immune interactions during cancer growth.

Making such research and collaboration possible is Clemson's Computing and Information Technology (CCIT). CCIT maintains an outreach program that supports the computing activities of various state and federal agencies, educational institutions and private companies. Its staff members are working with IBIOE researchers to develop new, immersive research environments.

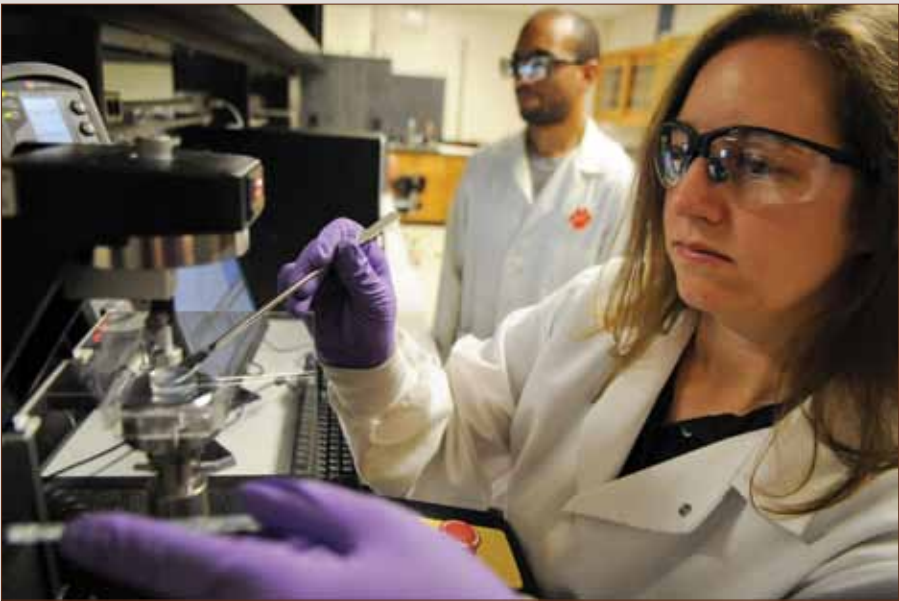
Doing as teaching

The educational goal of the institute is to immerse students and medical residents in a technically diverse environment to hone technical, entrepreneurial, communication, leadership and teamwork skills.

IBIOE is heavily involved in community outreach and education through performing biomedical demonstrations. These activities help IBIOE researchers transfer their work from the lab to the real world for others to see firsthand.

The institute's role in teacher education reaches across South Carolina through National Science Foundation-sponsored summer training programs for teachers based on the Clemson campus, all the way to Massachusetts through the Boston Museum of Science Teacher Training seminars.

IBIOE students, with the help of IBIOE faculty members, have developed half a dozen classroom-friendly modules that convey complex biomedical ideas that teachers can incorporate in the classroom while helping IBIOE researchers become better presenters and communicators outside the laboratory setting.



Clemson IBIOE graduate students Erik Bland and Erin McCave

“Community engagement programs help me communicate with the general public because I use different terminology when talking to a fourth-grader than I do when I'm talking to another scientist,” says IBIOE graduate student researcher Cheryl Gomillion. “It provides me with a completely different professional development experience.”

In addition to students' involvement in IBIOE work through their professors, the institute is launching a new training program — Call Me Doctor™. This professional development intensive program supports high-achieving minority students pursuing doctoral studies through IBIOE; the long-term goal is to institutionalize the program and facilitate widespread participation from non-IBIOE students.

Call Me Doctor Fellows are paired with a mentor/adviser and work in the IBIOE collaborative, team-based research and training environment.

Part of the Call Me Doctor student's experience is partnering with educators, other students and faculty mentors to deliver cutting-edge science and engineering concepts to the community and K-12.

Huge business potential

Another of IBIOE's goals is to maximize economic development for South Carolina through the establishment of an internationally recognized Medical Research Center with industrial partners.

Business opportunities are both huge and proven. An example is KIYATEC, a company founded by Matt Gevaert M '99, PhD '03 and David Orr PhD '06 in 2005, based on an IBIOE technology.

KIYATEC's corporate mission to commercialize novel 3-D cell culture technology developed in IBIOE's laboratories. It was awarded the 2007 Five Ventures innovation award, and its founders were

recently featured among “Twelve People Whose Technology Will Change the World” in *Greenville Business Magazine* (April 2010).

KIYATEC personnel work to deliver enabling 3-D cell culture tools for the pharmaceutical, biomedical and life science industries. These efforts will ultimately provide researchers and clinicians with advanced in vitro diagnostics for improved understanding in cell and systems biology, drug development and clinical diagnosis.

“The underlying principle of KIYATEC — as IBIOE researchers on the front edge of these discoveries have found — is that there are great advantages in growing cells in three dimensions,” says KIYATEC CEO Gevaert. “KIYATEC's proximity to IBIOE provides a work force development advantage. IBIOE exposes students to disparate areas of expertise and produces students that have exactly the skill set that we require for KIYATEC.”

IBIOE continually looks for business opportunities and therefore often collaborates with Clemson's Arthur M. Spiro Institute for Entrepreneurial Leadership. The Spiro Institute supports educational, research and outreach programs that promote entrepreneurial activity and economic development of the region, state and nation.

IBIOE researchers, in collaboration with the students and faculty members of the Spiro Institute, are involved in intellectual property process, including the development of more spinoff companies and forecasting of new business opportunities. For example, a Spiro MBA team evaluated IBIOE's tissue test systems technologies last year.

“They developed a fantastic market analysis,” says Burg. “One of the students from that team is beginning similar analysis of an absorbable tissue expander that we are assessing for craniofacial application as well as breast tissue engineering. Spiro students will also be developing a marketing piece to facilitate technology transfer to industry.”

To make the most of economic development opportunities, IBIOE has appointed Clemson University's first Professor of the Practice — an expert whose industry or business background aids the University's mission — Steve Hunter. Hunter, who spent 39 years with General Electric, is helping pair private-sector connections with its core researchers and will mentor students on real-world applications for research.

IBIOE faculty Tim Burg, director Karen Burg, faculty Rick Groff and graduate student Bryant Mersereau (graduated in May 2010)



Perhaps the greatest stamp of approval for the new research model comes from the state. **IBIOE was awarded a \$6 million Center of Economic Excellence last year in Tissue Systems Characterization. The General Assembly provides dollar-for-dollar state funding through the S.C. Education Lottery to match non-state investment to support an Endowed Chairs program.** The program recruits world-class faculty members to lead key research areas to stimulate South Carolina's economy and create high-tech jobs that raise per capita income at all levels. Clemson has recruited five internationally recognized scholars to its Endowed Chairs program.

The institute is working to raise matching funds so that the University can recruit an endowed chair for IBIOE — someone with human cell biology credentials — as a permanent research faculty member.

Of course, as important as economic development is, the overriding goal is still healing.

Orthopedic surgeon James Kellam of the Carolinas Medical Center, who collaborates with Burg and the team, says: “While the science of IBIOE is cutting-edge and complex — and the future implications are mind boggling — the underlying goal is fundamental.

“This interaction and the networking and the creation of the institute involve the surgeon with the scientist, and the surgeon's clinical problem drives the issues that the scientist is solving. So this allows us to take these discoveries and not keep them in the research lab — to move them out to the public and to use them to make a better life for people — that's what this is all about.”

For more on the Institute for Biological Interfaces of Engineering, go to clemson.edu/ibioe or call 864-656-5395.

Clemson Renaissance man James Oliver “Jim” Sweeny '39, HD '10

When Clemson conferred nearly 700 degrees in August, the University also presented a special honorary degree to electrical engineering graduate Jim Sweeny of Highlands, N.C., for his outstanding career and support of the University.

After graduation and then foreign military service, Sweeny joined General Electric Corp. — and stayed for nearly 40 years — where he worked in test program administration, market research, product planning, marketing and business management.

At Clemson, he led volunteer efforts that created unrestricted scholarships, the Class of 1939 Faculty Award for Excellence and an endowment for the S.C. Botanical Garden.

He's a charter member of the Presidents Club and was chairman of the Class of '39 Golden Anniversary committee. The Clemson Alumni Association named him Volunteer of the Year in 1998 and awarded him the Distinguished Service Award in 2000.

Sweeny is also a well-known numismatics expert. He has authored and co-authored numerous articles and has written several books on coin-collecting, including the prize-winning two-volume reference titled *Tempus in Numis*.



Calling Class of 1961!

Plan now to come home to Clemson for your 50th Reunion, June 9-11. To find out more about the Class of 1961 Golden Anniversary and how you can support your class project, go to cualumni.clemson.edu/1961 or call 864-656-1240.

Lowcountry leader

Arthur Herbert “Doc” Lachicotte Jr. '49

When you think of Pawleys Island, you probably think of “hammock.” And if you know anything about the area, you'll probably think of “Lachicotte” too, a family name deeply rooted in the Lowcountry.

Arthur Herbert Lachicotte Sr. '13 established the original Hammock Shop in the 1930s. His son, Doc, came to Clemson, served in the military and returned to earn a degree in horticulture. Doc then helped expand the family busy to include a nursery, and from there, he added a real estate development company, which is now the Lachicotte Company Real Estate Sales and Rental.

He's also known in Georgetown County for preserving history, collaborating with his fellow citizens and improving the economy. In 2007, he was named an S.C. Economic Development Ambassador for the county by the governor. The Georgetown County Chamber of Commerce recently presented to him its Lifetime of Leadership Award.

For Clemson, he and Martha, his wife, have supported various programs and projects through planned giving and outright gifts, including the Leadership Circle, significant unrestricted gifts to be used at the discretion of the president, a dean or other administrator. He's pictured with his daughter Lou on the porch of the Lachicotte Company in Pawleys Island.



courtesy of Baye Anne Tanner, Lachicotte Company

1961

Ron E. Cowart (HORT, M '63) of Elgin has launched a landscaping consulting business, Cowart Landscape Consulting. He's also a horticulture lecturer at Midlands Technical College in Columbia.

Luke A. Nance Jr. (AGE, M '67) of Columbia received the Association of Retired Conservation Service Employees President's Award for Outstanding Community Service for his volunteer service to the agency. He retired as planning engineer for flood control projects. He's the proud father of three Clemson alumni — ***Marcy '86** (MASC), **Tom '88, M '90** (ME) and **Eva '89** (ECON). Eva serves on the senior advisory board for the College of Business and Behavioral Science.

1967

Ronnie E. Bullock (SED) of Oxford, N.C., was elected to serve a four-year term as a city commissioner.

Oscar N. Vick (INED, M '70) of Charleston was featured in the British textile arts magazine *Selvedge* for his paintings of and recipes from sweetgrass basket weavers. He's a watercolorist and the author of numerous cookbooks.

1968

***David H. Wilkins** (HIST, HD '03) of Greenville is a member of the board of trustees for SC BIPEC — business and industry political education committee. The chairman of the Clemson Board of Trustees is the former U.S. Ambassador to Canada and serves on the board of directors for Porter Airlines, the Royal Bank of Canada, North America and the Greenville Area Development Corp.

1970

Donald S. Cherry (M ZOOL, PhD '73) of Blacksburg, Va., was conferred the title of professor emeritus by the Virginia Tech Board of Visitors. He's a retired professor of biological sciences.

1950s mystery solved!

Thanks to **Frank Townsend '85** of Aiken, we've solved the mystery in which we asked readers to help identify a Clemson “C” charm and a photo signed “Patrick” (summer/fall 2010, p. 26). Townsend told us the photo was of his childhood neighbor and friend Patrick Allen, whose father, **Albert “Ab” Allen**, was a 1956 graduate. Ab, a member of the Central Dance Association, had given the “Jr., Sr.” bracelet to his wife, Judy, many years ago. Ab passed away in December 2009, so having this token of his love returned was especially touching to Judy. A special thanks to Risa Weiss, whose kind heart and strong will made this reunion possible! For more on the story go to www.aikenstandard.com/Local/0902Treasure.



1971

Robert M. Behling (POSC) of Wernersville, Pa., is borough manager for the Borough of Manheim in Lancaster County.

1975

Mike J. Ellerbrock (M RPA, PhD '80 APPEC) of Blacksburg, Va., serves on the Virginia Tech Board of Visitors. He's a professor of agriculture and applied economics in Clemson's College of Agriculture, Forestry and Life Sciences.

1976

Edward M. Gouge (PhD CHEM) of Clinton retired as the Daniel Professor of Chemistry, College of Arts and Sciences at Presbyterian College. He's an adjunct professor in the college's School of Pharmacy.

1977

Teresa W. Knight (PSYCH) of Gray Court is chairman of the S.C. Bankers Association. She's executive vice president of bank administration, human resources and marketing for The Palmetto Bank.

1979

***Robert H. Jones** (FORMGT, M '81 FOR) of Morgantown, W.Va., was named dean of Eberly College of Arts and Sciences at West Virginia University.

Jeanie Garren Whitten

(SED-NS, M '84) of Fort Mill was named 2008-09 District Teacher of the Year for the Fort Mill School District. She teaches physics at Fort Mill High School.

1980

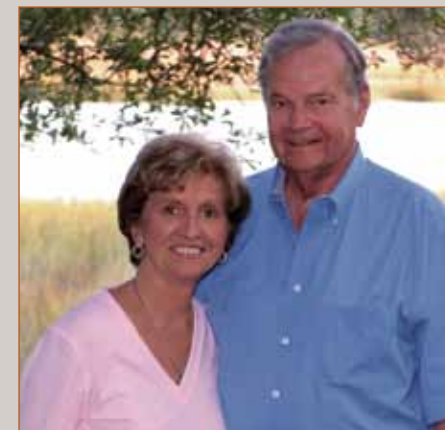
Tena Moyd Cogswell (SPAN) of Spartanburg

was appointed to serve a four-year term on the industry trade advisory committee on textiles and clothing with the U.S. Department of Commerce. She's vice president of marketing for Leigh Fibers Inc. in Wellford.

***W. Kelly Durham** (POSC) of Clemson has published an e-book, *The War Widow*, set in post World War II during the Nuremberg trials. For more on the novel, go to www.smashwords.com/books/view/18459.

1982

J. Wayne Merck (ME, M '93 BUSADM) of Greer is a senior adviser for Angelo, Gordon & Co.'s private equity group. He also serves on the board of the firm's portfolio company, KEE Action Sports.



Dairy legend and civic leader

Frank S. Hanckel Jr. '55

Dairy graduate Frank Hanckel grew up on Coburg Dairy in Charleston, a company co-founded in the 1920s by his father. He helped it become the largest independent dairy in South Carolina, also with customers in North Carolina and Georgia, and served as its president and CEO.

The Charleston Metro Chamber of Commerce recently presented him with the 2010 Joseph P. Riley Leadership Award for his outstanding leadership qualities and skills to make the region a better place.

He has been active in civic, community and charitable affairs including leadership roles in the Trident United Way, March of Dimes, Lowcountry Red Cross, Charleston County Parks, Recreation & Tourism Commission, S.C. Jaycees, Charleston Clean City Commission, Charleston Rotary Club, S.C. Chamber of Commerce and others.

For Clemson, he has served on the Foundation Board, Board of Visitors, Dairy Science Advisory Board and the Commission for the Future of Clemson. He received the Alumni Distinguished Service Award in 1985. He and his wife, Loraine (pictured here), have also provided for the Frank S. & Loraine B. Hanckel Family Endowment for the Clemson University Libraries, the Frank S. & Loraine B. Hanckel Family Endowment for the Class of '55 Exchange and a generous gift to the Palmetto Challenge Program.

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Graphic communications leader

Stephen L. Johnson M '76

Industrial education graduate Stephen Johnson recently received top honors from the National Association for Printing Leadership (NAPL) — the Walter E. Soderstrom Award for his leadership in business and education in the graphic communications industry.

Johnson is president of RR Donnelley-State of Columbia. He's past chairman of NAPL, director of the Graphic Arts Show Co. and chairman of the board of the Graphic Arts Education and Research Foundation.

For Clemson, he's a member of the senior advisory board for the College of Business and Behavioral Science and advisory board chairman for Clemson's graphic communications program. He's pictured with his daughter and wife, Stephanie and Jackie.



Treetops discovery center

When architect **Allen P. Wood '63**, Clemson trustee emeritus, helped create the Environmental Discovery Center at Lynches River Park in Florence several years ago, he became involved in a project of the heart.

He volunteered his professional skill to collaborate with the architect to design a center that would give visitors a treetops experience of the nearly 676-acre park. He and several other committee members traveled to Sudbury in Ontario, Canada, and to Glasgow and Edinburgh in Scotland, at their own expense to study other nature centers. And his work continued well beyond the initial completion of the project, including helping staff obtain Leadership in Energy and Environmental Design (LEED) certification for the center.

To honor his expertise, energy and vision, the S.C. Parks and Recreation Association recently recognized him with its prestigious Citizen/Lay Award. Wood (center) is pictured with Joe Eason (left), Florence County recreation director, and Joe Ross, park superintendent.

1990

Patrick J. Wethington (POSC, ECON) of Edina, Minn., is CEO of Hemosphere Inc., a medical technology company.

1991

Gray Laffite Henderson (MKTG) of Hampton was named 2010 Outstanding Young Banker by the S.C. Banker's Association. She's vice president of mortgage loans/secondary market at The Palmetto Bank's Hampton office.

Adam S. Wolf (SED-SO) of Baltimore, Md., is a senior cruise consultant with The Cruise Web in Landover.

1992

Robert H. Strait Jr. (POSC) of Jonesville owns a private firm, Solutions Counseling, in Union. He's a licensed professional counselor.

1993

M. Michele Robinson George (M ANPH) of Westerville, Ohio, has published her first

Still 'Making it Grow!'

Clemson Public Service Activities' "Making It Grow!" — featuring three College of Agriculture, Forestry and Life Sciences alumni — **Rowland**

Alston Jr. '70, M '72, Amanda Caldwell McNulty '80 and Tony Melton '80, M '86

— has won its sixth Emmy Award from the Southeast Regional National Academy of Television Arts and Sciences!

The live, interactive call-in program is produced at WRJA-TV in Sumter and provides viewers with research-based horticultural information. Alston, the host, and featured guests focus on gardening topics and highlight interesting places and products around the state. Extension agents McNulty and Melton are contributors for the ETV show.



Key KEMET team

KEMET Electronics Corp., headquartered in Greenville, has an Extended Leadership Team comprised of approximately 100 employees that hold leadership positions from around the world. Seventeen of these key employees are Clemson alumni.

The team helps the company formulate, develop and execute the company's strategic plan. From left are **Larry McAdams '73, Chuck Meeks '83, Randy Hahn '81, Keith Moore '97, Ben Freeman '77, Tommy Weir '78, Travis Ashburn '94, June Cely Lancaster '70, Debra McAlister Ham '78, John Powers '80, Hal Perkins '80, Bob Willoughby '88** (not pictured: **Jim Bruorton '73, Jim Piller '91, Jeff Franklin '91, Bill Sloka '93, Patrick Stringer '95**).

cosmetology work, *The Knotty Truth*, a guide for working with the beauty and artistry of highly textured hair. She's a certified personal trainer, marriage works counselor and a natural hair consultant (www.theknottytruth.net). She has also had a career as an award-winning

territory account manager and trainer in the pharmaceutical/medical industry and as a molecular biologist.

Tom P. Gressette Jr. (ENGL) of Charleston had an article, "The Heightened Pleading Standard of *Bell Atlantic Corp.* v.

Twombly and *Ashcroft v. Iqbal*: A New Phase in American Legal History Begins," published in the *Drake Law Review*. He's a partner with Richardson, Patrick, Westbrook & Brickman LLC in Mount Pleasant.



Food safety expert

Donna Garren '89

Food science and human nutrition graduate Donna Garren is the new president and general manager of NSF Davis Fresh, a modular, food safety and quality program within NSF International, The Public Health and Safety Company™. NSF International is an independent, not-for-profit public health organization that certifies products and writes standards for food, water and consumer goods to minimize adverse health effects and protect the environment.

Garren has more than 14 years of experience working in the food industry. Most recently, she served as vice president of Food Safety Programmes for The Consumer Goods Forum where she managed the Global Food Safety Initiative activities in the North American region.

She also served as vice president of Health and Safety Regulatory Affairs for the National Restaurant Association and earlier as vice president of Scientific and Technical Affairs at the United Fresh Fruit & Vegetable Association. In 2005, *Produce Business Magazine* named Garren one of the produce industry's "40 under 40 Rising Stars."

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Hanscom Air Force Base commander

Stacy L. Yike '89

Col. Stacy L. Yike, a mechanical engineering graduate, is commander of the newly activated 66th Air Base Group at Hanscom Air Force Base in Bedford, Mass., home to an Electronic Systems Center for building communication systems and transferring that capability to the Warfighter.

Yike started her career at Los Angeles AFB developing satellite systems for the Air Force. She was also selected as an Olmsted scholar and spent two years studying international relations in Portugal.

With Joint Chiefs of Staff, she worked with Western European allies to build the coalition in support of Operations Enduring Freedom and Iraqi Freedom. On Air Staff she developed the Air Force message on the space budget priorities.

Yike commanded the 338th Training Squadron at Keesler Air Force Base, Miss., where she led 200 personnel in the training of 5,000 Airmen annually to develop communications-electronic systems maintainers for the Air Force.



1995

Walt W. Ray (LSAH, M '97 HORT) of Atlanta, Ga., launched a new magazine, *Design Is*. The online magazine features articles on interior design, architecture, lifestyles and garden design (www.DesignIsMagazine.com).

1997

Angela Miccoli (M BUSADM) of New York, N.Y., was named to "PharmaVOICE 100," a list recognizing the top 100 most inspiring people in the life sciences industry. She's president of Cegedim Dentrte Americas.

1998

Kevin R. Laird (AGRON, '00 CE) of Greenville was selected as one of *Greenville Business Magazine's* "Best & Brightest 35 and Under" for his contributions to the area. He's managing partner with Goodwyn, Mills and Cawood Inc., whose projects include the University's SCRA Innovation Center.

1999

Jason L. (ME) and **Lisa Marsiglio** (MGT) **Leake** are married and living in Matthews, N.C. They've been featured on local TV shows and in newspaper articles for their efforts in promoting the benefits of eating only whole and non-processed foods. Their experiences and advice can be followed on their two

blogs, thefoodillusion.wordpress.com and www.100daysofrealfood.com.

2000

Susie Stancil Turner (MKTG) of Charlotte, N.C., was chosen first runner-up and Miss Congeniality in the 2010 Mrs. North Carolina pageant.

2001

Theodore D. Mauro (M SPECED, PhD '07 EDL) of Pendleton represented ED101 Inc., a training, advocacy, consulting and marketing firm specializing in educational programs, at United Nations General Assembly hearings. The U.N. recognized ED101 Inc. as a nongovernment organization in the educational field. He also made a presentation at the Council for Exceptional Children's Embracing Inclusive Approaches international conference in Riga, Latvia.

Willie G. Powell (CE) of Bluffton, a project engineer with Ward Edwards Inc., completed a \$20 million Tanger commercial center design renovation, including LEED-CS certification and an innovative storm-water management design that protects fragile coastal watersheds.



Disc golf world champ

Physics graduate Sarah Stanhope '03, M '07 is the 2010 Professional Disc Golf Association (PDGA) Women's World Champion. She beat out competitors from Texas, Florida, California, Michigan, Oregon, Japan and elsewhere. She also won the PDGA rookie of the year award in 2007.

Stanhope, who earned a master's degree in administration and supervision, teaches at Easley High School. She's the president of the Foothills Disc Golf Club in Easley and runs a club at the high school.

2002

***Christopher M.** (ECON, M '03) and ***Susan Perrone** ('03 MATH) **Clapp** are married and living in Charlottesville, Va. He's pursuing a Ph.D. in economics at the University of Virginia, where she's a statistician for a public service center.

Erin Smith Watson

(SPCOMM, SPAN) of Charleston was promoted to senior account director at Rawle Murdy Associates, handling public relations and social media initiatives. She serves on the S.C. Public Relations Society of America board and is a member of the Leadership South Carolina Class of 2011.

2003

Olympia Szokol Eddy (PRTM) of Simpsonville has written and illustrated a children's book, *Mysterious View* (www.mysteriousview.com). She's the membership coordinator for the Greenville Convention & Visitors Bureau.

2006

Brian L. Church (CPINSYS) of Charlotte, N.C., is an associate attorney with Robinson Bradshaw & Hinson P.A., a corporate and commercial law firm.

2007

J. Scott (GRCOMM) and **Elizabeth Foshee** ('09 PHIL) **Brannock**

4 Seasons veterinarian

Nancy T. Moses '92

Animal science graduate and veterinarian Nan Moses has worked at home and abroad, including time in New Zealand and nearly a decade in Akron, Ohio. But several years ago she decided it was time to return to the Southeast and open her own unique practice — 4 Seasons Cat Hospital — in Charlotte, N.C.

Moses focuses all of her continuing education on felines and has hired her staff members on their love and understanding of this unique species. Her hospital provides care for internal medicine, surgical and behavioral cases. It promotes preventive care and has boarding and grooming services. She also works with local cat rescues and has established the Felines without Families Fund to help sick and injured cats that have no owners.

When she has time, Moses loves hiking and exploring the mountains. She also breeds and shows Maine Coon Cats.



Brian K. Latham (DESIGN) of Portland, Maine, is creative director for causemedia inc. in Newton, Mass.

Disciplinary and Ethics Commission. He's a certified financial planner for Raymond James.

associate professor of history at Baylor.

M. Chad Malkus (SED-EN) of Cambridge, Md., is president of the Alzheimer's Association, Greater Maryland chapter. He's an attorney with Hodes, Pessin & Katz P.A.

Thomas S. Kidd (POSC, M '96 HIST) of Woodway, Texas, has published a book, *God of Liberty: A Religious History of the American Revolution*. He's an

1994

Chris E. Beard (FINMGT) of Greenville is serving a two-year term on the Certified Financial Planner Board of Standards –



Outstanding volunteer in Afghanistan

Ceramic engineering graduate Capt. **Kevin McClure '00** of the 1-178th Field Artillery Battalion, S.C. Army National Guard, was recently awarded the Military Outstanding Volunteer Medal for exceptional volunteer service to the Afghan people.

He was deployed to Afghanistan early last year where he helped build six schools in Kabul. While there he volunteered more than 100 hours of his

time to help distribute clothing and school supplies to hundreds of poverty-stricken Afghan children. He also worked with the elderly and helped restore well water to the village. McClure is now back at home in Murrells Inlet.

are married and living in Charlotte, N.C.

Drew D. (CHEM) and **Rebecca Hendrix** ('08 BIOSC) **Finley** are married and living in Charleston. They are pursuing pharmaceutical degrees from the Medical University of South Carolina.

Kristen H. Rosati (PSYCH) of Winston-Salem, N.C., was promoted to assistant vice president for BB&T. She's a marketing specialist.

Jerry M. (COMPSC) and **Angelina Gleason** ('08 CE, M '09) **Stasulis** are married and living in Charleston.



Tiger in Cape Town

Psychology graduate Susan E. "Betsy" Sutherland '03 of Charleston has earned a highly competitive Rotary International Ambassadorial Scholarship. She's currently studying graduate-level courses in international relations and education at the University of Cape Town in South Africa, while visiting and working with schools in Cape Town and around the country.

She's also serving as goodwill ambassador to Cape Town, and when she gets home, she'll share her experiences of her host country with Rotarians and others. Sutherland plans to be back at Clemson next fall to work on a Ph.D. Follow her blog at betsysutherland.blogspot.com.

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Marketing in D.C.

Marketing graduate **Patrick R. Boylan '07** talks strategy with a co-worker at David All Group, an online branding firm in Washington, D.C.

The firm helps clients promote public policy and positive public relations by combining the power of the Internet (and social networks) with the strategy and discipline of political campaigns. The team specializes in creating Web platforms, micro-sites, Facebook apps, online advertising, e-mail marketing and online video.

Boylan — a user-experience, design and advertising executive — helps clients engage online, especially through Facebook and Twitter, and he gauges the usability of many of the firm's online products.

2008

Monica L. Van Cleve (L&IT) of Spotsville, Va., teamed up with her mother, Shelly, to launch a business and publication, *Let's Eat Out Menus™*. As a restaurateur, Shelly faced the problem of getting her menu into the hands of hotel guests, office workers or residents. Monica came up with a business model that resulted in a collection of menus from local restaurants with a magnetic feature that allows the book to be placed in view (*letseatoutmenus.com*).

conference, Cancer Care in South Carolina, held in Clemson.

Sean M. Domermuth (ECON) of Mount Pleasant completed U.S. Navy basic training with the rank of seaman at Recruit Training Command, Great Lakes, Ill.

Kyle M. Roedersheimer (PSYCH) of Charlotte, N.C., was the winner of two Clemson/Auburn football tickets in a drawing held by the Clemson Fund for making his 2010 gift.

2010

Jake W. Williams (HORT TG) of Bluffton is second assistant superintendent on the Pete Dye-designed golf course at Colleton River Plantation Club.

2009

Kristin N. Bridgmon (MGT) of West Columbia works for the S.C. Cancer Alliance. She assisted in the organization and hosting of the SCCA



Glenn

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Making life better in Mozambique

Nursing graduate **Meghann Glenn '09** is on a mission in Maputo, Mozambique, with Iris Ministries' Zimpeto Base. She works within base facilities including schools, children's centers, homes and churches. Mission activities include feeding programs, spiritual and medical care, training programs, well-drilling to help neighboring communities and more.

Chemistry graduate **Austa Marie Parker '09** — a former Clemson tour guide with Glenn — is a graduate student in Colorado, where she studies water systems and ways of providing clean water for areas that need it. Parker and Glenn often exchange information to help improve life at the Zimpeto Base.



Avian study in Utah

New graduate **Carly Hackett '10** is fulfilling a dream — interning with the highly accredited Tracy Aviary in Salt Lake City, Utah. She earned a degree in August in parks, recreation and tourism management with a concentration in protected parks area management.

Hackett, who also interned with the South Carolina Aquarium, is expanding her knowledge and experience in avian husbandry and management together with management of endangered species and wildlife to further prepare for becoming a zookeeper.

Tracy Aviary is tracing the migratory path of birds from the southern tip of Argentina to Alaska and back, highlighting the importance Utah plays in that journey.

Salathial F. "S.F." Horton '32, Loris

William D. Metts Jr. '34, Anderson

Maxcy P. Nolan '34, Florence

Robert E. Graham Jr. '36, McClellanville

Jack Howard Oliver '38, Savannah, Ga.

Joseph E. Dixon Sr. '39, Columbia

Champ M. Jones '39, Clemson

Elder H. Jones Sr. '39, Nichols

Harry G. Salley '39, Due West

Sanford B. Stoney Jr. '40, Summerville

Richard E. Gettys Sr. '42, Hartsville. Memorials may be made in his honor to Clemson University Foundation, PO Box 1889, Clemson, SC 29633-1889.

Joseph P. Hodges Sr. '42, Bennettsville

Homer Ray Lindler '42, Chapin

Wade H. Padgett Jr. '42, Clemson

Elias B. Eskew '43, Clemson, agronomy and soils professor emeritus

Milton R. LeRoy '43, Doswell, Va.

Donald H. Rader Sr. '44, Columbia

James P. Abrams '45, Rock Hill

John B. Lowman Jr. '47, Irmo

Robert M. Phillips Sr. '47, Forest, Va.

James E. Craig '48, Greenville

Harold E. Thompson Jr. '48, Greenville

Ray A. Bolick '49, Canton, Ga.

James H. "Sonny" Crawford Sr. '49, M '61, Clemson, retired horticulture professor

Douglas C. Edwards '49, Atlanta, Ga.

Robert H. Holley '49, Orangeburg

Neely M. "Mack" Hollis '49, Dalton, Ga.

Billy Gordon Rogers '49, Dillon

A. McCoy Rose Jr. '49, Marietta, Ga.

James A. Smith '49, Appomattox, Va.

Alan M. Tewkesbury '49, Aiken

Robert A. Arthur '50, Boiling Springs

James M. Moss III '50, Cameron

William W. Turner '50, Greenville

Henry M. Chaplin '51, Neeses

John E. Harper '52, Seneca

Hewer C. Richardson '52, Greenville

Samuel L. Scott '52, Bennettsville

G. Christopher Turner '52, Florence

Alfred Courtney Cobb Jr. '54, Greenwood

Howard Cook '56, Pearland, Texas

Thomas P. Earle '56, M '64, Central

Willie L. Corley '57, M '61, Lexington

Bachman B. Harris Sr. '57, Clinton

William Ray Wactor '57, Anderson

Thomas C. Lynch Jr. '58, Clemson, former Clemson University trustee

Truman D. Melton '59, Shelby, N.C.

Lloyd H. Blanton '60, Clemson, agricultural education professor emeritus

Charles W. Floyd '61, Ransom Canyon, Texas

William B. Kellett '62, Dalton, Ga.

James Emmett Pruett Sr. '63, Hickory, N.C.

Johnnie R. Allred '64, Houston, Texas

Joseph C. Blackwell '65, Lancaster

George D. Phillips '65, Satellite Beach, Fla.

Lyndon R. Thompson '65, Fort Worth, Texas

Ronald James Hathazy '69, Columbia

Robert L. Heverley '70, Washington, N.C.

James L. Rivers Jr. '70, Spartanburg

W.W. "Wilkie" Whaley Jr. '70, Marion

Robert S. Bisker '71, M '80, Franktown, Va.

Francis B. deLoach Jr. '72, Spartanburg

Lee H. Clippard Sr. '73, Mount Pleasant

Walter A. Clark Jr. '74, Eutawville

Frank Donald Peden '75, Spartanburg

Nicholas H. Corontzes '76, Clemson

Brian B. Smith '77, Atlanta, Ga.

Luta Sullivan Mayfield '80, Anderson

Dorothy Mitchell Pittman M '80, Pickens

Darlene Shea Plyler '80, Pawleys Island

Stephen Mark Hunter '82, Blacksburg, Va.

James Charles Saylor Jr. M '83, Williamston

Dan W. McCullough '97, Iva

Elizabeth "Betsy" McDavid Campbell HD '00, Gaffney, longtime supporter of Clemson educational programs and the S.C. Botanical Garden, where the Betsy Campbell Carriage House is named in her honor

Adam H. Cox '07, Greenville

Samantha A. Rankin, senior, Riva, Md.

Zachary W. Shaffer, senior, Greenville, N.C.

FACULTY AND STAFF

James M. Boleman Jr., Townville, retired procurement director

Rickie R. Brink, Central, retired libraries information technologist. Memorials may be made in his honor to Library Friends, Clemson University Foundation, PO Box 1889, Clemson, SC 29633-1889.

Thomas W. Burton, Vero Beach, Fla., former athletic department grounds and equipment manager

N. Dwight Camper, Clemson, entomology, soils and plant sciences professor emeritus. Memorials may be made in his honor to the N. Dwight Camper Scholarship Endowment, Clemson University Foundation, PO Box 1889, Clemson, SC 29633-1889.

Julia A. Cato, Clover, retired staff assistant in business and finance

Edward L. Falk, Greenville, urban and regional planning professor emeritus

General Lee Guy, Clemson, retired electrician

Vernon J. McAlister, Anderson, retired from U.S. Department of Agriculture at Clemson

David Norman, Central, retired building/grounds specialist

Dot C. Porter, Tullahoma, Tenn., retired libraries associate director

John J. Porter, Clemson, textile chemistry professor emeritus

Shalaby W. Shalaby, Anderson, former bioengineering professor and director of research and development for Poly-Med Inc. at the Clemson University Advanced Materials Center

Dan B. Smith, Easley, retired S.C. Cooperative Extension dean and director

William Allan Tinsley, Greenville, agricultural and applied economics professor emeritus

Wallace D. Trevillian, Greenville, economics professor emeritus and commerce and industry dean emeritus. Memorials may be made in his honor to the Wallace Dabney Trevillian Endowment, Clemson University Foundation, PO Box 1889, Clemson, SC 29633-1889.

Malcolm O. Usrey, Clemson, English professor emeritus

CLEMSON MEMORIALS

Family, friends and former classmates may choose to remember a loved one by supporting Clemson. To find out how to establish a memorial in someone's honor, please contact Ann Smith at annsmit@clemson.edu or 864-656-5895.



Catherine Graham Parker Moroney '01, M '04, a daughter, Parker Catelynn, Aug. 18, 2009, granddaughter of **Stephen L. Parker '73**.

Nathan S. Campbell '02, a son, James Scott, March 11, 2010.

J. Ryan Glenn '02, a son, Jackson Ryan, Aug. 19, 2010.

Julia Parker Motts '02, a daughter, Julia Hope, July 20, 2010.

Dayna Thompson Schoonmaker '02, a daughter, Nora Kate, July 20, 2010.

Nicole Hanfland Skinner '03, a daughter, Charlotte Baker, Aug. 16, 2010.

Anne Snipes and Bradley L. Smith '03, a son, Jackson McNeal, Oct. 5, 2009.

Adam W. French '05, a daughter, Maddie Greer, April 8, 2010.

Aaron B. and Amy Stokes Gibbs '05, a daughter, Avery Laine, Dec. 8, 2009.

J. Wade Richards '05, a son, Jack Benjamin, Oct. 16, 2009.

E. Ashley Boggs '06 and Neil A. M. '06 Capper, a son, Noah, March 14, 2009.

Brooke Bridges Timms '06, a daughter, Avery Elizabeth, Aug. 29, 2009.

Pamela Marie Benden '08, a daughter, Madison Elissa, May 5, 2010.



Annette Stuck with Kay Wall, dean of Clemson Libraries

Happy Birthday, Aunt Annette!

Annette Shealy Stuck, who grew up in a large household in Chapin, has always loved Clemson. From her childhood experiences of seeing Extension Services support the Shealy family farm to decades of Tiger tailgating with family to encouraging nieces and nephews as they earned Clemson degrees.

She also values libraries and the printed word — having spent most of her public service years working for the South Carolina State Library. So, to celebrate her 70th birthday, five of her nephews and nieces — all Clemson alumni — honored her with a special Clemson gift in the Cooper Library.

***Mike Shealy '81**, along with cousins ***Gregory '88**, ***Paula Shealy Garcia '89**, ***Jody '92** and ***Kenneth '97**, dedicated one of the library's new overstuffed chairs in her honor, marked by an engraved brass plate.

To learn how you can honor a loved one with a donation to the Clemson University Libraries, go to clemson.edu/culib/giving.

AUDIT OF DONOR RECORDS — The University's internal auditing department will mail confirmation letters to a sample of Clemson University Foundation donors. This annual audit procedure helps validate the integrity of donor records. If you receive a confirmation letter, please complete and promptly return. For more information, contact Jeff Rosenberger, internal auditing, at rjeffre@clemson.edu or 864-656-4896.

TRAINING TOMORROW'S LEADERS TODAY

Training leaders. It's never been more important. Clemson's ROTC programs have been training America's leaders for over 100 years.

The Clemson Corps provides scholarship support to current cadets in both Army and Air Force ROTC.

To help fund scholarships for our future military leaders, use the envelope in this magazine, or make a secure online contribution at clemson.edu/giving. Specify that your gift is for the Clemson Corps scholarship endowment.



cualumni.clemson.edu/clemsoncorps



WINTER 2011

What's new?

We like to hear from you.



Sorry for the delay! You may not see your class note in the issue or two after you send it in because of the amount we receive and the cutoff time necessary to keep the magazine on schedule. But we will include it as soon as possible.
Thanks for your patience.

Are you receiving duplicate copies of this magazine? Please help us keep our mailing costs down by sending your address information from the back cover so that we can delete it from our list.

Address changed? Please send your old address information from the back cover with your new address.

We welcome general comments, address information, class notes, birth announcements and passing announcements.

Send your news by e-mail to sleigh@clemson.edu or FAX to 864-656-5004.

Or mail your news to *Clemson World*, 114 Daniel Drive, Clemson, SC 29631-1520.

You can also update your information online at cualumni.clemson.edu/update.

Remember — include your name (and maiden name), year of graduation, major, town and state.

1. South Dakota
Bill '52 and Mary Alice Burnett, Jim '61 and Louise Hull, and *Claudia and *David '74 Dority at Mount Rushmore

2. Croatia
Douglas Wilson '76, Mindy Higgs Taylor '85, Bill Taylor '74 and *Larry Gantt '59 overlooking Dubrovnik

3. Grand Cayman Island
George '63 and Ann Harmon visiting a turtle farm

4. Hungary
*Gary '65 and *Toni Faulkenberry in front of the opera house in Budapest

5. Haiti
Brett Turner '93 and Earl Burch '66, M '68, PhD '70, professor emeritus of business administration and mathematical sciences, in Bois Joli

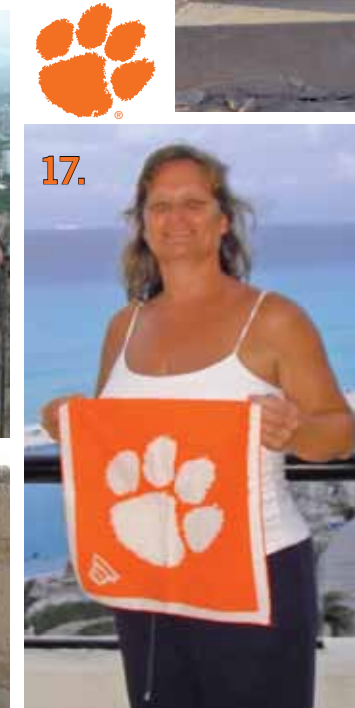
6. Rhine River
Buck '67 and Mary Reese on a Rhine River cruise through Europe

7. Northumberland
Mark K. '07 and Miller S. Jr. '75 Ingram at the end of the St. Cuthbert's Way hike from Scotland to Lindisfarne Abbey in North England

8. Peru
Bill Easterling '83, Dan O'Neal '76, Cathy Curtan Richardson '77 and David Smith '80 on a mission trip to Santa Clara

9. Africa
Jim Rowell '83 with his Tiger Rag at Camp Lemonnier, Djibouti

10. Turks and Caicos Islands
Tammy West and David Williamson '83 at the beach



11. Scotland
Mike Rallings '85 at the Old Course in St. Andrews

12. Alaska
LeeAnn Haralson '86, Jack, Will, Carlisle and Rusty '86 Harris vacationing at Denali National Park

13. Haiti
Jacob Hathcox (student), Wilson Elgin '92, Katie Jones '09, Mark Buchholz '08 and Randy Williamson '87 on a mission trip

14. Hawaii
Lee, Megan Roberts '90 and Kea McDow on top of Diamond Head, Honolulu

15. Afghanistan
Bill Poling '91 serving as an infantry officer in the 101st Airborne Division

16. Bald Head Island, N.C.
*Ashleigh, *Diamond Gethers '94, M '01 and *Nataleigh Palmer in front of "Old Baldy" lighthouse

17. Mexico
Denise Gary Shealy '96 on the Yucatan Peninsula in Cancun

18. Iraq
Maj. Mark Tyndall '96 and *1st Lt. Daniel Phillips '08 at Camp Taji

19. Afghanistan
*Todd M. Graham M '98, a major in the U.S. Air Force, serving with the I Marine Expeditionary Force in the Helmand Province

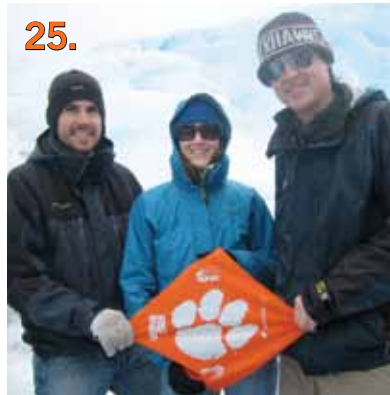
20. Mill Valley, Calif.
Michael Hader '01, Maria Iglesia M '09 and Lisa Britt '01 hiking the Ben Johnson Trail at Muir Woods

*Active Clemson Fund donor for 2011 Fiscal Year (July 1, 2010 – June 30, 2011) through October 18. For more information, call Annual Giving at 864-656-5896.

21. Alaska
Sam '02, M '04 and Emily Robertson '02 Parsons overlooking Portage Glacier



22. Kenya
Alexis Woosley '03 on safari in Masai Mara



23. Michigan
Betty, Brad, Lindsay, Brian '04 and Jim Garrison at Half Ironman marathon in Benton Harbor



24. Qatar
Sen. Lindsey Graham and USAF Capt. Andrew F. Smith '05 at Al Udeid Air Base



25. Argentina
Steven Dejonckheere '07, Rachel Yost '07 and Andrew Suski '07 on Perito Moreno Glacier in Patagonia



26. Austria
Ryan and Lauren M '08 Kilbreth at Schönbrunn Palace in Vienna



27. Turkey
Al Saunders '08 in front of Istanbul's Blue Mosque



28. Yosemite
Trevor Turner '08 hiking at Yosemite National Park



29. France
Aubrey Coward '09 in Paris



30. Australia
Caitlin Creswick '09 and Edward Curtis '09 kayaking off Moreton Island, Queensland



31. South Africa
Jesse Godfrey, student, in Johannesburg



32. Switzerland
Britton Hunter, student, highflying in the Swiss Alps at Interlaken



For more Clemson World Travelers ...

If you sent in a Clemson World Travelers photo earlier this year, but haven't seen it in print, go to the online version at clemson.edu/ClemsonWorld/travelers.

You can post your own Travelers photos on the Clemson World Magazine Facebook site at facebook.com/clemsonworld. Or send them, with a brief description, directly to Sallie Culbertson at sleigh@clemson.edu.

HOW WILL YOU

LEAD?

Fran McGuire

Alumni Distinguished Professor
Department of Parks, Recreation
and Tourism Management
Class of '39 Professor

Fran McGuire is no stranger to leading the way for change. Over the past four years, he has worked tirelessly with a group of colleagues revamping the PRTM curriculum and developing an immersion program for second-year students called PRTM EDGE (Engagement in Diverse Guided Experiences), which offers an improved, hands-on educational experience while reducing the program's cost. The innovative curriculum has broadened the future of this nationally recognized program and answered the challenge of today's economy: giving students the best possible educational experience in the most cost-effective manner.

Faculty such as McGuire are giving Clemson an academic edge by working to transform the way students experience and apply what they learn.

The competition for outstanding teachers and researchers is fiercer than ever today. The Clemson faculty is one of the University's great strengths. And they deserve our support.

Our donors make the difference by funding endowed professorships and chairs, research programs and facilities.

Will you be the one to make a difference? Will you lead? Make your gift or find out more at clemson.edu/giving.

The Will to
LEAD
A CAMPAIGN FOR CLEMSON

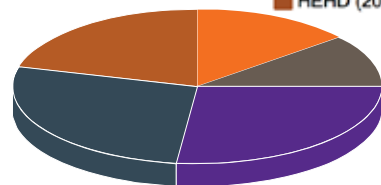
This year, Clemson launched **The Will to Lead: A Campaign for Clemson**, an effort to raise more than \$600 million to support Clemson students and faculty by July 2012.

Tracking Tigers

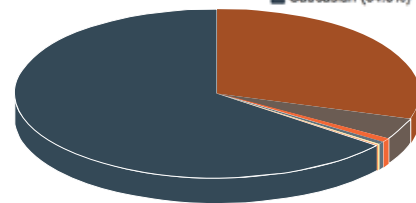
HAVE YOU EVER WONDERED ABOUT the demographic or statistical makeup of the almost 120,000 current Clemson alumni? Find out how many Tigers live near you or on the other side of the globe. See who shares your academic college or your decade. Discover much more about your fellow alumni.

Our Alumni Family totals 119,971 (as of July 2010), with a ratio of nearly five females to just over seven males (more precisely, 48,482 females to 71,489 males). Here are some other Tiger numbers.

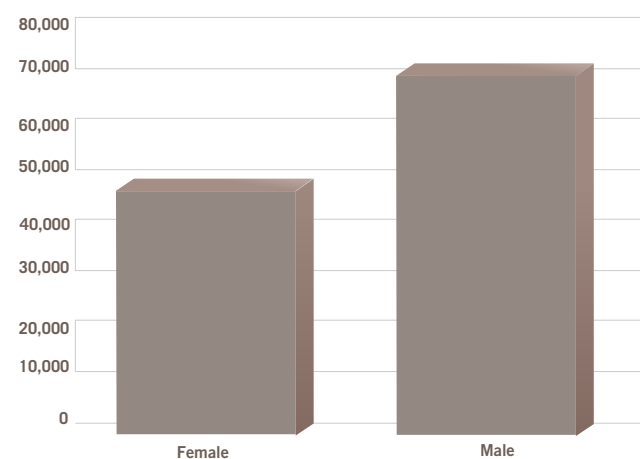
ALUMNI BY ACADEMIC COLLEGE



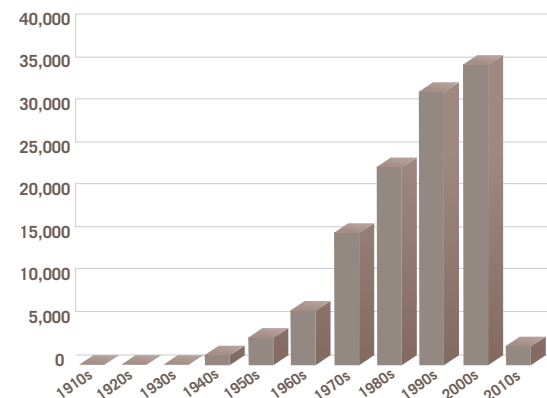
ALUMNI BY ETHNICITY



ALUMNI BY GENDER



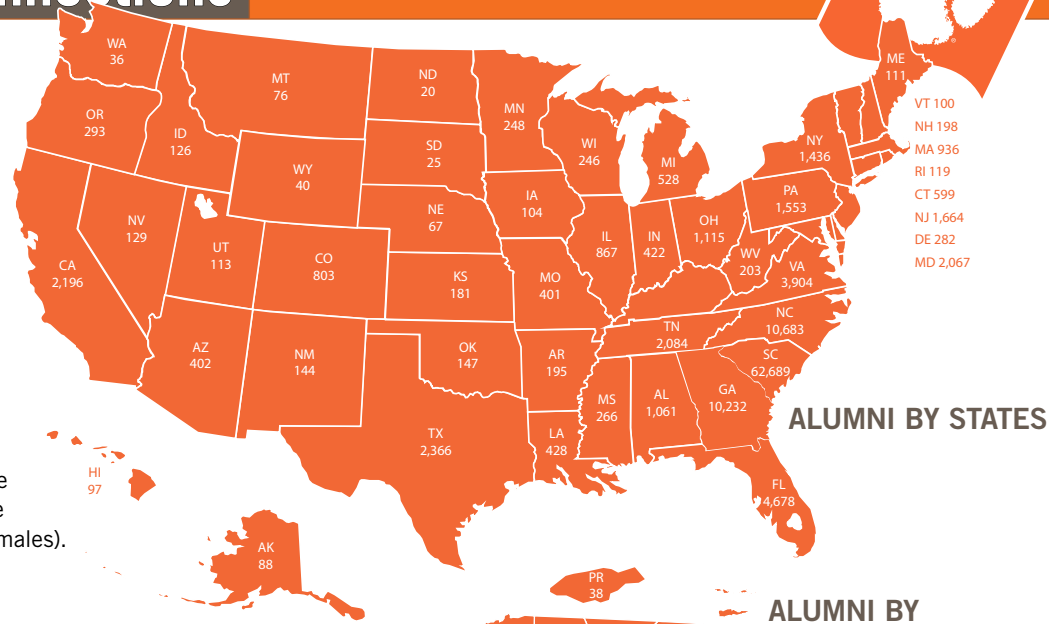
ALUMNI BY DECADE



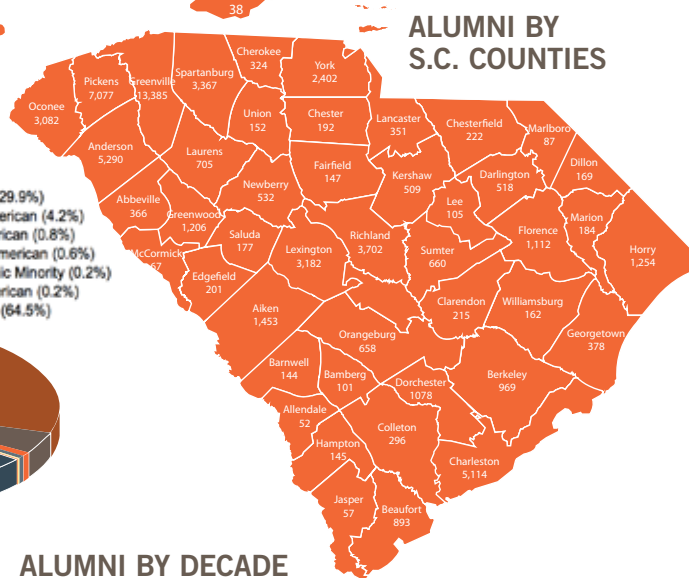
Are you being counted?

It's easy to be sure. Visit the alumni homepage at clemson.edu/alumni and log in or register (if you haven't already) to create or update your information.

If you'd prefer to talk to us directly, call 864-656-2345. And we still accept snail mail at Clemson Alumni Center, 109 Daniel Drive, Clemson, SC 29631-3006. No matter how you contact us, please do! We — and your fellow Tigers — want to keep in touch.



ALUMNI BY STATES



ALUMNI BY S.C. COUNTIES

Honorary Alums — Cheryl Holland and Betty Poe

THE CLEMSON ALUMNI ASSOCIATION HAS recognized **Cheryl R. Holland** of Columbia and **Betty Sheppard Poe** of Greenville as honorary



alumnae for their tremendous roles in the Clemson Family. Holland, president of Abacus Planning Group Inc., has been named to top financial adviser lists in *Worth,*

Medical Economics and *Wealth Manager Magazine* and has been featured in *The Wall Street Journal*. She serves as vice chairperson for Clemson's College of Business and Behavioral Science Senior Advisory Board.

Holland and her husband, **Doug Quackenbush '82**, gave Clemson \$100,000 to support the Will to Lead campaign. Half of the gift was used to develop the Abacus Planning Group Endowed Scholarship in Financial Planning, and the other half went to the renovation and expansion of Lee Hall.

Betty Poe, a retired executive with Canal Insurance, is the widow of Clemson alumnus **William M. "Billy" Poe '46**. She's a member of the Clemson University Foundation Board of Directors and recently served as co-chairperson of the leadership phase of the Will to Lead campaign.

A longtime financial supporter, she's a member of the Thomas Green Clemson Society and the Clemson Legacy Society. She and Billy named Memorial Stadium's Poe Plaza, and she named Gate 1 in memory of her husband.



Honorary alumna Betty Poe with Jimmy Kimbell, Alumni Association president.

2010 Alumni volunteer of the year

CONGRATULATIONS TO **ANDREA L. MACMECCAN '99, M '00** of Greer, the 2010 Alumni Volunteer of the Year! MacMeccan is vice president and process design consultant for Bank of America.

She serves on the Alumni Association Board of Directors and previously served on the Alumni Council. She's past chairwoman of the Women's Alumni Council and former president of the Atlanta Clemson Club. She and her husband, **Robert '01**, have been consistent donors to the University since graduation.

"Not only does Andrea spend countless hours volunteering and leading alumni events and initiatives, but she also always finds time to encourage and inspire those around her," says Wil Brasington, senior director of alumni relations.



Alumni Challenge Tournament

CAA HELD THE INAUGURAL CLEMSON ALUMNI Golf Challenge in September at Walker Golf Course. The winning team, pictured with Randy Boatwright, director of business development and facilities (center), are (from left) **David Wolf, John Roberts, Eddie McLaurin, Jim Wolf**. The team earned an all-expenses-paid trip to Pinehurst Resort to represent Clemson in the Acura College Alumni Team Championship, pitting 120 college alumni teams in a 36-hole best ball.

The 2010-11 Clemson Alumni Association Board

James A. "Jimmy" Kimbell III '87, president, Anderson, jimmy.kimbell@bankanderson.com

Ann W. Hunter '80, M '82, president-elect Greenwood, ann.hunter@alumni.clemson.edu

Leslie D. Callison '81, past president Lexington, lescal59@aol.com

Mary Ann Bigger '88, IPTAY North Augusta, bbigger@comcast.net

Janine A. Bowen '89 Stone Mountain, Ga. jdabowen@yahoo.com

Teresa S. Coles '84 Lexington, riggsadvertising.com

W. Paul Craven '87 Greer, paulc@grandsouth.com

Sandy Edge '72 Clemson, sedge@clemson.edu

Danny E. Gregg '71 Clemson, dgregg48@gmail.com

Rick Griffin Beaufort, dwnwtwnmarina@islc.net

Jessie R. Hood '94 Atlanta, Ga., jessierichardson@alumni.clemson.edu

Satch Krantz '72 Columbia, skrantz@riverbanks.org

Andrea MacMeccan '99 Greer, amacmec@alumni.clemson.edu

Allen Martin '69 Vienna, Va., amartin@livingstongroupdc.com

Mike Maxwell '67, '68 Atlanta, Ga., mjmaxwell@aol.com

Harry G. Moore Jr. '70 Richmond, Va., harry.moore@alumni.clemson.edu

Jane S. Sosebee '78 Clemson, jane.sosebee@att.com

Evan Vutsinas '79 Old Hickory, Tenn., evtiger@comcast.net

Lynn West '84 Charleston, west84@alumni.clemson.edu

Greg Younghans '93 Camden, gyoungans@go2uti.com

Ex-Officio members include: **Leon J. "Bill" Hendrix '63**, Clemson Board of Trustees Kiawah Island

Wil Brasington '00, Alumni Relations senior director Clemson, wil@clemson.edu

Brian O'Rourke '83, M '85, Development and Alumni Relations executive director Clemson, orourke@clemson.edu



Charlotte Textile Cup

Charlotte Clemson Club golfers and volunteers brought home the trophy in the first Charlotte Textile Cup, featuring Clemson versus N.C. State golfers. Top team members, pictured here, are **Bert Henderson**, **Travis Furbee**, **Jim Blackwood** and **Bob Riggins**. The profits went to support activities for the Charlotte Clemson Club and the local Wolfpack Club. For questions about the Charlotte club, contact Anne Roberts at annevrobarts@alumni.clemson.edu.

Clemson at Arlington



Col. Carlos Hill '86 and veteran **Vern Pyles '43** of the Baltimore/ Washington, D.C., Clemson Club were part of the Wreath Presentation Ceremony at the Tomb of the Unknown Soldiers at the Arlington National Cemetery in September. The event

took place during Clemson's Will to Lead campaign regional event in the D.C. area. Visit the club's website at clemsonclub.org.



Welcome, Treasure Coast!

Welcome to our newest Clemson Club — the Treasure Coast Clemson Club in Florida, covering Martin, St. Lucie and Okeechobee counties. Contact the club at treasurecoastclub@alumni.clemson.edu. We've also welcomed Berkeley County and San Diego Clemson Clubs! To find out how you can help start a Clemson Club in your area, contact Reed Cole at rc@alumni.clemson.edu or 864-656-3605.

Columbia CC gathering

Tigers in Columbia gathered for fun, fellowship and featured speaker **Will Merritt**. Pictured are **J. Lewis Cromer**, past president of the club and Clemson Humanities Board member; Merritt, former Clemson football player and sports talk radio personality; and **Sonny Jones**, assistant S.C. attorney general. E-mail this club at columbiaclub@alumni.clemson.edu.



Pittsburgh picnic

The Pittsburgh Clemson Club gathered for a picnic at the home of Stuart Olson. For more on the club, contact Allison English at pittsburghclub@alumni.clemson.edu.

Record turnout for Black Alumni Homecoming

More than 450 Clemson Black Alumni came back to campus for Homecoming 2010 festivities! The tailgate event boasted unprecedented attendance on the Alumni Center lawn to enjoy food, music and fellowship prior to cheering on the Tigers from block seating in Death Valley. See more photos at flickr.com/groups/clemsonblackalumni/council/pool/show. For CBAC information, contact blackalumni@alumni.clemson.edu.



Jacksonville Freshman send-off

Jacksonville Clemson Club sent area freshmen to Clemson in style! For more on this club, e-mail jacksonvilleclub@alumni.clemson.edu.

CBBS Family Weekend

Clemson's College of Business and Behavioral Science held a family gathering on campus in September with 300 guests. The event gave families the opportunity to visit their students, participate in the tradition of Clemson football and make new friends during a reception on the Sarrine Hall lawn. For more on CBBS alumni, go to clemson.edu/cbbs/alumni.



CAFLS Tailgate stuffs Tundra!

College of Agriculture, Forestry and Life Sciences students and alumni "stuffed the Tundra!" during the annual CAFLS Tailgate in October, uniting students, alumni, faculty and staff for a great day at Clemson. For more on CAFLS alumni events, go to clemson.edu/cafls/alumni.

ΣN-Theta Zeta and KDX — Has it been that long?

Nearly 200 Sigma Nu/Theta Zeta chapter members and Kappa Delta Chi founding fraternity members celebrated their common bonds during a reunion marking their 40th (ΣN) and 50th (KDX) anniversaries. To see more photos, go to flickr.com/clemsonuniversity, click on "sets" and choose "Sigma Nu Reunion."



Like mom, like daughter

In September, 151 students received their rings from President Jim Barker at the Brooks Center as family and friends shared the moment. Students who've earned 90 credit hours at Clemson are eligible. The next ceremony — sponsored by the Alumni Association and the Student Alumni Association — is April 11. For more on the Clemson Ring Ceremony or Student Alumni Association, contact Stewart Summers at ssummer@clemson.edu or 864-656-5653.

Mark Your Calendar

- Alumni Distinguished Service Award Celebration — March 18
- Ring Ceremony — April 11
- Senior Week — April 25
- Bring Your Daughter to Clemson Weekend — May 20-22
- Clemson Reunion 2011 — June 9-11

Advance your career

Check out CAA's new online career services! You can create, present, manage and share your professional credentials with the tools available through this new online application. Whether you're building a résumé, prepping for an interview or searching for jobs, this new career services resource will help. Go to clemson-alumni.optimalresume.com or contact Glenn King at glennk@clemson.edu or 864-656-2345.



Promote your business on the Roar Board

The Roar Board is a Web-based business directory designed to connect Clemson alums via common geographic and/or industry criteria. It allows you to locate other Clemson graduates when searching for a new service vendor or when entering a new geographic market. For an annual membership fee of \$500, you and your company receive a prominent listing complete with company logo and link to the Clemson Alumni Association's official website, which receives up to 20,000 unique user sessions per month. Register at www.clemsonroarboard.com.

Travel with fellow alumni

The Clemson Alumni Association is offering exciting travel opportunities for our alumni and friends for 2011. From the Caribbean to an Alaskan getaway, there is something for everyone. Go to cualumni.clemson.edu/travel or contact Randy Boatwright at brandol@clemson.edu or 864-656-5671.

Find the perfect Clemson gift

Shop with your Alumni Association for special Clemson gifts — from books to baby gifts, from jewelry to apparel, from ring decals to custom ring plaques. Go to hearusroarstore.com.



Clemson at Mount Vernon

One hundred members of the Clemson Club of Baltimore and Washington, D.C., enjoyed a beautiful day at the Mount Vernon Estate and Gardens in October. The group had a picnic-style lunch at the West Gate, the original entrance to the estate now closed to the public, followed by a private walking tour of the gardens led by **Dean Norton '77**, director of horticulture. View all photos at flickr.com/groups/dcbaltimoreclemsonclub/pool/show.



Historic Riggs Field — Home to Clemson Athletics

Dedicated during the October 1915 Clemson-Davidson football game, Riggs Field has held home-field advantage for nearly a century of Tiger athletics.

When you think of Historic Riggs Field, you probably think soccer. But it's more than home to Clemson's proud soccer tradition; it's the first field dedicated specifically to Clemson athletics.



Named for Walter M. Riggs, Clemson president (1911-1924) and first football coach (1896-1897), Riggs Field has been the scene of more athletic competitions than any other site on campus. Prior to Riggs, Clemson student athletes took to Bowman Field in front of Tillman Hall for competitions. Bowman Field was also the marching grounds of Clemson cadets and the stage for many other official events.

During Riggs Field's 1915 dedication, then-president Riggs did the honors of booting the first kickoff. In addition to football, the field soon became the heart of other Clemson athletics, including track and baseball.

Football moved to Memorial Stadium in the early 1940s, and baseball was played where the tennis courts are now until Tiger sluggers got their own field during the early 1970s in what's now Doug Kingsmore Stadium. Clemson's tennis facility was constructed at about the same time on part of the original field.

In the 1980s, Riggs Field got new life as home to Clemson soccer. The soccer stadium was constructed in 1987, a premier facility at the time suitable for national champions.

That same year, the NCAA Men's Soccer Final Four was contested on Riggs, and the Tigers won their second national championship on their own home field. (They also won the 1984 NCAA



Championship.) In 1988, 1994 and 2001, the men's ACC championships were played there, and the women's ACC championship in 1996.

Now, Clemson is working to make Historic Riggs Field a leading facility again. With 21st century upgrades from its playing surface and fan seating to its lighting and student-athlete facilities, the stadium will attract top recruits and give Clemson soccer fans a top-tier experience.

A major part of the renovation will be the Championship Plaza in recognition of the champions who have competed on the famed field over the course of nearly 100 years and made this one of Clemson's treasured landmarks. 🌐

For more on Historic Riggs Field renovation plans, go to clemson.com/riggs or contact Bobby Couch at jcouch@clemson.edu or 864-656-0361.

A Community on the Move



Patrick Square, the lively TND community in the heart of Clemson, is *buzzing* with new construction, new families and a whole new way of life. You can hear it between hammers and saws and moving vans: Doors opening, children laughing and adults breathing a deep sigh of relief — that they've finally found just what they were looking for.

- **Distinctive new homes** with personalized designs that meet the needs of growing families, busy professionals and active retirees alike.
- **A unique community that's on the move.** Along with even more new homes, the Town Center is set to break ground this fall.
- **Enduring value,** including exceptional quality, builder incentives and homes designed to lower utility bills as much as 30 percent.

Come, listen to *your* future at Patrick Square.
Visit soon for best selection and pricing. Models open daily.

(864) 654-1500 • 578 Issaqueena Trail • Clemson, SC 29631
Village Homes from \$209,000 to \$400,000 • Custom Homes from the \$400,000s • Custom Home Sites from \$90,000



Patrick Square

Where Legacies Begin

PATRICKSQUARE.COM

Lee Hall project boost

A \$100,000 GIFT FROM PARTNERS IN A GREENVILLE ARCHITECTURE FIRM will support the expansion, renovation and restoration of Lee Hall, home to Clemson's design, build and visual arts disciplines.

Partners **Ed Zeigler '77, M '79; David Dixon '84, M '86; Scott Powell '87; David Moore '88, M '90;** and **Scott Simmons** made the pledge for their firm, Craig Gaulden Davis of Greenville. Clemson will honor the donors by naming the Craig Gaulden Davis Review Alcove in Lee Hall.

The firm has a long connection to Clemson, from its founding in the late 1950s by 1951 classmates **Kirk Craig** and

Earle Gaulden to the addition of partners Davis, Zeigler, Dixon, Powell and Moore. Partner Scott Simmons is a 1984 graduate of Virginia Tech.

Zeigler says, "When I arrived on campus in 1973, Lee Hall was under construction to make room for growing program needs. My partners and I are pleased to answer the call to expand and improve the facilities at Lee Hall to continue the tradition of developing outstanding design professionals."



Craig Gaulden Davis partners Moore, Powell, Simmons, Dixon and Zeigler

'Right thing to do'

CHEMICAL ENGINEERING GRADUATE **RON TAYLOR '65** says his decision to contribute to his alma mater boiled down to just one thing: "It's the right thing to do."

His most recent \$100,000 gift to Clemson will be divided equally between the President's Leadership Circle — an unrestricted fund that allows the University to apply money where it's most needed — and the Math Out of the Box program, an inquiry-based math curriculum for elementary school students.

The gift will help connect the math program with graduates of the Call Me MISTER™ program, which trains teachers from diverse backgrounds to serve in economically disadvantaged and educationally at-risk communities.

A former member of the Clemson University Foundation board, Taylor was instrumental in several major gifts connected with Dow Chemical Co., including the establishment of the Dow Chemical Engineering Alumni Endowment. A separate endowment bearing the Taylor family name provides need-based scholarships for freshman engineering majors.



ACM Chemistries Inc. executives Brown and Light

Lowry Hall project boost

ACM CHEMISTRIES INC. HAS PLEDGED \$100,000 TO SUPPORT the expansion and modernization of Lowry Hall, home of Clemson's civil engineering program.

The company is led by a pair of Clemson civil engineering alumni — president **Marshall L. Brown '82, M '86, PhD '88** and vice president **Ted Light '86**.

"Ted and I are very proud of our Clemson education, and we are glad to be a part of civil engineering's continued growth and success," says Brown. "The business we have today is a direct result of the education and research we had at Clemson. I'm grateful for what Clemson has provided me, not only a wonderful education, but also my wife, Cindra [**Cindra Bell '86**], an economics graduate I met when we were at Clemson."

Norcross, Ga.-based ACM Chemistries Inc. is engaged in research, development and application of chemical admixtures for machine-made concrete products, such as pavers, roof tile and precast products.

CJ continues legacy

SHORTLY AFTER CLIFFORD "CJ" Spiller graduated in 2009 and before he headed off to the NFL, he visited the Barkers in the President's Home. During that visit, he expressed how important his graduation was to him and his desire to help other students stay at Clemson and graduate.

He came back in October and did just that. At the Clemson vs. Maryland game, the University honored his great legacy as a Tiger by retiring his "28" Clemson jersey. And he in turn made a gift to help other Clemson students build their own legacies, both in athletics and academics.

He presented a One Clemson gift of \$100,000. Part of the gift will go to Clemson football to allow Coach Dabo Swinney to direct the funds to the program's greatest needs.

The other part will support President Barker's completion-grants initiative, which helps seniors who, without financial assistance, would be unable to complete their degrees.



Legacy Day celebrates people who've left their mark on Clemson

ALUMNI, STUDENTS, FACULTY, STAFF AND friends celebrated Clemson history and the people who've left their mark on the University during Legacy Day in November.

The Fort Hill Legacy Society — honoring donors whose estate gifts have resulted in gifts of \$1 million or more for Clemson — added the late Earl Charles Ray '38, a chemistry graduate.

And the University installed a beautiful new bronze oak leaf in his honor with the existing seven Fort Hill Legacy Society leaves displayed on the grounds of Fort Hill, home to John C. Calhoun and Thomas Green and Anna Calhoun Clemson.

Ray, of Savannah, Ga., was the benefactor of the Earl C. Ray Student Assistance Endowment for graduates or undergraduates in chemistry or chemical engineering.

The Clemson Legacy Society — for other donors who remember Clemson in their estate planning — inducted 16 new members, bringing the total to 260, during the celebration. For more on legacy gifts, contact JoVanna King at jovanna@clemson.edu, 864-656-0663 or 800-699-9153.

Induction into the Cumulative Giving Societies honored Clemson's most generous donors. For more on these societies, contact Kate Troelstra at kate@clemson.edu or 864-656-1331.

You can also find more information about gift plans to benefit you, your family and Clemson University on the Gift Planning web-site at clemson.planyourlegacy.org.



I understood what the Clemson Tiger Paw meant way before I understood what college was.

My aunt — Lisa Constante Torrence — graduated from Clemson in 1990, and I remember being at Littlejohn to watch her collect her degree. I was nine years old, and from my first visit to Clemson, it felt like a place I'd like to be one day.

I had no idea that Clemson would later give me the chance to combine my educational pursuits with my serious dedication to football. Thanks to my aunt, I received quite a load of Clemson goodies from a young age: a jersey, stuffed tigers, pompoms and more. Thanks to my dad, I received a lifetime full of knowledge about football.

After earning my economics degree at West Virginia University, I knew I wanted to get my MBA. Of course, I took a hard look at Clemson — and it was an easy decision to make. I came to Clemson to pursue a Master of Business Administration degree, and I decided to double down and also earn a Master of Arts in Professional Communication.

The opportunity to merge my study interests with my football interests came together thanks to the Atlantic Coast Conference. I discovered and landed an internship opportunity with the ACC — through the help of a classmate — where I blog about Clemson Football with national exposure. I still pinch myself at the thought of actually getting to do this “job.”

In my time at Clemson, I've met more people genuinely interested in me and my success than anywhere else (besides my family, of course). The Clemson Family atmosphere, sense of community and school spirit on campus (and not to mention Death Valley) are unrivaled.

I know that when I walk across the stage and accept my degrees, the entire Clemson

nation will be rooting for me. It will be my turn to run down that hill.

I'm Melissa Constante and this is my Clemson.

After she earns two Clemson graduate degrees, Constante says her dream job will be to work at the corporate level for a bowl game organization or for the NFL in corporate relations and communication.



Melissa Constante



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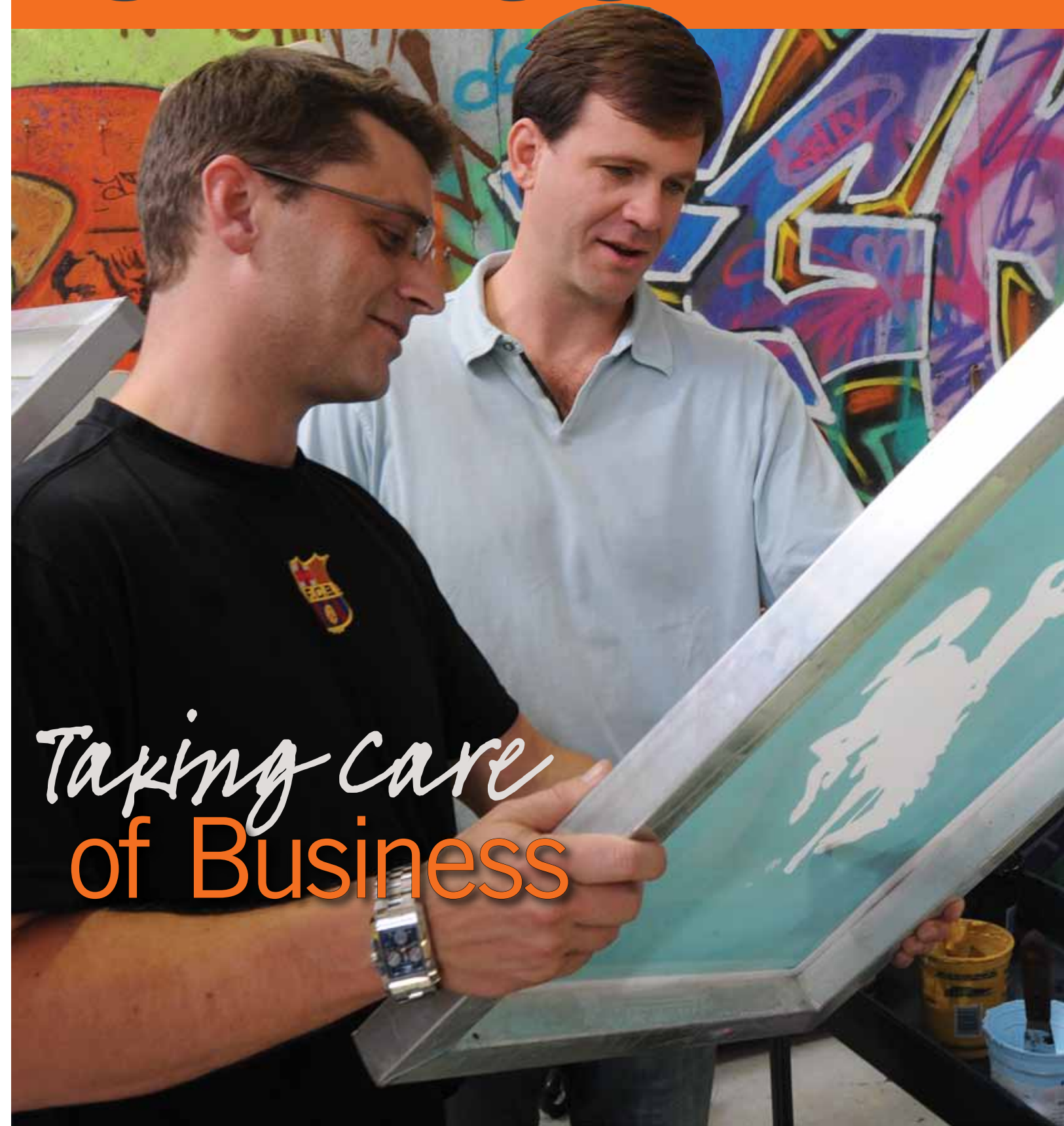
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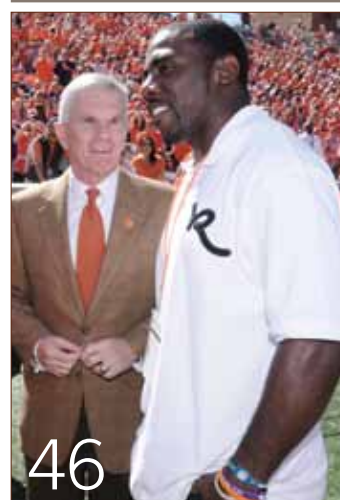
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CW D Y K? "Did You Know" facts about Clemson University.



EXTRAS ON THE WEB

View *Clemson World* online with lots of Web extras at clemson.edu/clemsonworld.

Check out the University's social networks page for Facebook, YouTube, LinkedIn, news and calendar feeds, and much more at clemson.edu/campus-life/social-media/index.html.

See the University's new flickr site at flickr.com/photos/clemsonuniversity/collections for photos from campus, vintage collections, regional events and much more.

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Cover photo: Chris Bernat '93 and Jackson Burnett '94, M '95 of Vapor Apparel — photography by Patrick Wright

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