

CLEMSON WORLD MAGAZINE

SPRING 2012



Life-changing research
at **CUBEInC**

Content

SPRING 2012 Volume 66, Number 2



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Cover photo: Ph.D. candidate Lee Sierad at CUBEInC (see story on page 18). Photo by Craig Mahaffey.



Clemson must build to compete

“There has been no state bond bill for higher education in South Carolina for more than a dozen years. During that same period, our neighbor North Carolina has spent \$3.1 billion on higher ed facilities, and Georgia has spent \$1.7 billion.”



Clemson is growing again, as features and news items in this issue of *Clemson World* make clear, and that is a very good thing.

A newly renovated and enlarged Lee Hall opens this spring, along with the Class of 1956 Academic Success Center. Construction cranes near the Brooks Center for the Performing Arts mark progress on a new life sciences facility for the College of Agriculture, Forestry and Life Sciences.

Off campus, a new biomedical engineering laboratory at the Greenville Hospital System's Patewood campus is up and running. Our business programs in downtown Greenville are bursting at the seams, and the Board of Trustees recently approved a plan to acquire space in the new Project One development at Washington and Main.

In the Lowcountry, architects have been chosen for the Clemson Architecture Center in downtown Charleston. Work continues on the massive Large Wind Turbine Drivetrain Testing Facility at the Clemson University Restoration Institute in North Charleston, where we also plan to add a graduate education center.

New or improved athletic facilities include the Chapman Grandstand at Doug Kingsmore Stadium and the new Larry Penley Golf Facility.

These improvements are all aspects of a key strategic priority in the new Clemson 2020 plan. Our university must build to compete. We have a 10-year plan to provide nationally competitive facilities, replace worn-out infrastructure and protect a multi-billion-dollar asset — our campus.

Why is this a priority?

- Because 75 percent of Clemson's academic and support space is a half-century old, even some of our key engineering and science buildings. Think Riggs Hall, Long Hall, Lowry and Earle. Remember the P&A!
- Because good facilities are critical to recruiting the top faculty we want, and three out of four prospective students also name facilities related to their majors as “very” or “extremely important” in choosing where to go to school.
- Because we are in a positive economic environment for construction right now. Interest rates are low, and bids are favorable.
- Finally, because there has been no state bond bill for higher education in South Carolina for more than a dozen years. During that same period, our neighbor North Carolina has spent \$3.1 billion on higher ed facilities, and Georgia has spent \$1.7 billion.

I repeat: Clemson *must* build to compete. That's why this is a key priority for the Will to Lead campaign.

Four key components of our 10-year facilities plan

The **Student Portfolio** includes, first, redevelopment of the Douthit Hills area, which is across Walter Cox Boulevard from the President's Home near the Clemson House. Next, we plan to redevelop the core campus, replacing the last section of Johnstone, the Union and Harcombe, built 38 years before this year's freshmen were born.



President Barker talks with students and faculty atop the 30,000-square-foot sedum roof of the Lee Hall addition.

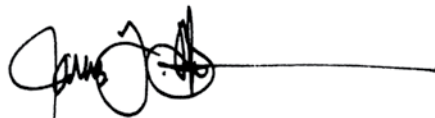
The **Academic and Research Portfolio** includes the two Lowcountry projects and the new Watt Family Innovation Center near the Library. Renovation of Freeman Hall (industrial engineering) will get under way soon, and we also want to renovate Serrine Hall and build new facilities for the College of Business and Behavioral Science.

The **Athletics Portfolio** calls for completing the next phase of the major athletics facilities plan launched in 2003. We're building an indoor practice facility for football and completing the WestZone, adding practice space to Littlejohn Coliseum, improving Historic Riggs Field and the safety of pedestrians walking by it.

The **Stewardship Portfolio** supports our Road Map pledge to "fix what's broken" and be good stewards of public resources. We have a backlog of \$230 million in deferred maintenance work. Much of our infrastructure is aging and eroding and must be addressed. These planned improvements will save energy, reduce energy costs, improve indoor air quality and make sure we have needed backup utility systems.

Clemson values its hard-won reputation for being a good steward of resources — financial and otherwise.

Our 10-year facilities plan does not have a cheap price tag, but it's reasonable and "do-able." It's also an essential "enabler" that will help us carry out our mission to provide talent for the 21st century, drive economic development and job creation through innovation, solve problems and address the great challenges of our time.



James F. Barker, FAIA
President

To see construction projects in progress, go to clemson.edu/webcams.



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\$5.5M gift for Watt innovation center and more

A FAMILY OF CLEMSON ALUMNI HAS GIVEN \$5.5 MILLION TO CLEMSON'S WILL TO LEAD campaign to transform student lives and the academic center of campus.

The family — Charles Watt '59 and his wife, Linda; son, Steve '81, and his wife, Pam '83; and son, Mike '84, and his wife, Kim '85 — wants to create an intellectual center that will prepare a new generation of scholars who can take ideas from concept to the marketplace.

The primary portion of the gift, \$5.25 million, will establish the Watt Family Innovation

Center for academic collaboration and student engagement. The balance will enhance academic, scholarship and athletic programs, particularly in the colleges of Health, Education and Human Development and Engineering and Science.

Charles is founder and former chairman of Scientific Research Corp. (SRC), a company in Atlanta that provides military and commercial technology solutions to public and private sectors. Steve is SRC executive vice president, and Mike is SRC chairman and CEO. The family members not only support Clemson financially, they also give their time and expertise in serving voluntarily on various University advisory boards.

The Watt Family Innovation Center, a three-story, 40,000-square-foot facility, will be built near the R.M. Cooper Library and the Class of 1956 Academic Success Center. It will thrive on public and private investment and expose students to global leadership and critical thinking.



Watt family members, pictured from left, Mary Katherine, Mike, Wesley, Kim, Austin, Charles, Linda, Pam, Steve and Brittany. (Not pictured, Brandon '08, M '10.)

CW DYK?

Diverse Issues in Higher Education recognized Clemson as tied for ninth top U.S. producer of African-American engineering Ph.D. graduates and eighth for B.S. graduates. CU-ICAR STEM efforts to support young women were recognized by InnoVision. Fall 2011 entering class has increase of 25 percent African-American freshmen vs. 2010 as well as record number of African-American transfers.

Interning in Uganda

CLEMSON STUDENTS KATHLEEN MCKISSACK (RIGHT) AND Libbie Dean spent last fall in Kampala, Uganda, interning with Show Mercy International.

McKissack, a psychology major with an education minor, and Dean, an economics and political science major, worked with children in its orphanage and primary school, where they tutored and mentored the children and started an after-school program for the youngest orphans who get out of school at noon and have no one to look after them.

They also visited and evaluated village schools in the area, worked with teachers at the primary school to help improve educational standards, and helped lead a mission's group of 15 Americans. For more on the organization, go to www.showmercy.org.



Student interns with Show Mercy International



Class of '56 Academic Success Center

CLEMSON'S ACADEMIC SUCCESS CENTER HAS WORKED NEARLY A DECADE IN the lower level of the Cooper Library — and in other nooks and crannies across campus — to help students keep scholarships and graduate.

Now, thanks to the Class of 1956, it has a new designated building in the heart of Clemson's academic campus. The \$2.7 million raised by the class became seed money for the construction of the Class of 1956 Academic Success Center, located behind Cooper Library, which opened earlier this year.

The \$13.7 million project includes construction of the 35,000-square-foot, three-story building, site preparation, furnishings and landscaping. Its main programs and instructors make studying and understanding course work more effective and meaningful, helping students keep scholarships and graduate.

Key components are tutoring, supplemental instruction, academic coaching and counseling, academic skills workshops and special programs for students on academic probation.

And, thanks to \$1.5 million in additional support from Ted Westmoreland '56, the Academic Success Center is getting new and expanded programming to help even more Clemson students succeed. Along with the Westmoreland Academic Success Program, the new center will house Disabilities Services, the Writing Center and additional tutoring, supplemental instruction and classroom space.



IPTAY pledges \$1.25 million for need-based scholarships

IPTAY, WIDELY REGARDED as the model of successful collegiate athletic fundraising, has pledged \$1.25 million for need-based scholarships to the University.

"The members of the IPTAY board know that Clemson strives to create the leaders of tomorrow, instilling in students the understanding and the drive that will change both their futures and ours," says Charles Dalton, president of the IPTAY board of directors.

"Dwindling public funding, a struggling economy and increasing numbers of people entering higher education have created urgency for additional scholarships."

Since 1934, IPTAY has been a source of strong, consistent support for the athletic program, student-athletes and the general improvement of the University.

The organization also supports non-athletes through the IPTAY Academic Scholarship Endowment. The scholarship fund is the second largest scholarship of its kind at Clemson and has assisted thousands of students in attending.

IPTAY membership includes more than 16,400 annual donors and an additional 5,500 Collegiate Club members.

Tigers experience NYC art scene

EACH YEAR, CLEMSON bachelor of fine arts seniors travel to New York City to tour the area's major museums including the Museum of Modern Art, the Metropolitan Museum of Art, the Guggenheim and others.

The Clemson group also visits the Chelsea art district, where they explore contemporary work in private galleries. Beyond seeing the art, students learn about how the art business works and what goes on behind the scene of major galleries.

The tour is led by Clemson art professor Joseph Manson with fellow art faculty Dave and Denise Detrich.



Clemson faculty and students at the Museum of Modern Art

Social Media Listening Center



Monitors display real-time social media data behind Clemson President Jim Barker; Allison Dew, executive director of social media for Dell; Jim Bottum, chief information officer and vice provost; and Ed Sullivan, vice president of strategic relationships for Radian6.

CLEMSON HAS ESTABLISHED A SOCIAL MEDIA LISTENING Center with support from Dell, a giant in multinational computer technology, and Salesforce Radian6, a major Web-based social media monitoring platform.

The center, thought to be the first of its kind at a university, enables Clemson students to monitor thousands of online conversations about organizations, brands, products and services on a global scale in real time. This allows for more sophisticated review, routing and response to social media posts and content. Jim Bottum, Clemson's chief information officer, learned about a social media listening center during a visit to Dell's headquarters last year and saw the potential for Clemson, as did other faculty, for a unique partnership.

The resulting research lab and teaching facility serves as a catalyst for sparking interdisciplinary research and pedagogy that connect Clemson with the world.

The center has six large display screens that faculty, students and staff monitor. Salesforce Radian6 provides the platform to listen, discover, measure and engage in conversations across the Web by capturing more than 150 million sources of social media conversations — Facebook, Twitter, YouTube, LinkedIn and other online communities. The customized screens and dashboard provide a graphic display of social media content to convey sentiment, share of voice, trend information, location and much more.

Clemson faculty members mentor their students on social media research and issues through Creative Inquiry team projects. Jason Thatcher, management professor, is the center's academic lead. Barbara Weaver, project manager in the CyberInstitute, is the information technology lead. For more information in general, contact Thatcher at jthatch@clemson.edu or Weaver at weaver2@clemson.edu. For corporate information, contact Bottum at jb@clemson.edu.

CW DYK?

For the fifth year in a row, Clemson was named to the President's Higher Education Community Service Honor Roll by the Corporation for National and Community Service and the U.S. Department of Education. Schools were selected based on the commitment of their students, faculty and staff to bettering their communities through service and service learning.

Interning at NASA's Glenn Research Center



BIOENGINEERING MAJOR MOLLY TOWNSEND EARNED AN elite internship at the 2011 NASA Glenn Academy for Space Exploration at the Glenn Research Center.

The program immerses students in all aspects of NASA, from the mathematical to the social and the political, and creates camaraderie and connections in the NASA community.

Townsend says the experience helped her decide to enter the space exploration industry after she completes her education. She's pictured sitting under the recently retired Space Shuttle *Discovery*, NASA's fleet leader, as it was being cleaned to be sent to the Udvar-Hazy Aerospace Museum.

CW DYK?

Clemson's emergency management project is a finalist in *Computerworld* awards competition.

A University project to enhance emergency response capabilities was one of five finalists for the Computerworld Honors Program's 21st Century Achievement Awards in the safety and security category. The project, led by Clemson Computing and Information Technology, creates a data management and visual display system for use in responding to emergencies.

Orange Wave rolls again in Ethics Bowl

CLEMSON'S INTERCOLLEGIATE Ethics Bowl team — the Orange Wave — won the annual Mid-Atlantic Regional Ethics Bowl championship in November and placed second in the country during the national championship in March.

Team members, assistants and coaches (from left) are assistant Matt Burrows (physics), coach Kelly Smith (philosophy professor and C. Calhoun Lemon Fellow of the Rutland Institute for Ethics), Eric Reeves

(political science), Courtney Dixon (political science and philosophy), Yancey Appling (microbiology), Anna Little (mechanical engineering), Kyle Sporrer (philosophy), Charles Starkey (philosophy professor and Fellow of the Rutland Institute for Ethics) and assistants Spencer Taylor (biological sciences) and Julianna Sobczyk (microbiology).

Not pictured are assistants Peter Catalano (philosophy), Alex Knowles (philosophy), Melissa Hibdon (psychology) and Kris Taylor (history).

Clemson is a perennial powerhouse in the Ethics Bowl competitions. The victory marks the third year in a row Clemson has taken home the regional trophy. The team won the national title in 2008, finished second in 2009 and was a semifinalist in 2006 and 2007. The Rutland Institute and the philosophy and religion department sponsor the team each year, and it receives support from the Humanities Board.



Students win national marketing challenge

A HIGH-ENERGY student marketing team won the Chevrolet Sonic Marketing Challenge, sponsored by Chevrolet and edVenture Partners, in Detroit earlier this year.



Clemson team members who won the Chevrolet Sonic Marketing Challenge are Evan Duggar, left, Paul Hargrave, Blair Bolen and Jessica Byrd.

Creative Inquiry marketing classes, led by James Gaubert, worked in groups to come up with entries for the challenge and voted for the top team's project to compete for the University.

The winning entry, titled "Chevrolet Sonic: Kick Normal to the Curb," was built around a program to build awareness of the vehicle among Clemson students. It included plans for a kickoff event on Bowman Field; targeted marketing plans, including social media and guerilla marketing strategies; and research into students' perceptions of the vehicle.

To see the Clemson team's winning entry, go to the EdVenture website at www.edventurepartners.com/awards.asp.

CW DYK?

WSBF 88.1 FM — Clemson's student-run radio station — has been recognized by RadioFlag as a Spirited College Radio Station. RadioFlag is a website that combines college radio stations and social media. **The Printing Industries of America honored the 2011 *Taps*, the University's yearbook, with the first-place Award of Recognition.** *Taps* beat out more than 2,700 other entries. Awards were based on design expertise and the quality of photography, printing and binding.

Students develop arm stabilizer for pediatric care



Clemson students test the stabilizer they designed.

A TEAM OF CREATIVE INQUIRY STUDENTS FROM MULTIPLE disciplines is working to make pediatric medical care a little easier for children and nurses. They've developed a way to stabilize children's arms when nurses are drawing blood or inserting IVs.

Last year the Children's Hospital of the Greenville Hospital System expressed a need for a pediatric arm stabilizer. Currently when children are brought to the treatment room to get IVs or have blood work done, they have to lie down for the procedure and be restrained.

Students from bioengineering, mechanical engineering, nursing and marketing met with nurses and a child-life specialist multiple times to design the prototype, get feedback, create 3-D models of the prototype, conduct a pilot study and present their stabilizer. The result is a stabilizer that reduces the number of nurses present and allows children to sit up, making the experience less threatening and stressful.

Team members are Allison Jarriel and Kate Coggins of nursing; Russell Corwin, Michael Reardon, D. Adam Spencer, Thomas Bridges, Chris Wenner and Christopher Hapstack of mechanical engineering; Caroline Johnson of marketing; and Devin Walford of bioengineering. Advisers are Arlene Johnson of nursing and Todd Schweisinger of mechanical engineering.



THE GENTLE WHIR OF AN ELECTRIC MOTOR — in a Chevy Volt, to be precise — marked the start of a new era for Clemson earlier this year. Clemson has its first electric vehicle charging station and a new car-sharing program for students, faculty and staff.

Both are a step toward helping Clemson alleviate parking problems, traffic congestion and carbon emissions. Clemson is the first university in the state to offer the program.

The car-sharing program, called WeCar — offered by Enterprise Rent-A-Car — allows Clemson students, faculty and staff to rent vehicles by the hour. A fleet of fuel-efficient WeCar vehicles is maintained at buildings across the campus: the Volt at the Hendrix Student Center, a Toyota Prius at Fike Recreation Center, a Ford Fiesta near Sistine Hall and a Volkswagen Jetta at Sikes Hall.

Members reserve a vehicle online, then access the vehicle using a membership card and return it to the same location. Fuel and basic liability protection are included in the plan.

When the electric charging station at the Hendrix Center isn't charging the WeCar Volt, it will be open to privately owned electric cars. More stations may be added. For more information, go to clemson.edu/parking or call 864-656-2270.

International 'Design to Zero' winners

TWO TEAMS OF CLEMSON'S SCHOOL OF ARCHITECTURE GRADUATE students have earned first and second places in Dow Chemical Company's Dow Solar Design to Zero Competition. Three additional Clemson teams received honorable mention and ancillary awards.

The international competition challenged undergraduate and graduate students to conceptualize energy-efficient, sustainable residential solutions on a global scale.

Clemson's LiveWork team won first place and \$20,000 with its sleek, modern design. Eric Laine of Indianapolis and Suzanne Steelman of Las Vegas embraced the social and economic aspects of life and created a home that incorporates both commercial and residential functionalities. Go to www.ericmlaine.com/dtz/ for a guided tour.

Pictured, from left, are Jason Drews, James Graham, Adrian Mora, Daniel Kim, Caitlin Ranson, John Oxenfeld, Adam Wilson, Suzanne Steelman and Eric Laine. (Michael Niezer is not pictured).



Architecture grad students dominate design competition.

Figliola receives Class of 1939 Award

CLASS OF 1939 MEMBERS HAVE DONE IT AGAIN — HONORED another outstanding faculty member — as recipient of the Class of 1939 Award for Excellence. The annual award, voted on by faculty, recognizes faculty members for the highest achievement of service to the student body, the University and the community.

The 2012 recipient, Richard Figliola, a mechanical engineering and bioengineering professor, has served his department in many ways including department chair. He's also been an outstanding mentor for many young faculty members, undergraduate honors students and graduate students.

His current research program teams with colleagues at engineering and medical schools in four countries through a prestigious Leducq Foundation (Paris, France) grant to develop blood-flow modeling tools and virtual surgery tools to assist surgeons treating babies born with only one functioning ventricle. And he's co-author of the top-selling textbook in the field of engineering measurements.

He's also a consultant to the U.S. Air Force on morphing wing strategies. He's published extensively, holds several patents and has worked with many local companies, contributing to the development of several successful commercial products, including a coriolis mass flow meter and a mattress cover that helps to prevent pressure ulcers in bedridden patients. He's even an international expert on the fluid mechanics of vacuum cleaners.



Figliola rings in Class of '39 honor.

CW DYK?

Clemson's Conference Center & Inn was featured in the national magazine *Small Market Meeting* last October, and the award-winning Walker Golf Course is slated for a feature in *Sandlapper* magazine for the spring. All meeting space has been renovated in the past two years. And last spring, Seasons by the Lake restaurant was renovated and expanded, and the golf course was enhanced.

Students use winter break to help others

DOZENS OF INDIVIDUAL CLEMSON STUDENTS USED their winter breaks to help others on service trips to Tuscaloosa, Ala., for tornado relief; to New Orleans to work with HIV/AIDS issues; to Maryville, Tenn., for environmental projects; and even abroad to help communities.

The Tennessee team — pictured from left, Amy Smedberg, Marjorie Perez, James Antill, Kate Radford, Rachelle Idziak, Ariane Alexandrescu, Eric Owens and Jasmine Newman — worked on projects at the Sequoyah Museum.



CW DYK?

The University's biodiesel program has been named the Energy Project of the Year by the Association of South Carolina Energy Managers. The initiative began with the goal to convert diesel-powered vehicles to use more biodiesel made from cooking oil collected from dining halls and local businesses. The vehicles and equipment in University Facilities use 20 percent biodiesel now. The plan is to increase that to 100 percent.

Frats, sororities join San Juan community build

FIFTEEN STUDENTS from Clemson fraternities and sororities spent a week in December in San Juan, Dominican Republic, building with the organization Cambiando Vidas (changing lives). They worked with recipient family members to help create small, safe homes.

Pictured here are Clemson students digging out the foundation by hand for the next house to be built.





Clemson food safety to help children avoid food illness

UNIVERSITY FOOD SAFETY SCIENTIST ANGELA Fraser has received nearly \$543,000 to study conditions for the spread of norovirus in the elementary school environment. Every year norovirus sickens millions of Americans who come into contact with contaminated foods, surfaces and individuals.

The USDA National Institute of Food and Agriculture awarded \$542,999 to Fraser's project: "Hand Hygiene Promotion: An Essential Strategy for Preventing Foodborne Illness in Elementary Schools." She will direct a three-year project to identify conditions for the transmission of norovirus in 10 S.C. elementary schools.

Fraser leads a multi-university team that will study and analyze conditions for the spread of norovirus, then develop and promote educational materials targeting children, teachers and food-service workers. With colleagues at North Carolina State University and Michigan State University, the first phase will have observers in selected elementary schools, looking closely at hygiene habits and the school environment.

CW DYK?

Clemson is the new home for *Writing Across the Curriculum Journal*, in partnership with Parlor Press LLC. The international journal publishes innovative research into writing in every major. For decades Clemson has been an international leader in Writing Across the Curriculum and Writing in the Disciplines, contributing to the University's selection as *TIME's* 2001 Public College of the Year and annual commendations from *U.S. News & World Report*.



Clemson grads find jobs at nearly twice the national average.

Clemson graduates find jobs at nearly twice the national average according to the University's Michelin® Career Center. For the 2010-2011 period, 34 percent of Clemson students either had a full-time job offer in hand or had committed to a branch of the armed services before graduating. The national average is 18 percent according to the National Association of Colleges and Employers 2011 report. Another 21 percent of Clemson's graduating seniors were either applying to or had been accepted into graduate school.

Here's why a Clemson degree works.



Companies such as Lockheed Martin participate in Clemson's cooperative education program.

Experience, experience, experience

Two-thirds of Clemson seniors had significant hands-on experience as part of their educations; 67 percent reported having an internship, field experience, clinical assignment or practicum according to

the 2011 National Survey of Student Engagement. The national average is 50 percent. The survey also found that 38 percent of Clemson seniors had worked on a research project with a faculty member outside of class, compared to a national average of 20 percent. No wonder they have a job-market advantage.

Michelin® Career Center rocks

Another reason for success is Clemson's outstanding career services program through the Michelin Career Center. It's No. 9 in the nation according to *The Princeton Review's* 2012 best colleges ranking. The center offers career workshops, on-campus interviewing, co-op and internship programs, and more.



Architecture professor Lynn Craig works with students on the green roof of Lee Hall.

Teaching at its best

Clemson is ranked No. 11 among national doctoral schools in commitment to undergraduate teaching (*U.S. News & World Report*). The National Survey of Student Engagement — given to freshmen and seniors — has several benchmarks evaluating students' overall educational experience. Over the past few years Clemson has outscored the competition in nearly every benchmark comparison.

Clemson among best values in public colleges

SmartMoney magazine ranked Clemson No. 6, higher than Ivy League schools, in its comparison of 50 colleges and universities as to which schools' graduates get the best return on their tuition dollars.

Kiplinger magazine also rated the University among the best values in public higher education — and *the best* in South Carolina — in its most recent ranking of the “100 Best Values in Public Colleges.” And *The Princeton Review* and *USA TODAY* included Clemson in the “*The Princeton Review* Best Value Colleges for 2012.”

Among tops in innovation

In the *U.S. News* 2012 Up-and-Comers category for institutions that have made the most promising and innovative changes in the areas of academics, faculty, student life, campus or facilities, Clemson ranks fourth in the nation. Two of those innovations are Creative Inquiry and living-learning communities.

Creative Inquiry and the Aha! moment

Creative Inquiry is a uniquely Clemson combination of engaged learning and undergraduate research. Team-based investigations, led by a faculty mentor, typically span three to four semesters. Students take ownership of their projects and take the risks necessary to solve problems and get answers. The results are astounding — from published books to award-winning plays to better water systems for Third World countries.

Cool living-learning communities

In the latest *U.S. News* annual guide to “America’s Best Colleges,” Clemson is noted as one of 18 to offer strong learning communities. Clemson’s living-learning communities provide a holistic approach to student development through academic partnerships, service-learning opportunities and research initiatives ranging from honors to ROTC, from service to wellness, from academic majors to career services.



Alumni and students form mentoring relationships in the Tiger Ties program led by the College of Business and Behavioral Science.

Happiest, supportive students, best relationship with town

No wonder Clemson students are so happy. According to *The Princeton Review* (2012), Clemson is No. 2 in “happiest students.” The same survey notes Clemson at No. 1 in “town-gown relations” and No. 3 in colleges where “everyone plays intramural sports.” Just as important, a 2011 survey by *The Huffington Post* ranked Clemson No. 4 for students being approachable, supportive and charitable, along with having a deep love for other students.



Students who participated in the *Power Behind the Palette* Creative Inquiry project led by Mark Charney not only acted, but helped research and develop the play.

For more info

Michelin Career Center at clemson.edu/career
 Creative Inquiry at clemson.edu/academics/programs/creative-inquiry
 Living-learning communities at clemson.edu/campus-life/housing/living-learning.html
 Student Affairs at clemson.edu/student-affairs
 Prospective students at clemson.edu/prospective-students
 Admissions at clemson.edu/admissions
 Majors at clemson.edu/majors/home



Lee III sets new standard for academic buildings

The newly opened Lee Hall expansion — Lee III — is a showcase academic building and a model for energy efficiency.



Patrick Wright

Faculty, staff and students of Clemson's School of Design and Building have enthusiastically moved into the much-needed addition to Lee Hall, which increases the overall complex by 50 percent.

The building raises the bar in terms of energy efficiency, featuring exterior and interior skylights, geothermal radiant heating and cooling, natural ventilation and the largest university Garden Roof installation in the Southeast.

The Lee Hall complex houses Clemson's master's and undergraduate programs in architecture, art, city and regional planning, construction science and management, landscape architecture and real estate development, and the doctoral program in planning, design and the built environment.

Thomas Phifer and Partners designed Lee III in collaboration with McMillan Pazdan Smith. Holder Construction was the Construction Manager.



Amenah Le Jacques



Patrick Wright



Craig Mahaffey



Craig Mahaffey

The expansion was funded, in part, by private gifts made through Clemson's Will to Lead campaign.

Fast facts about Lee III

Lee III is designed to offset all of its energy consumption with its own renewable energy when the photovoltaic array is installed. It's also expected to receive LEED (Leadership in Energy and Environmental Design) Gold certification.

Forty-two geothermal wells are installed to a depth of 440 feet below ground, where the median temperature is 59 degrees F. These wells provide heating and cooling to the building's mechanical system and allow the new addition to operate without the use of the coal-based campus energy plant.

An energy dashboard will provide real-time data on temperature, humidity, energy and water use.

Natural ventilation is provided through both manually and mechanically operated windows. Mechanical windows close when temperature and humidity readings reach threshold levels.

The 30,000-square-foot sedum roof is the largest university Garden Roof installation in the Southeast.

Fifty-three external and internal skylights provide natural light. The skylights and window walls minimize the need for lighting during daylight hours.

Nearly 98 percent of Lee III's regularly occupied space has views to the outside in multiple directions.

Structural steel column trees are made of 10¾-inch diameter, 1-inch thick seamless steel, typically used for high-pressure lines in the oil industry.

Materials used to construct Lee Hall have high recycled content and are extracted and manufactured from resources in close proximity (500 miles or less) to the building. In fact, some material was harvested on campus! Most of the wood used in this project is certified sustainably harvested by the Forestry Stewardship Council. Lee Hall's interior finish materials were carefully selected to ensure a high standard of indoor air quality.

A large percentage of Lee Hall's site is covered with pervious paving materials that allow storm water to transfer into the ground instead of municipal treatment systems.

A team of Clemson School of Architecture students and faculty, led by professors Rob Silance and Dan Harding, designed the workstations. 🍷

For more on Lee III or the programs, contact Jeannie Davis at eugenia@clemson.edu or 864-656-1821.

Portraits of Success



Westmoreland



Segars



Sullivan



Krantz



McKissick



Durham

*Meet the
Clemson Alumni
Association's newest
Distinguished
Service Award
recipients.*



Clemson's impact on the world around us can be measured in a large part by the positive actions of its alumni. Here are six individuals who have achieved personal and professional success while making invaluable contributions to their communities, their alma mater and far beyond.

Theodore G. “Ted” Westmoreland ’56

From an early age, animals have been an important part of Ted Westmoreland’s life. As a child, he raised turkeys from eggs discarded from a local hatchery. As a teen, he raised cattle and later sold them to cover his tuition at Clemson.

After earning a Doctor of Veterinary Medicine at the University of Georgia, he served as a captain in the U.S. Air Force. He has spent five decades as the owner of Boulevard Animal Hospital in Shelby, N.C., and at the age of 78 continues working tirelessly to care for generations of animals and their owners 365 days a year.

Ted was twice elected president of the N.C. Angus Association, while his River Hill Angus Farm produced renowned breeding stock for purebred herds across the United States and Argentina. Ted has served as a mentor, teacher and supporter of youth of the N.C. Junior Angus Association. Upon exiting the cattle business in 1991, he generously donated the bulk of his valuable herd to Clemson.

“My philosophy is to use the abilities the Lord has given me to work hard, earn, save and help others. It seems to me that if you’re not giving back, you aren’t really successful.”

Westmoreland’s energy and resources have positively impacted athletics and academics at Clemson. A life member of Clemson’s IPTAY program, he has been a supporter of the WestZone and other strategic initiatives for student athletes.

The T.G. Westmoreland Scholarship Endowment assists a significant number of animal and veterinary science majors.

The Dr. T.G. Westmoreland Academic Success Program, to be housed in The Class of 1956 Academic Success Center, will ensure the continued academic success of Clemson students for years to come.



Gosnold G. “Goz” Segars Jr. ’66

GOZ Segars spent his first year of college at Furman, but wanting to study agronomy and return to the family farm, he transferred to Clemson and found a home. A member of Delta Kappa Alpha fraternity, Tiger Brotherhood, Central Dance Association and *Taps*, he was recognized as one of 10 outstanding seniors.

After a stint in the Army, he headed home to work with his dad. Because of Segars’ foresight and determination, what once was a family farm has diversified to include Segars Development and Segars Realty, as well as the 2,400-acre Segars Farms.

Segars has led countless community boards and initiatives, from the Hartsville Rotary Club and Darlington County Farm Bureau to the Darlington County Development Board. He was on the Florence Darlington Technical College Board from 1972 to 2009. A founding board chair for the Hartsville YMCA, he has served on the Coker College Board of Trustees since 2008 and is currently chair of that body.

And he hasn’t forgotten his other home at Clemson. A member of the Greater Pee Dee Clemson Club and IPTAY (32 years), Segars is a supporter of the WestZone initiative and the Will to Lead campaign. He has served on Clemson’s Board of Visitors and the Agricultural Economics Curriculum Advisory Committee.

“To me, being grounded is important — understanding where I am, remembering what I am a part of.”

Segars is a founding director of the Clemson University Land Stewardship Foundation and has been a director of the Clemson University Real Estate Foundation since 2006. His leadership skills and seasoned perspective as a developer have proved invaluable in evaluating potential gifts and leading the development of strategic use plans for properties received.

Elected as a director of the Clemson University Foundation board in 2006, Segars has chaired the Investment Committee and the Investment Task Group and is currently vice chair of the foundation.



Charles L. Sullivan Jr. '66

Charles Sullivan may have stayed in South Carolina for college, but his Clemson education prepared him for the world.

Sullivan grew up on a farm in Hartsville, then headed to Clemson in 1962. His academic and extracurricular activities broadened his perspective as he studied economics and sociology and met people from other parts of the country. Before he could graduate, he was drafted.

After four years in the Army with a tour in Korea, he came home to work at the Hartsville Oil Mill. Plant superintendent in 1981 when the company was sold to Cargill, Sullivan stayed with Cargill, a decision that took him to more than 50 countries around the world.

In 2000, Sullivan returned to Hartsville to take a job with Sonoco Products. By the time he retired as executive vice president of global operations, Sonoco's sales and earnings had doubled under his leadership.

He embraced his move back to Hartsville and began serving as a leader for the Coker College Board of Trustees, YMCA of the Upper Pee Dee, Hartsville Heritage Foundation, Harvest Hope Food Bank and Thomas Hart Academy.

Currently in his second term on the Clemson University Foundation board, Sullivan chairs the foundation's Development Committee. He is a member of the National Campaign Executive Committee for the Will to Lead campaign and chairs the campaign's Corporate Foundation Relations Task Force.

"Being exposed to people from other parts of the United States was the start of a foundation that helped me later in life. I give Clemson a lot of credit for opening my eyes and starting to help me develop that foundation."

He is a lifelong donor to IPTAY and the Clemson Fund and participated in the WestZone initiative. Sullivan was an integral member of the task force that developed the concept and secured the funding for the Sonoco Institute of Packaging Design and Graphics and the Harris Smith Building at Clemson.



Palmer E. "Satch" Krantz '72

Satch Krantz came to Clemson with his life planned out. Clemson would be followed by the University of Georgia Veterinary School and a career as a veterinarian. But a class in ethology (animal behavior) under professor Sidney Gauthreaux changed the course of his life.

He assisted Gauthreaux with ornithology research and even had a paper published in a scientific journal. By senior year, a graduate degree in ornithology was his new goal. However, a visit to the site for a new zoo in Columbia resulted in another change.

Krantz began work at Riverbanks Zoo in 1973, and within three years was named executive director. Under his direction, it has become one of the top zoos in the country and a multimillion-dollar scientific, cultural and recreational facility. Krantz is the longest serving zoo director of a single zoo in the country.

"Going to Clemson was an eye-opening experience. I remember being energized and excited about the dialogue with professors and being challenged to take a different view of things. A large part of who I am today was developed back then."

He has served as president of the World Zoo and Aquarium Association, one of only four Americans to do so, and twice served as chair of the American Association of Zoos and Aquariums, including three terms on its board.

For his community, he's a former board of directors chair of Palmetto Health Children's Hospital, past president of the Rotary Club of Columbia and on the River Alliance board.

A member of the Clemson Alumni National Council since 2007, he recently completed a term on the Alumni Association Board of Directors and executive committee. A former Board of Visitors chair and dedicated volunteer, he's a founding member of the Second Century Society, Columbia's Clemson Luncheon Club.



E. Smyth McKissick III '79

Smyth McKissick's father was a great believer in the principle of an honest day's work. He most admired hard-working people. The younger McKissick learned this lesson well. He got his first real job at 16, working as a utility person in the spinning room of his family's textile company, Alice Manufacturing.

In 1975, he headed to Clemson to study business, then on to the University of South Carolina for an MBA in 1981. He returned home and joined the ranks at Alice Manufacturing, where he had the pleasure of learning and working alongside his father many years.

President and chief executive officer of Alice Manufacturing since 1988, McKissick is on the board of the Institute of Textile Technology, past board member and chair of the S.C. Manufacturers Alliance, co-chair of the American Manufacturing

"Clemson was a maturing experience for me. Sometimes I feel like I grew up in Sistine Hall. Clemson gave me a discipline and a focus that have helped me in life."

Trade Action Coalition, and former board member on the J.E. Sistine Textile Foundation, the National Council of Textile Organizations and the American Textile Manufacturers Institute. **McKissick and his leadership team at Alice Manufacturing have transformed the company by becoming much closer to the consumers and providing**

outstanding fashion, and in doing so have been able to re-create themselves successfully in today's global textile environment.

In addition to his professional commitments, he invests a lot of time and hard work in Clemson and his community. A life member of Clemson's Board of Trustees since 1998, McKissick is chairing the Will to Lead campaign. A director of the Clemson University Foundation, he has supported the University's WestZone initiative.



W. Kelly Durham '80

When Kelly Durham graduated from Clemson in 1980, he received the Algernon Sydney Sullivan Award, given annually to one male and one female student "in recognition of the recipient's influence for good, excellence in maintaining high ideals of living and genuine service to others."

The award reflected his dedicated involvement in Student Alumni Council, Student Government and ROTC, where he earned the top rank of cadet colonel. The inscription on that award set the tone for Durham's life since.

After a four-year stint in the Army, he returned home to Clemson, where his good friend Joe Turner lost no time in bringing Durham on board as marketing director for First Sun Management Corp., an 18-store Wendy's International franchisee.

Now president and co-owner of First Sun Management Corp., Durham has worked with Turner to grow the business to 51 restaurants in four states, during which time the company has been recognized by Wendy's Corp. for the best operation, best marketing and best sales in the entire country.

"In the Clemson community, we have all been given a great deal, much more than previous generations have enjoyed, much more than other countries enjoy. And I think we have a responsibility as Clemson people, as Americans, to give something back."

Durham has chaired the Clemson University Board of Visitors and currently serves on the Clemson University Foundation board as well as the Clemson Corps. He wrote, directed and produced a documentary about the Scroll of Honor Memorial located near the football stadium, which honors Clemson alumni who have died in service to their country. He was a member of the WestZone initiative committee.

Author of *The War Widow*, a historical novel, Durham also appeared in Clemson Little Theatre's 2011 production of *To Kill a Mockingbird*.



Life-changing research at **CUBEInC**

By Peter Hull

Photography by
Craig Mahaffey



Bioengineering students, from left, Tasha Topoluk, James Chow, Richard Pascal and Lee Sierad work with a heart valve bioreactor in Dan Simionescu's Laboratory for Regenerative Medicine at the Patewood campus of the Greenville Hospital System.

Clemson students experience life-changing research with cardiovascular and orthopedic surgeons at Patewood in Greenville.

To walk through Clemson's Patewood bioengineering laboratories is to stand at the leading edge of science. It's innovation at its best — a place where Clemson research will improve the quality of life for countless patients.

The Clemson University Biomedical Engineering Innovation Campus, or CUBEInC, opened in December. The state-of-the-art laboratory at Greenville Hospital System's (GHS) Patewood campus is where Clemson faculty and students work in some of medicine's most complex fields, from tissue regeneration to joint replacement.

Faculty collaborate with cardiovascular and orthopedic surgeons across the hospital system and expose their students to the highest levels of research.

At the heart of regenerative medicine

In the Laboratory for Regenerative Medicine at Patewood, Dan Simionescu and his students collaborate with GHS cardiovascular and orthopedic surgeons, and other clinicians. Together, they work in a world that sounds more like science fiction than just plain science.

Clemson's depth of research and the clinical expertise of GHS are the perfect complement, Simionescu says. Working on the same campus, in many cases just floors apart, sparks dialogue.

The Patewood labs are an extension of research at Clemson's bioengineering department on the main campus. The work at Patewood transfers research and engineering to clinical applications.

And it's often on the clinical side where many of Patewood's projects begin.

One such project that came out of this collaboration with clinicians was a request by a GHS vascular surgeon who needed a very long vascular graft for leg surgery. The surgeon challenged Simionescu's team to make an artificial graft that could be used on patients.

"I think that's the way bioengineering should work," says Simionescu. "You have to engage with clinicians to find out what they need. It's very difficult to sit on the main campus, for example, and imagine what they might require."

At the center of Clemson's mission is its students, and at Patewood there is no exception.

Ph.D. candidate Lee Sierad and Jeremy Mercuri, who received a doctoral degree from Clemson in December, are at the heart of Patewood's research — in more ways than one.

Sierad, who specializes in cardiovascular tissue engineering, researches ways to repair damaged or diseased human tissue using the body's own adult stem cells. He works with aortic roots, which contain the aortic valve — retrieved from pigs and other animals — to literally grow human cells on the root.

The intent is that the root can be transplanted in a patient with a heart valve defect and stand a better chance of not being rejected by the body. The root will contain the patient's own adult stem cells, which the body may not consider "foreign."



Bioengineer Jeremy Mercuri, Ph.D. '11, from the Laboratory for Regenerative Medicine, specializes in orthopedic tissue engineering and works collaboratively with surgeons from the Steadman Hawkins Clinic of the Carolinas.



Mercuri specializes in orthopedic regenerative medicine. He works side-by-side with surgeons at the Steadman Hawkins clinic, located two floors down from the Patewood research labs.

His primary focus is to improve patient care through engineering cartilage and tendon tissue using adult stem cells in combination with biomaterials that mimic native tissue architecture.

Building a better joint replacement

In addition to Simionescu's lab, Patewood houses one of the country's largest stores of post-use total joint replacements: hip, knee and other artificial joints that were removed from patients, in some cases after 15 years or more of use.

John DesJardins directs the Frank H. Stelling and C. Dayton Riddle Orthopaedic Education and Research Laboratory. He and his team study and catalog how joint replacements have performed over the years, such as how different materials wear out during natural movements of the body.

Bioengineering's newest assistant professor, Melinda Harman, has recently joined in this implant retrieval effort and brings more than 10 years of implant retrieval research experience to Clemson.

Clemson's research is used by manufacturers to improve their products, leading to fewer repeat total-joint replacement procedures. Such advances help reduce medical costs and spare patients a return to what often is painful and invasive surgery.



John DesJardins directs the Frank H. Stelling and C. Dayton Riddle Orthopaedic Education and Research Laboratory at Patewood. His team, including Ph.D. candidate Estefania Alvarez, studies how joint replacements have performed over the years.

"Essentially, we're trying to improve the entire procedure," says DesJardins. "We're trying to make these joints last longer and longer, because they're like highly engineered car tires — they eventually will wear out."

Win-win-win for students, state, patients

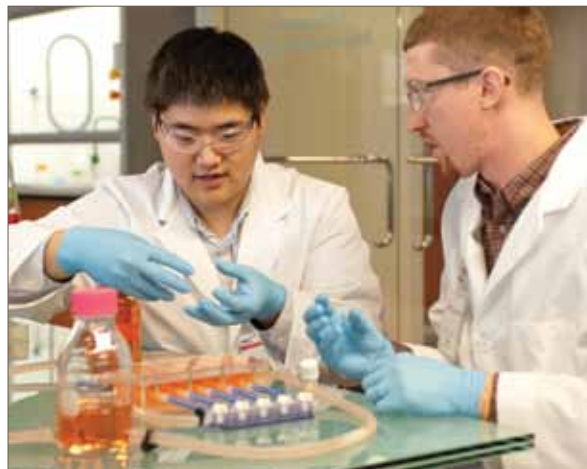
Clemson's new 30,000-square-foot research facility at Patewood houses 10 laboratories, plus offices and conference areas. More than 100 faculty, staff and students will use the laboratories as Clemson adds another dimension to its bioengineering degree programs.

For example, DesJardins supervises 65 bioengineering students who are visiting the hospital campus as part of

their senior year design projects. The students are working with clinicians to design new medical technology, tools and devices to improve the health care of patients. During two semesters, the students will identify needs and design potential solutions.

Also in the facility, bioengineering professor David Kwartowitz runs four fully equipped ultrasound rooms

where he works with students to study, among other conditions, why people suffer rotator cuff tears.



Ph.D. candidates James Chow (left) and Lee Sierad work with a vascular bioreactor that simulates flow through blood vessels in the human body in tissue engineering research.

In collaboration with the Steadman Hawkins Clinic of the Carolinas and Proaxis Therapy, Kwartowitz is working with eight Clemson undergraduate and graduate students to gather data on how and why patients experience the condition.

Martine LaBerge, chair of the bioengineering department at Clemson and Patewood's director, says, "As the go-to organization in Upstate South Carolina for medicine and surgery, GHS is a wonderful partner for Clemson. When these areas of expertise are combined, there exists real opportunity to make a difference in the quality of life for the people of our state."

Breakthroughs from this partnership at Patewood will not only improve health care but also help fuel the economy through patents, small business startups and other economic development.

And as an added benefit, the partnership makes the Clemson degree even more valuable. 🍷

For more information about Clemson's Patewood bioengineering laboratories, contact Martine LaBerge at laberge@clemson.edu or 864-656-5557.

we're behind you.

2000%

Getting Down(town) to Business

By Darlene Fuhst

When John-David McKee '07 was working on his master's degree in marketing at Clemson, the germ of an idea began to sprout. Computer-aided matching has certainly been a success in the online dating arena; could colleges use a similar tool to recruit, involve and retain students? As he developed his master's thesis, the idea grew. And by the time he completed his degree in 2009, McKee had founded Umatch™, a Greenville-based business offering an innovative technology that combines data management, analytics and social software into a risk management tool for higher education.

Along with 40 other entrepreneurs, McKee applied for NextStart, a two-month pilot incubation program sponsored by Clemson's Renaissance Center and Spiro Institute, SC Launch, the Greater Greenville Chamber of Commerce and NEXT, a resource collaborative of technology professionals and entrepreneurs in the Upstate. McKee was one of four chosen to receive up to \$10,000 in startup capital, as well as office space and mentoring assistance from Clemson's Spiro Institute.



John-David McKee

Clemson has consolidated many graduate business programs and outreach efforts in the state's largest business district.



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A vision realized

It's the kind of story that Claude Lilly likes to hear. When Lilly took the helm of Clemson's College of Business and Behavioral Science in 2007, one of his visions was to create a viable presence in downtown Greenville to foster easy collaboration and partnerships between the college and the business community. Two years ago, the college relocated several programs and centers in the former Bowater building overlooking the Reedy River in the heart of downtown.

Clemson at the Falls, as the building is now known, offers one convenient location for the community to partake in world-class educational opportunities, co-designed leadership and sales training for established businesses, small business development services and an ongoing array of exciting events designed to encourage the spirit of entrepreneurship and spur economic growth in the Upstate and beyond.

"When we created this campus," says Lilly, "our mission was simple: to bring business education, professional development, leadership training, entrepreneurial thinking and small business assistance to the place where business is, to where the professionals are — to make higher business education accessible in an effort to spur economic development and support our local economy."



President Barker and Greenville mayor Knox White hoist the Clemson flag.

Entrepreneurship, social responsibility and community service

Nearly 300 students are enrolled in Clemson's MBA program in Greenville. The downtown location allows the college to partner with industry leaders and provide students with hands-on experiences including internships.

In June 2012, Clemson is launching a brand-new MBA in Entrepreneurship and Innovation, which will allow students to begin with just an idea and graduate in one year with an MBA degree and a registered business.

Instead of searching for a job, these graduates will go to work at their own companies. Along with providing foundational business knowledge, the program also provides an impressive 3:1 mentor-to-student network and the opportunity for students to pitch their ideas to “angel investors” for seed capital to launch their businesses.

Clemson’s MBA program encourages a spirit of social responsibility and community service. Students have initiated and supported several outreach programs including the creation of a computer lab in Triune Mercy Center designed to aid the homeless in gaining basic computer skills necessary to find employment. The students were recognized with a Service Award from the TeamMBA advisory committee of the Graduate Management Admission Council for this effort. Students have also organized and participated in the Susan G. Komen Race for the Cure, a trash sweep of the Reedy River and initiatives to help people earn their GED. All incoming MBA candidates must swear to uphold the MBA oath, to “conduct business within an ethical framework and strive to create sustainable, global prosperity.”

Spurring innovation and competitiveness

The Arthur M. Spiro Institute for Entrepreneurial Leadership, charged with supporting educational, research and outreach programs that promote entrepreneurial activity, has been instrumental in bringing many innovative programs to Greenville. Most recently, its leaders co-hosted Ecoplosion, a one-day summit designed to engage students and businesses in spurring entrepreneurship and real estate development. S.C. Governor Nikki Haley was the keynote speaker at the event, which drew a sold-out crowd of 300.

Last fall, the Spiro Institute hosted the second annual LaunchPad competition, a business plan contest in which participants present a five-minute, six-slide PowerPoint of their new business concepts in an effort to win startup funding. LaunchPad attracted more than a hundred applicants and awarded more than \$20,000 in prize money that first year.

Every First Friday of the month when classes are in session, the Spiro Institute hosts a free speaker series that is open to the public. Notable past speakers include Wayne Culbertson, executive human relations director of Michelin North America, and Dave Ridley, vice president of marketing for Southwest Airlines.

The staff and consultants of the S.C. Small Business Development Center, a service of the federal Small Business Administration supported by the University, are ready to help entrepreneurs as well as others who are in the market for free private consulting, educational seminars and links to resources that support the growth of small businesses.

Also located in Greenville, the Professional Advancement and Continuing Education (PACE) center designs, develops and manages Clemson’s continuing, professional and executive education programs. Through partnerships with faculty, experienced industry consultants, and business and community leaders, these programs offer custom and open enrollment programs designed to improve businesses’ capabilities, performance and competitiveness.

Providing wings

Fast forward two years since graduation. John-David McKee is president of Umatch, and has charted an aggressive course of expansion, working with several statewide university systems to implement his company’s risk management technology.

“Clemson offered me incredible resources,” says McKee. “I not only received a great education that prepared me for the wide range of challenges you face as an entrepreneur, I also got the support that allowed me to take a risk and get my business off the ground.” 🙌

Clemson programs located in Greenville

MBA programs: Including full- and part-time MBA programs, as well as one-year MBA in Entrepreneurship and Innovation
clemson.edu/cbbs/departments/mba/

Other graduate business programs: The master’s programs in marketing and management, and starting this fall, the accounting programs
clemson.edu/cbbs/departments/marketing/

clemson.edu/cbbs/departments/management/

business.clemson.edu/departments/acct/acct_grad.htm

S.C. Small Business Development Center: Provides one-on-one consultations, seminars and workshops on everything from tax rules to marketing tools
clemson.edu/centers-institutes/sbdc/

Professional Advancement and Continuing Education (PACE): Continuing, professional and executive education programs
odce.clemson.edu/

Arthur M. Spiro Institute for Entrepreneurial Leadership: Supports educational, research and outreach programs that promote entrepreneurial activity
clemson.edu/centers-institutes/spiro/

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We need **'Every Tiger'** to stand up and be counted!

Every Tiger counts

Our alumni network is only as strong as those who are a part of it. We're all Tigers at heart. And just like family, we support each other, work together and share a common goal of making Clemson even stronger. But we've lost touch with some of our alumni. We want to reconnect and stay connected with you. Go to *everytiger.com* and check what Every Tiger needs to know. Get special discount promotional codes for the online store and register to win special Clemson prizes available only on *everytiger.com*.

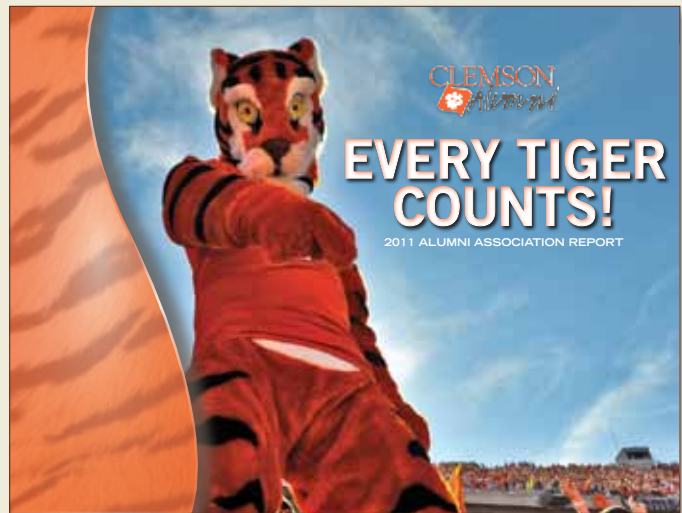
*every***TIGER**.com 

See what connected Tigers accomplished

More and more of you participated in local alumni clubs and special interest groups this year. You are finding that the Clemson Alumni Association can help you reconnect, network, enjoy professional development, attend campus events and uphold your favorite Tiger traditions. This past year the Alumni Association — currently 125,000-strong — grew on many fronts.

- We engaged with more than 72,000 of you through new, online communication tools.
- We hosted 421 alumni events — including reunions, student events and award ceremonies — with a total attendance of 18,700.
- Your participation in our many special program offers provided by our corporate sponsors raised \$340,500 for alumni programming.
- Together, our network of 82 local clubs and groups gave \$71,855 to support University priorities and provide 78 scholarships. We welcomed four new clubs to the network this year!
- Our Student Alumni Council donated \$20,696 to the SAC Scholarship Endowment and \$8,184 for campus support.
- We honored and recognized 13 outstanding individuals with awards.
- We nearly doubled participation in the Clemson Advocacy Program to the S.C. General Assembly and the U.S. Congress. Advocate volunteers increased from 2,213 to 4,236 this past year.
- We took on full oversight and responsibility for all sales and marketing of the official Clemson Class Ring and offered a new accessory line of Clemson Ring products.
- We launched a new online store where you can find all the best quality and prices on alumni gear and gifts.

Check out the Annual Report on our website (clemson.edu/alumni) to learn more.





Tiger tracks run everywhere

Have you ever wondered about the demographic or statistical makeup of approximately 125,000 current Clemson alumni? If you're a finance or marketing alum, you probably have. This is the place to find out how many Tigers live near you, or on the other side of the globe. See who shares your degree or your decade, and discover much more about your fellow alumni. Visit **Tracking Tigers** at clemson.edu/alumni/dashboard for up-to-date stats throughout the year.

Travel with Clemson Alumni

From Alaska to Italy to France and beyond, travel with fellow alumni during 2012. To see what exciting PASSPORT Adventure destinations are awaiting you now, go to clemson.edu/alumni or contact Randy Boatwright at brandol@clemson.edu or 864-656-5671.

Shop with your official online Alumni Store

For Clemson apparel, accessories, gifts and more, shop at the official online store of Clemson Alumni at clemsonalumni.teamfanshop.com.

The 2011-12 Clemson Alumni Association Board

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Get ready for 2012 Tiger Football!



Make your football plans and leave away-game travel to us. Plan your away-game travel with the Alumni Association's Clemson Sports Travel Program at clemsonstortravel.com.

- Sept. 1 — Auburn (Chick-fil-A Kickoff Classic at Georgia Dome, Atlanta)
- Sept. 8 — Ball State (Youth Day)
- Sept. 15 — Furman (Family Weekend)
- Sept. 22 — at Florida State
- Sept. 29 — at Boston College
- Oct. 6 — Georgia Tech (Hall of Fame Day, Reunion Weekend)
- Oct. 20 — Virginia Tech (Military Appreciation Day)
- Oct. 25 — at Wake Forest
- Nov. 3 — at Duke
- Nov. 10 — Maryland (Homecoming)
- Nov. 17 — N.C. State (IPTAY Day)
- Nov. 24 — South Carolina (Solid Orange Day)

Fan Appreciation Day is Sunday, August 19.

The Clemson network has you covered!



Welcome AZ

Arizona Clemson Club members supported the Tigers during a December basketball game in Phoenix. Arizona is among the newest club locations along with Newberry, Florida Gulf Coast and Polk County, Fla. With 66 Clemson Clubs and 16 other special interest groups, the Alumni Association has groups just about everywhere. To find one near you or to start one in your area, call the Alumni Center or visit clemson.edu/alumni.



Fort Hill club meets new Tigers

Fort Hill Clemson Club members and their guests met head Clemson football coach Dabo Swinney, the coaching staff and the newest football signees during the 2012 Wendy's Recruiting Wrap Up. The February event is held annually to raise funds for the Fort Hill Clemson Club Scholarship.

Alumni network supports students

During the Alumni Council business and network gathering earlier this year, members took time to showcase and celebrate support of Clemson scholarships and other University priorities that the 82 local clubs and groups provided last year. They gave \$71,855 to support the University and provide 78 scholarships last year!



Clemson in DC

The Clemson Club of Baltimore and Washington, D.C., board of directors had a breakfast meeting with S.C. Senator Jim DeMint (front, center). The Clemson University Office of Federal Relations sponsored the event, and Allen Martin '69 hosted it at his office.

Find your Clemson Alumni Association on

Facebook, LinkedIn, YouTube, Twitter, Flickr





CBAC hosts Gantt Scholars

Clemson Black Alumni Council (CBAC) hosted a reception for former and current Gantt Scholars earlier this year that featured Harvey and Lucinda Gantt. CBAC raises funds in support of the Harvey B. Gantt Scholarship Endowment Fund and other initiatives and has fun events throughout the year. For more on CBAC, go to clemson.edu/alumni and click on “Black Alumni” under “Groups.”



Clemson in NYC

Tigers in New York City have a favorite gathering spot — Three Monkeys. Pictured here are Hal Miley '12, Tyler Grimes '13, Caroline Stephenson '75, Claire Marsh '09 and Mac Marsh '13.

Mark Your Calendars

Bring Your Daughter!

Clemson Women's Alumni Council hosts its annual Bring Your Daughter to Clemson Weekend May 18-20. It invites girls, ages 6 through 18, with their chaperones, to visit campus to see what college life is like. They can experience “classes” taught by professors, tours, an ice cream social and more. They'll meet coaches and student-athletes, the cheerleaders and the Tiger, and get to rub the Rock and run down the Hill! Visit the Clemson Alumni homepage for more information.



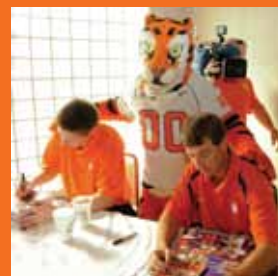
Golden Tiger time!

The 2012 Golden Tiger Reunion is set for June 7-9 and will celebrate the Golden Anniversary Class of 1962 along with many other reuniting classes. This year's celebration will feature a ceremony for the class's project in the S.C. Botanical Garden, academic and athletic updates, Clemson ice cream, class parties, photos and more. Headquarters will be at the Madren Center, while fun and festivities will reach across campus and beyond. For more information, call 864-656-2345 or go to clemson.edu/alumni.

May Prowl & Growl

We're midway into our annual Prowl & Growl tours, with these

May stops still to come —
 May 8, Myrtle Beach;
 May 12, Orlando, Fla.;
 May 21, Rock Hill;
 May 22, Atlanta, Ga.;
 and May 31, Charlotte, N.C.



For more information, check out our Facebook page at www.facebook.com/2012ProwlandGrowl or call 864-656-2345.

Hartwell Lake turns 50



Clemson and Hartwell Lake have shaped each other.

Hartwell Lake and Clemson have a friendship — more than 50 years in the making. For decades, Clemson students have taken advantage of almost everything about being near the shores of Hartwell Lake — Y-Beach (now Campus Beach). Boat races. Sailing club. Skiing.

And so has the University, with its outdoor classrooms for biology, wildlife, botany, forestry, PRTM and more. Its gorgeous setting for the Madren Center, Martin Inn and Walker Golf Course. Its community outreach through the Outdoor Lab's array of opportunities for special-needs campers.

Clemson and Hartwell Lake have served each other well. But the relationship has not always been positive. In fact, the two didn't start out as friends at all. They did have a mutual interest — the Seneca River. The Seneca River, on which Fort



Hill was established, flowed through the Clemson campus and surrounding counties and into the Savannah River basin.

In the 1940s, Congress directed the U.S. Army Corps of Engineers to begin studies of the hydroelectric capacities of the Savannah River basin. The proposed new lake would flood the entire low-lying area of the Seneca River, including areas where Clemson raised crops and livestock and the new football stadium where proud alumni and other Clemson fans watched the Tigers play.

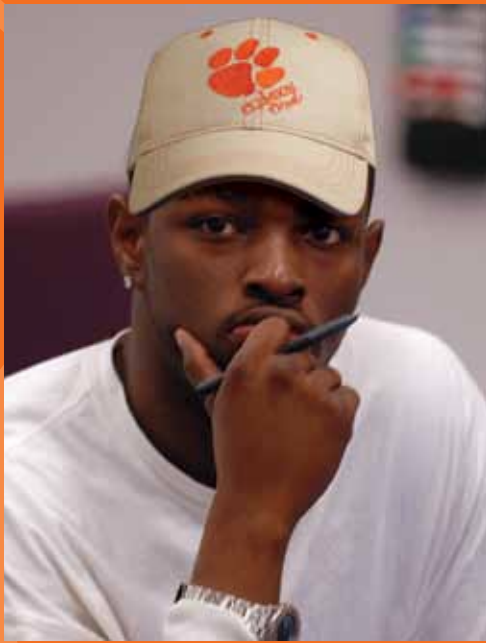
And so began a long struggle between Clemson leaders and the Corps of Engineers that would go on for another decade during the construction of the dam and the diversion dikes and even as the flooding began and the waters rose.

The lake, considered complete in 1962, did take nearly 10,000 acres of the University's original 30,000 acres of land-use property. But thanks to the determined spirit and heroic efforts of its leaders — administrators, legislators, engineers, attorneys and others — Clemson was able to save Memorial Stadium and much of the other original acreage from flooding and to get fair financial compensation or replacement for land that it couldn't save.

And best of all, Clemson has reaped the benefits of a beautiful man-made lake that has truly enriched the University, the Upstate and the rest of the areas its more than 900 miles of shoreline touches.

So Happy 50th, Hartwell Lake! It's been a fine friendship after all. 🍷

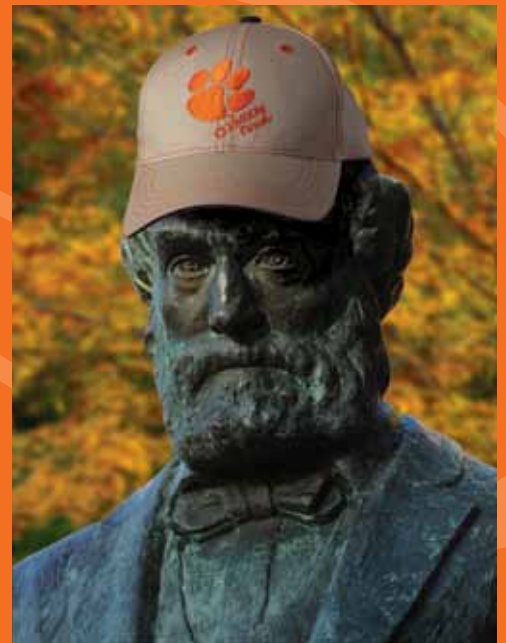
For details on the Clemson-Hartwell Lake negotiations, see The High Seminary, A History of the Clemson Agricultural College of South Carolina, Vol. 1, by Jerome Reel.



Thinking cap.



Rally cap.



Campaign cap.



We're capping off the Will to Lead: A Campaign for Clemson by July, and we need your Determined Spirit to take us over the top.

Your annual gift to the Clemson Fund counts as a campaign gift and demonstrates your will to lead as we raise \$600 million to support students, faculty and exceptional education. Your gift, no matter how big or small, can be the capper that helps push us to our goal and gives you the opportunity to

 purchase this exclusive new cap (\$10 each, includes shipping and handling) available only to Clemson Fund donors and

 receive all print issues of *Clemson World* magazine.

Look for details on the enclosed envelope, call 864-656-5896 or go online to clemson.edu/giving to make your gift and order your cap today.

Will \$600 million go to our heads? Yes, in the best and brightest minds in the nation!

CLEMSON
fund

Pelham opens world to some of most creative students

A \$337,500 GIFT WILL OFFER INTERNATIONAL EXPERIENCE TO Clemson's budding designers, architects, contractors, artists and others. This most recent gift directed by 1977 alumnus William H.



“Bill” Pelham, AIA, through the Jean T. and Heyward G. Pelham Foundation, brings the foundation's total donations to Clemson to more than \$1 million since 2007.

This gift provides \$37,500 to support the Architecture and Health graduate program; \$200,000 to name a studio and seminar room in the expanded Lee Hall; and \$100,000 to bolster the Pelham Foundation's previous support of the School of Design and Building's program in Genoa, Italy; Barcelona, Spain; and Charleston. Pelham's previous gifts also provide scholarships and fellowships that enable students to spend a semester studying at off-campus locations.

Pelham, who also earned a Clemson master's degree in 1981,

is president of Pelham Architects, LLC of Greenville. As a student he spent a semester in Genoa. His parents, Heyward and Jean, who had traveled extensively in the U.S., visited him during their first trip to Italy.

“International travel is good for any student, regardless of experience level. It's confidence-building and gives you new insight into your own culture,” says Pelham, who reflects the philosophy of his entire family.

The Charles E. Daniel Center for Urban Research and Building Studies in Genoa, Italy, owned by the Clemson Advancement Foundation for Design + Building, provides opportunities for students in the College of Architecture, Arts and Humanities. It, along with centers in Charleston and Barcelona, Spain, is central to the “fluid campus” concept.

Plans unveiled for Tiger Band Plaza

CLEMSON UNIVERSITY TIGER BAND ASSOCIATION (CUTBA) has unveiled plans for a Tiger Band Plaza to be built on the band practice field on Perimeter Road.

“The plaza will provide a special place for our band members and their parents to assemble, and it will be an excellent recruiting tool for prospective band students,” says Mark Spede, Clemson band director. “It will be both a functional structure and a chronological monument to Tiger Band — and a beautiful addition to the campus.”

Fundraising for the project, part of Clemson's Will to Lead capital campaign, is under way. Tiger Band alumni and members can have their names, instruments and class years recorded in plaza bricks as a permanent testament of their time in the band.

CUTBA President Ed Evans says that as the plaza contributions — both major gifts and brick purchases — come in, the funds raised above the cost of the project will flow into a special endowment for Tiger Band scholarships. For more information, contact Evans at cedevans@bellsouth.net or Larry Sloan at larrysloan@elecprodsales.com. For Tiger Band website, go to clemson.edu/tigerband.



Clemson Student Affairs Gala raises \$100,000+

The 13th annual Student Affairs Gala collected more than \$100,000 — through silent and live auctions — to support programs and initiatives.

Over the years, funds from the gala have financed such safety enhancements on campus as security cameras, light poles and vans. The funds have also contributed to late-night and weekend programming, leadership development for students and CU Beach activities.

You can make a difference too!

YOUR GIFT CAN MAKE A DIFFERENCE in students' lives and the economic development of South Carolina. To contribute to any of the efforts described here, to establish a memorial or to find many other ways to support Clemson, go to clemson.edu/giving or call 864-656-2121. Your gifts will count in the Will to Lead campaign, Clemson's effort to raise \$600 million to support students and faculty and provide an exceptional education.



Fraternities, sororities raise funds for Clemson Student Memorial



CLEMSON'S FRATERNITY AND SORORITY COMMUNITY RAISED more than \$11,000 in last fall's third annual Clemson Student Memorial 5K.

The Student Memorial Project is an ongoing initiative to bring an All Faiths Chapel and Student Memorial Garden to Clemson's campus. It will be a place to reflect, meditate, pray and remember students who died prior to graduation.

The memorial committee has also found support from the undergraduate student body beyond the fraternity and sorority community. "With this donation, the project has now raised more than \$200,000 from student-led fundraising," says Tyler Smith, project committee chairman.

For more information about the Student Memorial Project or to donate to the cause, visit www.cuchapel.org. The next Student Memorial 5K will take place in the fall of 2012.

'80s alums endow scholarship

THESE SEVEN ALUMNI SERVED IN STUDENT GOVERNMENT DURING their Clemson days, graduated in the early 1980s, and have since gotten together annually for 30 consecutive years!

And during those gatherings, they've come up with a way to help future Clemson students. They recently made a gift of \$40,000 to establish an unrestricted scholarship endowment.

"At Clemson we not only got a great education, we formed important lasting friendships," says John Pettigrew. "We were fortunate to serve together in student government, and we are pleased to give something back to help others experience Clemson. It is our hope to add to the scholarship in future years."

Pictured at their last reunion, from left, are John Pettigrew, Doug Gray, John Gilpin, Chase Foster, Weldon Sims, Keith Smith and Reid Tribble.



Do you have the
will of a **Tiger?**

Clemson is for life. For many of us, the loyalty goes even farther.

You can leave a lasting legacy to ensure the Tiger's roar may echo on in generations of Clemson students.

As you think about your legacy, make sure that you include a planned gift for your Clemson family. We can help you discover giving options that make sense for you today and will make a difference for Clemson students for generations to come.

For details, contact JoVanna King at 864-656-0663 or jovanna@clemson.edu.

The Will to
LEAD
A CAMPAIGN FOR CLEMSON

CW | My CLEMSON

Clemson and I go back a ways.

I'm a graduate. And a daughter, sister, wife and mother of Clemson graduates. I even taught here as a humble TA (graduate teaching assistant).

But I didn't really get Clemson as a whole until I started writing for *Clemson World*.

Since then, I've come to realize how Clemson is more than Death Valley on a fall Saturday, more than Tillman Hall chiming "Amazing Grace," more than the fragrant magnolia grove in the S.C. Botanical Garden, more than the entire Clemson Experimental Forest, almost sacred in its green waves of hardwoods and pines.

Clemson is the sum of its people – teachers and researchers, students committed to making life better for others, alumni – engineers, architects, educators, nurses, executives, entrepreneurs – who accomplish amazing successes and still consider their Clemson days among their most valuable.

And creative folks behind the scenes – those who keep the Clemson brand fresh and true, who snap those photos that go viral in a matter of a few clicks, who tell the stories of Clemson people making a difference right here or across the country or on another continent. These designers, editors, photographers, Web gurus and student interns have been my cool, colorful fellow travelers for nearly two decades.

And what a trip it's been.

Together, we've shared with *Clemson World* readers (and many other audiences) what Clemson-connected people are doing that makes us proud, inspires us and sometimes just gosh-darn surprises us. And, believe me, 70 print issues, 33 online issues and two power-packed tablet issues of *Clemson World* just haven't been enough for all the great stories that deserve the telling.

I've also come to realize that Clemson is more than the sum of its parts – more than all its people and their individual stories – as though the collective energy and interaction among its people give rise to a larger, stronger force – one that takes challenges in stride and keeps rolling forward, urging us all to be better than we could be alone – to accomplish a greater good.

That's what I've learned as managing editor of *Clemson World*. That and a few other things I'm saving for the book.

I'm Liz Newall and this is my Clemson. 🌐

Secondary education (English) graduate Liz Pennington Newall '70 has written for the University since the early 1990s and served as Clemson World managing editor since 1995. She retires from the University in May, but plans to keep writing.



Liz Pennington Newall

The College of Architecture, Arts and Humanities congratulates the Department of English, the City of Clemson and Clemson businesses for five great years of the Clemson Literary Festival — welcoming more than 50 visiting fiction writers, poets, critics and scholars at venues across campus and throughout downtown Clemson. For a recap and photos of the April 2012 festival, visit clemson.edu/litfest.

5th Annual Clemson Literary Festival

CLEMSON

College of ARCHITECTURE,
ARTS AND HUMANITIES

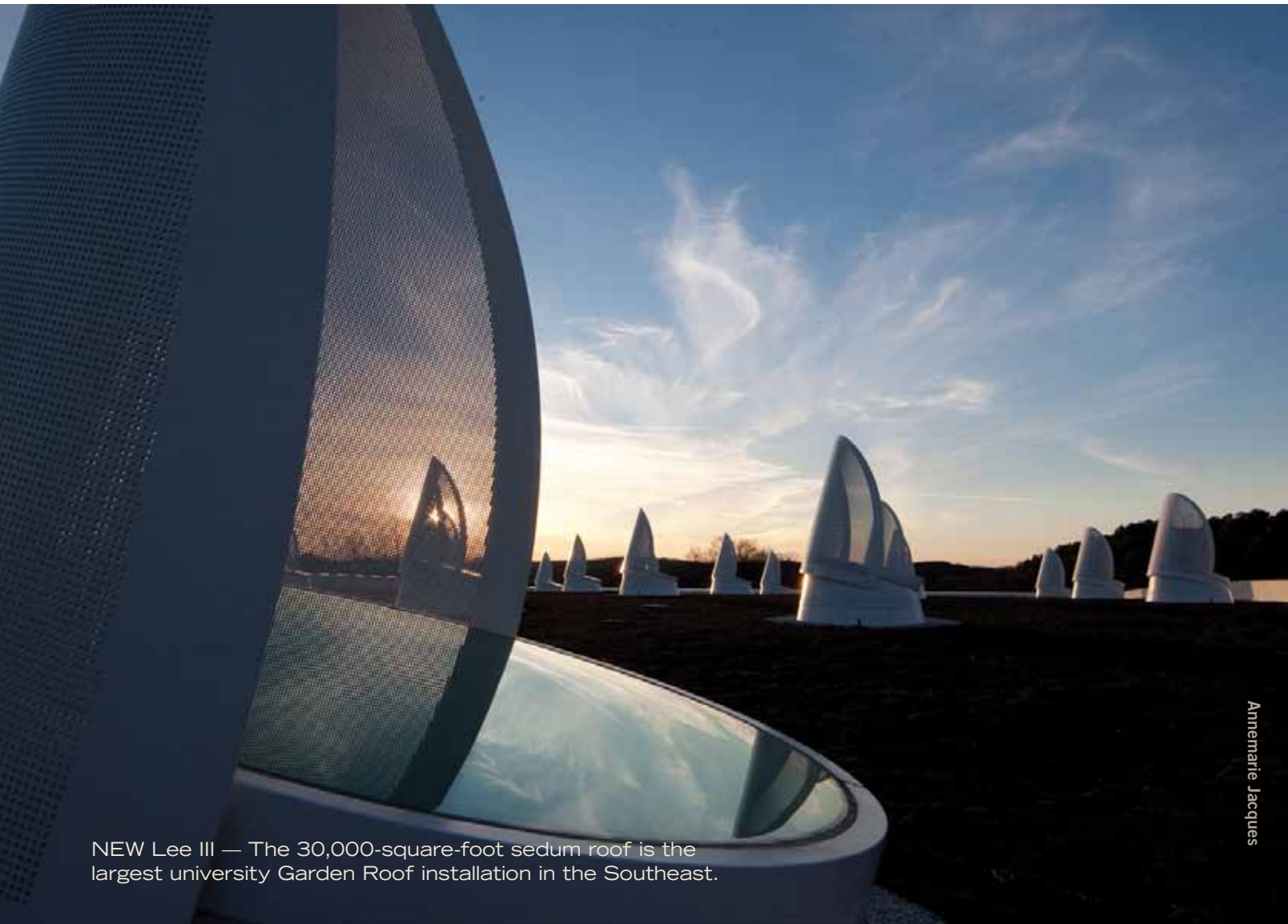
think critically. be creative.



Clemson Alumni Association
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NEW Lee III — The 30,000-square-foot sedum roof is the largest university Garden Roof installation in the Southeast.