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CLEMSON WORLD

MAGAZINE

SPRING 2013

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EXTRAS ON THE WEB

- View *Clemson World* online with lots of Web extras at clemson.edu/clemsonworld.
- Get the Alumni Association's mobile app for your smartphone at clemson.edu/alumni/app.
- 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 FLICKR site at www.flickr.com/photos/clemsonuniversity/collections for photos from campus, vintage collections, regional events and more.
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Cover photo: Lisa Walker '03 (see story on page 14).
Photo by Craig Mahaffey.

A time for change

The personal journey I have taken in the first half of 2013 led me to conclude that this is the right time to “change majors” from the president’s office to Lee Hall simply because Clemson University is in such good shape.



For the first time in 14 years as Clemson’s president, the volume of mail I received this semester was so great that I could not even consider answering all of it. So forgive me if I use this space in *Clemson World* in a very personal way — to say thank you to alumni and others who sent messages of support, encouragement and gratitude, and to reflect on what I learned during my “medical sabbatical” and return to duty this spring.

Lessons learned

First, I learned that the “Clemson Family” is very real. After my heart surgery in January, Marcia and I received literally thousands of cards, letters, emails and posts to a special “get well” blog. And when I say “literally,” I mean it in the classic not ironic sense — literally thousands! These messages were a vital part of my recovery.

Some were heartfelt and touching. Others were funny. Many alumni welcomed me to membership in the “zipper club.” They shared stories of their own or a family member’s improved health and well-being after the same surgery.

Second, I learned that it is humbling and healthy for a pilot to step out of the cockpit and into the passenger cabin once in a while. When you do, you quickly learn there are many people capable of flying the plane.

To paraphrase something former Supreme Court Justice Sandra Day O’Connor once said: When you think you are important or essential, stick your hand in a bucket of water and then pull it out. The hole you leave behind is how much you will be missed.

Clemson University is and always has been larger than the individuals who serve her at any given point in time.

Today, we have many, many dedicated and able folks working for Clemson’s success — faculty, staff, administrators, Trustees and volunteer leaders. So I am also grateful to Chairman David Wilkins, Provost Dori Helms and all others who stepped in to keep the University machine running smoothly in my absence.

Finally, I learned that though my arteries were blocked, my heart was and is very strong.

Eight weeks after my surgery and two days after this picture was taken, Marcia and I left for a trip to Germany and Italy. I met with BMW’s Board of Directors in Munich, and we attended the 40th anniversary celebration of our architecture center in Genoa. It was a wonderful trip in a beautiful place. We were happy to be there, and even happier to be home.

Changing majors

I returned from my medical leave on March 29 and two weeks later asked the Board of Trustees to begin its search for the 15th president of Clemson University. I will remain in



office until the new president is found and begins work. After that, I will begin preparing for the next phase of my Clemson career as a faculty member in the School of Architecture.

This is a transition I had always planned to make, and it is not directly related to my surgery. I feel good, have a high level of energy and plan to remain engaged. But the personal journey I have taken in the first half of 2013 led me to conclude that this is the right time to “change majors” from the president’s office to Lee Hall simply because Clemson University is in such good shape.

We have a high demand for everything about Clemson. We’re attracting great students, faculty and staff. We are blessed with alumni support and a capital campaign that has been very, very successful. We are financially healthy; in fact, we are in better shape financially than we were before the Great Recession. And we have a plan that has broad support by our alumni and, most importantly perhaps, by our Board of Trustees.

We are on an upward path, and I pledge to do everything I can to continue this positive momentum.

It has been the honor and privilege of my life to serve as your 14th president, and I will always be grateful to Clemson students, faculty, staff and alumni for giving me a chance to serve my alma mater in this special way.

Thank you very much. Go, Tigers!

James F. Barker, FAIA
President

<http://blogs.clemson.edu/barkers-blog/category/blogs/>



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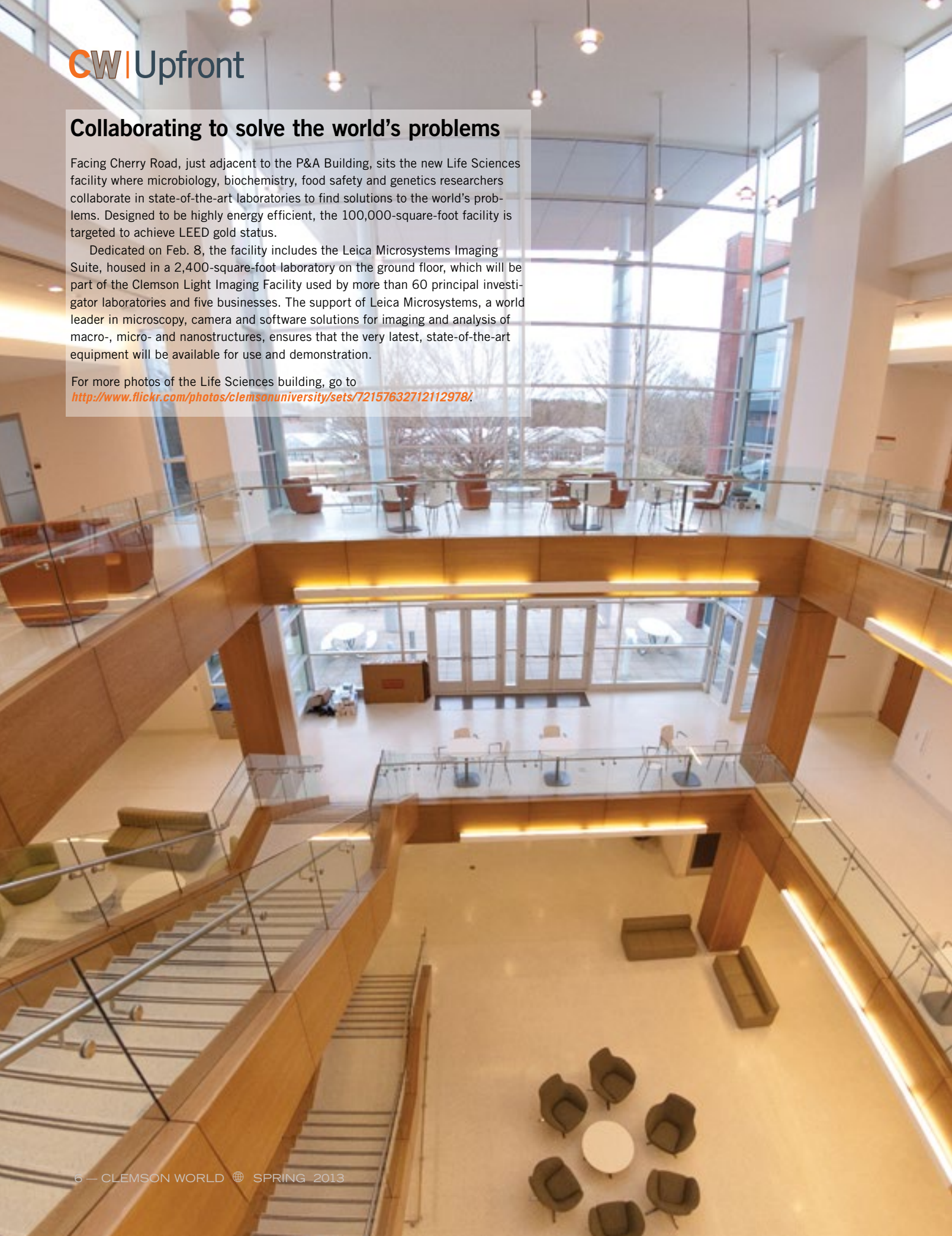
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Collaborating to solve the world's problems

Facing Cherry Road, just adjacent to the P&A Building, sits the new Life Sciences facility where microbiology, biochemistry, food safety and genetics researchers collaborate in state-of-the-art laboratories to find solutions to the world's problems. Designed to be highly energy efficient, the 100,000-square-foot facility is targeted to achieve LEED gold status.

Dedicated on Feb. 8, the facility includes the Leica Microsystems Imaging Suite, housed in a 2,400-square-foot laboratory on the ground floor, which will be part of the Clemson Light Imaging Facility used by more than 60 principal investigator laboratories and five businesses. The support of Leica Microsystems, a world leader in microscopy, camera and software solutions for imaging and analysis of macro-, micro- and nanostructures, ensures that the very latest, state-of-the-art equipment will be available for use and demonstration.

For more photos of the Life Sciences building, go to <http://www.flickr.com/photos/clemsonuniversity/sets/72157632712112978/>.



Indoor practice facility open for business

On Jan. 25, with the weather demonstrating the need for such a facility, fans and friends gathered to dedicate and tour the new Clemson Football Indoor Practice Facility, an 80,000-square-foot, \$10 million structure. Adjacent to the football practice fields and the indoor track facility, it includes a full-sized synthetic turf football field. High above the field, coaches can view practice from a long platform. In order to simulate a gameday experience, there is a fully functional, game-ready scoreboard inside the facility along with four play-clocks and a video board equal to the size of the ones in Memorial Stadium.

It won't be just the football team that uses the new facility; men's and women's soccer will share the strength and conditioning area and training room as well as equipment storage space.

Director of Athletics Dan Radakovich, who was nearly two months into his job at the time, said the hundreds who attended the ceremony demonstrated the passion that was the very reason he came to Clemson.

For a 360-degree tour of the facility, go to <http://www.earlycommit1.com/clemson360/indoor-football-facility/indoor-facility-50.html>





Erwin Center to support emphasis in advertising and communication

THANKS TO A RECENT \$1.05 MILLION GIFT FROM Joe '79 and Gretchen Erwin, co-founders of Erwin Penland Advertising, Clemson is now home to the Erwin Center for the Study of Advertising and Communication. "Top companies, including most of our clients, are extremely proficient at developing more innovative and reliable products and services by using cutting-edge technology and insight-driven ingenuity," said Joe Erwin. **"The Erwin Center will help prepare future generations of marketers to similarly use information, technology and modeling methods to skillfully promote these products and services."**

Initially, the Erwins' gift will provide up to five new courses to support a new emphasis area in advertising and communication for communication studies majors

and as a minor to students in other majors. Many of the classes will be taught in collaboration with industry experts at Erwin Penland.

The communication studies department currently offers emphasis areas as diverse as sports communication, communication and the law, and health communication. Erwin said that he and Clemson representatives will be meeting with major brands, marketing agencies and other industry leaders across the country to solicit input aimed at ensuring that the center develops students who are uniquely qualified to drive the future of marketing communications.

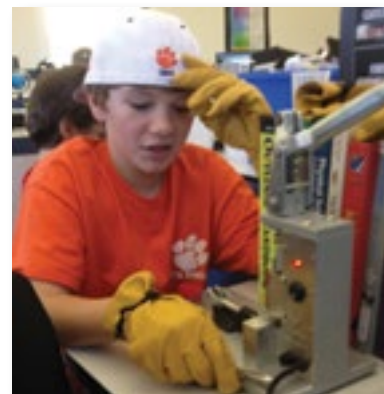
Lee III wins AIA award for design achievement

LEE III, THE 55,000-SQUARE-FOOT ADDITION to Clemson's Lee Hall that was dedicated in April 2012, has won a national award for design achievement from the American Institute of Architects (AIA). The award is one of only 11 given this year. **According to the AIA, the award is given to a project that "demonstrates exemplary skill and creativity in the resolution and integration of formal, functional and technical requirements, including ecological stewardship and social responsibility that acknowledges and advances social agendas."**

Clemson alumnus Thomas Phifer ('75, '77) and Partners of New York designed Lee III in collaboration with McMillan Pazdan Smith Architecture of Greenville and Holder Construction of Atlanta.

U.S. News & World Report ranked Clemson among the top 10 schools with the highest percentage of students who hold internships or co-op positions.

S.T.E.M.ulating young minds to learn and lead



CLEMSON'S YOUTH LEARNING INSTITUTE and Kansas-based PITSCO Education have partnered to create the Youth Leadership Academy of South Carolina (YLA), a STEM-based middle school and Pickens County's first charter school. STEM is an acronym for science, technology, engineering and mathematics, a widely promoted learning focus in classrooms nationwide.

Located at the institute's headquarters in Pickens, the school utilizes PITSCO Education's math and science curriculum modules as the foundation for the hands-on, standards-based learning programs. Even the English language

arts, social sciences, arts, music and physical education courses include engaging, hands-on, team-based approaches.

"The YLA is producing leaders," says YLA principal Patsy Wood Smith. "Our school is small, and offers individualized learning. It's a safe, nurturing environment where every child feels empowered and valued for their differences."

As an alternative to attending other public schools, the 48 sixth- and seventh-graders at the YLA get a unique educational experience that is enriched by the involvement of Clemson students.

"Each week, as part of our cultural immersion program, international students from Clemson have represented their native countries through lectures, music, dance and dress. Our students have literally been 'around the world' through these presentations. What's more, they are inspired by Clemson student leaders and are aspiring to follow their examples," says Smith.

Eighth grade will be added and the sixth grade class will double for the 2013-14 school year, pushing enrollment to 96. A waiting list of students is a sure sign that parents in Pickens County are excited about the kind of creative learning environment the YLA offers. For more information, contact Patsy Smith, at 864-878-1103 or patsys@clemson.edu.

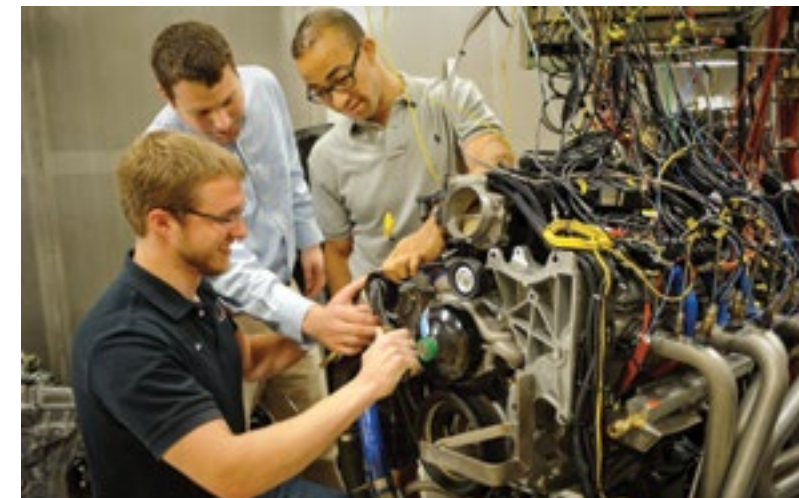
Duke Energy helps fund workforce development initiative

A \$4.11 MILLION GRANT FROM DUKE ENERGY TO Clemson's Center for Workforce Development will fund initiatives in South Carolina to help provide a next-generation workforce in key cluster areas. The grant will be used to manage educational, research and outreach activities in support of workforce development and STEM education. The Center for Workforce Development will oversee distribution of these funds to partner institutions that include universities, technical colleges, K-12 institutions and STEM-oriented organizations through competitive grants, scholarships and internships.

The goal is to spur job growth by helping develop a labor force with specific skills in STEM — science, technology, engineering and mathematics — and specifically in advanced manufacturing to support South Carolina's burgeoning manufacturing industry.

"Duke Energy recognizes that workforce development and economic development go hand in hand," said Clark Gillespy, Duke Energy state president – South Carolina. "The Center for Workforce Development, through its far-reaching partnerships, addresses the challenges of creating next-generation engineers, technicians and scientists so the region and nation can continue to be competitive in a global marketplace."

The center's e-learning initiatives focus on creating innovative educational tools — aligned with industry employment needs — to increase workforce capacity. The center also supports working professionals who wish to upgrade their skills and further their qualifications.



Summer offerings span the state for students K-12



OPPORTUNITIES about this summer at Clemson for young people ranging from kindergartners to high school seniors. **An extensive program lineup matches just about every interest imaginable, from athletic camps and rigorous academic enrichment programs on campus to an array of recreational summer camps at sites around the state.**

Clemson's legacy of service to pre-collegiate youth audiences spans beyond a century, when the first 4-H club programs were organized. It's a legacy that has evolved with the times, and with consistent emphasis on providing the most physically and emotionally safe environments possible for program participants and facilitators.

In 2008, before the Penn State tragedies rocked the nation, President James Barker commissioned a summer programs task force that recommended the development of a centralized system to oversee the operation of youth programs. Then in 2011, the Pre-collegiate Programs Office (PcPO) was created. The PcPO coordinates with faculty and staff to develop and plan all phases of youth program operations, then monitors to ensure they meet the University's operating standards. These policies include background checks for all individuals working or volunteering to supervise youth, staff training protocols and emergency procedures, and a variety of other areas of risk management such as staff-to-student ratios, housing and transportation.

In 2013, the PcPO expects to support the operation of more than 1,000 youth programs, on and off campus, that will serve an estimated 45,000 young people.

For a list of programs and registration information, visit clemson.edu/aspire. Or, contact Jacob Repokis, assistant director, Pre-Collegiate Programs Office, at wrepoki@clemson.edu or 864-656-5535.

A group of student veterans has opened the Student Veterans Success Center to help other veterans navigate the transition from the battlefield to campus. Volunteers from the Student Veterans Association staff the center and serve as a resource for help with Veterans Affairs, GI Bill paperwork and adjusting to college life.

Clemson student Pierce Roberts of Sumter has been named the nation's outstanding Air Force ROTC cadet for 2012. The award was based on military performance, academics and physical fitness.



Photo by Nick Barrett

Architecture students install Sassafras Mountain overlook

FROM THE SUMMIT OF SASSAFRAS MOUNTAIN, YOU CAN SEE Tennessee, North Carolina, South Carolina and Georgia.

And now, thanks to a new overlook designed, constructed and installed by a team of graduate students in architecture and landscape architecture, visitors can enjoy that view.

The challenge was to provide a universally designed viewing platform accessible to all who visit the highest point in South Carolina, Pickens County and the Foothills Trail, according to Dan Harding, associate professor of architecture and director of the Community Research and Design Center at Clemson.

“The concept hinged on an idea that used a primary wood structure with a light, sky-blue-painted steel railing designed to leave visitors feeling as if they are floating over a wonderful rock out-cropping while remaining safely contained by the railing, which disappears into the expanding horizon,” Harding said.

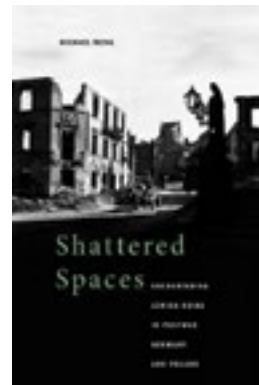
Built entirely on campus, employing best practices associated with sustainable construction and resource management, the prefabricated overlook platform and the project components were transported to the job site by the design team with assistance from the S.C. Department of Natural Resources. At the Sassafras parking area, about 80 feet in elevation below the top of Sassafras Mountain, the parts were efficiently reassembled over several days.

The Sassafras Mountain overlook can be accessed from S.C. State Road 199 or from the Foothills Trail.

Two Clemson professors had something to brag about after the Oscars. Jerry Tessendorf and Robert Geist of the Digital Production Arts program worked on visual effects for several Academy Award-winning films. Tessendorf’s water-simulation software was used in *Life of Pi*, which won for Best Visual Effects. Geist was credited in *The Hobbit: An Unexpected Journey*, which was nominated for Best Special Effects, for working on code for digital map-filtering techniques.

Meng honored by Notre Dame for recent book

THE UNIVERSITY OF NOTRE DAME’S Nanovic Institute for European Studies has awarded Michael Meng, assistant professor of history, the 2013 Laura Shannon Prize in Contemporary European Studies for his book, *Shattered Spaces: Encountering Jewish Ruins in Postwar Germany and Poland*, published by Harvard University Press (2011). The \$10,000 prize is presented annually to the author of the best book in European studies that transcends a focus on any one country, state or people.



Clemson bestows nation’s first Ph.D. in automotive engineering

AT CLEMSON’S DECEMBER GRADUATION CEREMONIES, Ala Oattawi made history as the first woman in the country to earn a Ph.D. in automotive engineering. Her work involves concept cars and establishing a scientific approach for the design of structural origami in folded sheet metal in an effort to improve automobile efficiency and functionality.



Windsor Westbrook Sherrill

Student researchers honored for advancements in accessibility

THE FEDERAL COMMUNICATIONS COMMISSION (FCC) honored professor Juan Gilbert and his team of students from Clemson’s Human-Centered Computing division with the FCC Chairman’s 2012 Award for Advancement in Accessibility.

Prime III, a universally designed voting system, was the winning entry in the Civic Participation Solutions category. **Unlike voting systems where people with physical disabilities are relegated to a separate voting machine, Prime III enables people with learning, intellectual or physical disabilities to cast their votes privately and independently on one machine.**

The accessible voting system gained national attention when the state of Oregon utilized it during the 2012 Presidential Primary. The Self Advocates Becoming Empowered (SABE) organization also used Prime III during its annual board election.

Gilbert, Presidential Endowed Chair in Computing, directs the Human-Centered Computing division in the School of Computing.



Sherrill presented Class of 1939 Award for Excellence

PROFESSOR OF PUBLIC HEALTH SCIENCES Windsor Westbrook Sherrill may be younger than the rest of the Class of 1939, but as the 2012 recipient of the Class of 1939 Award for Excellence, she is now an honorary member of the class. The award is presented annually to one distinguished member of the faculty whose outstanding contributions for a five-year period have been judged by his or her peers to represent the highest achievement of service to the University, the student body and the larger community.

Sherrill has taught courses in health-care management, health-care systems, health-care finance, health-services research, honors and Creative Inquiry. Her research, which spans epidemiology, health services administration, health education and behavioral science, has brought in more than \$1.5 million in grants and has been published in numerous refereed publications, five book chapters, professional reports and scholarly presentations.

Public health sciences professor Rachel Mayo described Sherrill as “a vital research partner of the University, unafraid to take risks, and a visionary.”

Sherrill recently was asked to lead the health-research collaborative between Clemson University and the Institute for the Advancement of Healthcare of the Greenville Hospital System.

Clemson professor working to reduce deaths among infants with heart condition

APPROXIMATELY 1,500 BABIES ARE BORN EACH YEAR IN THE U.S. WITH AN ABNORMAL single ventricle heart condition. The corrective process, known as the Fontan circulation, involves three stages of surgery during the first few years of life to enable the heart to function with only one ventricle. The specific corrective process depends on several factors, including the heart’s development as the child grows, making it difficult for doctors to monitor progress and predict the next stage of treatment or the long-term effect of such treatments. The mortality rate is high due to the complexity of the surgery and a physician’s skill-set/experience needed to succeed.

Richard Figliola, professor of mechanical engineering and bioengineering, is working to reduce this high mortality rate and improve available information used in the surgical decision made by physicians. He and a team of physicians and engineering researchers spanning two continents have been awarded a \$6 million award from the Leducq Foundation to develop 3-D modeling of the three surgical stages of single ventricle physiology. These models, which will be shared on a global network, will provide surgeons various predictive tools that they can use for better clinical bedside decisions.

think critically. be creative

EACH SPRING THE COLLEGE OF ARCHITECTURE, ARTS AND HUMANITIES RECOGNIZES EXTRAORDINARY CREATIVITY IN TEACHING BY AWARDING AT LEAST THREE MEMBERS OF ITS FACULTY – ONE EACH FROM THE SCHOOL OF THE ARTS, THE SCHOOL OF DESIGN AND BUILDING AND THE SCHOOL OF THE HUMANITIES – A TWO-YEAR TERM AS **CREATIVITY PROFESSOR**. THE AWARD INCLUDES FINANCIAL SUPPORT TO ENCOURAGE INNOVATION IN TEACHING AND RESEARCH.

WE ASKED THIS YEAR'S CREATIVITY PROFESSORS TO DESCRIBE THEIR VIEWS ON CREATIVE TEACHING

“Creativity in the classroom means trusting students to participate in their own education. Every teacher knows that you don't fully understand something until you've had to teach it to someone else. In the creative classroom, insight and understanding emerge from a dialogue in which everyone is teaching and learning together.”
James Burns, associate professor of history

“Creativity is an oxymoron. Make meaning from (almost) nothing. Explore widely and deeply. Work fast, slowly. Organize a mess and freely disorder. Create precisely fantastic and fantastically precise tools and methods. Be creative, even when it's not demanded of you.”
*Keith Evan Green, professor of architecture and electrical and computer engineering
Director, CU-iMSE – The Institute for Intelligent Materials, Systems and Environments*

“More often than not, creative explorations harness something that is already there, already present, already right in front of you ... for me, creativity is uncovering it, celebrating it, and seeing its intrinsic opportunities. And trusting when I think I see something special.”
*Daniel Harding, associate professor of architecture
Director of the Center for Community Research and Design*

“Challenged with the task to teach and research in the field of design with a special focus on sustainability, I believe that the key to a successful creative work is communication and interdisciplinary exchange. It follows the concept of an integrated, holistic approach as a comprehensive method for designing buildings, defined by a fair framework of constraints.”
Ulrike Heine, assistant professor of architecture

“I think Greg Sholette's idea of 'creative dark matter' in the art world is useful here. The creative world (which includes the art world) is mostly made up of creative dark matter: the invisible creative work of countless individuals who never receive recognition for their efforts. Like its astrophysical counterpart, creative dark matter acts as a gravitational force that supports more visible forms of creative production. Without it, there wouldn't be a creative world, or an art world, or a world, for that matter.”
Christina Nguyen Hung, assistant professor of art; and rhetorics, communication, and information Design (RCID)

“Creativity begins with taking a risk ... with a method to the madness. Pushing yourself and being pushed to your limit ... and letting go. Allowing parameters, but seeing what happens by chance. Control, losing control, and regaining it. And then ... you are happening.”
Linda Li-Bleuel, professor of music

“Creativity and critical thinking are suspicious of one another. The critical faculty looks askance at creativity, concerned that it will not be good enough. Creativity wonders what is taking critical thinking so long.”
Catherine Paul, professor of English

CLEMSON
College of ARCHITECTURE,
ARTS AND HUMANITIES

THE HEART — AND ART — OF BEING A TIGER



You may not see the family resemblance, but it's there. 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.

You can make a difference in the lives of Tigers who are following in your tracks — and increase the value of your own degree — by making an annual gift to the Clemson Fund in support of our students and faculty, and the facilities and programs needed for their success.

Show that you're a Tiger at heart by making a gift today. Use the enclosed gift envelope, call **864-656-5896** or go to clemson.edu/giving.



The Art of the Tiger: A Retrospective

In appreciation of your Clemson Fund gift, we'll send you a poster showcasing Dale Cochran's Tiger illustrations that have appeared on Clemson Fund T-shirts over the years. This FREE poster is available exclusively to Clemson Fund donors. Make a gift and order yours today!

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Training TIGERS for the real world

by Molly Collins '13



Eric Roper makes presentation to IPTAY.

Client-Based Writing Program is preparing students to write professionally in the workplace.

For mechanical engineering major Eric Roper, it's fair to say that writing was not one of his favorite subjects. But as a senior trying to prepare himself for a career that involves writing reports and procedures, he needed to have a basic skill set under his belt.

That's where professor Ashley Cowden's technical writing class last fall came into play. A part of Clemson's Client-Based Writing Program, the class provided Roper the opportunity to experience writing and formatting technical documents in a real-life setting, while gaining the knowledge that would prepare him for future technical writing projects he may encounter in the workforce.

Writing class+local client=real-world experience

Having been recently ranked among the top 10 in *U.S. News & World Report's* list of schools with the highest percentage of students holding internships or co-op positions, Clemson takes pride in

offering programs and opportunities to provide students with this type of real-world experience.

The Client-Based Writing Program pairs business and technical writing classes with local clients, such as nonprofit organizations, public schools, corporations and University departments, that need communication deliverables. In teams, students complete deliverables that range from white papers and research reports to brochures, instruction manuals and multimedia presentations.

Established in 2003, the program has garnered impressive statistics. More than 4,361 students in more than 220 sections of business and technical writing have partnered with clients, and more than 30 writing faculty and 176 clients from the campus and community have participated in the program.

Cowden, director of the program, has witnessed its development since the beginning.

"We started out doing a lot of environmental projects and sustainability, because that's where a lot of the funding was and we felt very passionate about that," she said.

Since then, the program has branched out in terms of the clients and projects that it undertakes, developing a strong reputation and a long list of clients ranging from Clemson Dining Services to Anderson Adult Education and Habitat for Humanity.

Solving real problems

Richard Gaines, director of Anderson Adult Education Center, has been working with professor Philip Randall's classes for the past three years, and admires the creativity and commitment displayed through each project and semester. The classes have assisted with a variety of projects, including marketing efforts, boosting morale of students and faculty through building enhancements and surveys, communicating GED requirements and research.

"It's been motivating for our students and staff to see the hard work and dedication of the University students," Gaines said. "Beyond the obvious benefits, there are countless rewards that both groups experience by being challenged and inspired by each other."

A goal of Randall's is to enable students to excel in business writing while using their talents to positively impact society by solving real problems in the real world.

"Helping people get more education so they can qualify for better jobs is helping solve a very big problem," Randall said. "It can change life for a person or even an entire family. So the work that Clemson students are doing for adult ed is very important."

Moving students toward confident communicating

In addition to teaching and recruiting clients to participate in the program, Cowden is responsible for recruiting faculty members like Randall and orienting them to an approach unlike most of their other classes. Classes are very much student-centered, as class members work directly with clients. And faculty members collaborate with their students in a variety of ways throughout the process.

"In the beginning of the semester," Cowden said, "we're teaching a lot of the theory, how to perform good audience analysis, what a good proposal sounds like, how to do research, and so on." Once the class moves forward in the

process of actively working with a client, the professors direct students' attention to the client when they have questions.

And while Cowden and other faculty members don't tell students how to solve problems, they do work to guide them toward finding a solution.

"The client comes and says, 'Here's my problem, and here's what I think I need.' I know in my head how I would do it, and I try to ask students questions to help them get there, but I try to let them figure that out on their own," she said.

And watching them succeed is especially rewarding, according to Cowden and Randall.

"Watching these students do amazing things for a client is exciting," Randall said. "I often think, 'I get to do this!' I find it that enjoyable. It's the best way to teach, in my opinion."

Cowden views the program as one of the more unique experiences offered at Clemson.

"You have to meet real client expectations, and it's not just for a grade," Cowden said. "These skills give our students more confidence to be able to ask tough questions, give a client feedback, and feel more confident in their communication ability."

Building résumés while building character

As the program enters its tenth year, it exhibits the potential for growth in the midst of its success. Cowden would like to expand the program across campus into a wider variety of courses. That has already begun "in little pockets," she said, including some graduate classes. "I would also love to have more classes collaborating on projects, like having a business writing and marketing class working together."

In all its efforts, the Client-Based Program is motivating business and technical majors to develop writing skills that will be useful in their careers. And with these new skills, students are building résumés while also building character through using their knowledge for the betterment of the Clemson community and surrounding areas.

"The IPTAY project we worked on not only gave me experience in writing technical documents, but it also gave me a chance to give back to the University," Roper said. "And the experience will definitely benefit me in my career, because it's given me an effective approach for writing technical reports and procedures." 🌐

Client Partners

In addition to on-campus clients, the Client-Based Writing Program has worked with the following off-campus organizations:

AMECO division of Fluor Corp.
American Haitian Project
Anderson County Board of Education
Anderson County Department of Health and Environmental Control
Anderson County Museum
Anderson County Transportation
Anderson Emergency Food Bank
Anderson Free Clinic
Anderson-Oconee Speech and Hearing Clinic
Anderson Services Association
Anderson Sunshine House
Betty Griffin House
Cancer Association of Anderson
Carolina Farm Stewardship Association
City of Clemson
Clean Start
Clemson Child Development Center
Clemson Elementary School
Code Elementary School
Concerned Citizens for Animals
CYT-Upstate
DoLink
Dining for Women
Foothills Conservancy for the Performing Arts
Foothills YMCA
Frazee Dream Center
Gignilliat Park Academy
Greenville County Library
Greenville Humane Society
Habitat for Humanity
Happy Hooves
Helping Hands of Clemson
Hope Academy
Impact
Iva Recreation
Keep America Beautiful
Littlejohn Community Center
Mary's House
McCants Middle School
Michelin Tire Co. Research and Development
Oconee County Foster Parent Association
Oconee County Track Team
Oconee Pediatrics
Parenting Place
Pendleton Historic Foundation
Pickens County YMCA
Sharing Inc.
South Carolina Urban and Community Forestry Program
United Way of Pickens County
Upstate South Carolina Red Cross
We Stand for Kids

24-7 AVAILABILITY

Our research shows that the leading sources of technostress are the technologies that increase our availability around the clock. This availability, combined with general work pressure in a weak economy, has resulted in organizations having increased expectations, and employees feeling pressure to acquiesce to those expectations.

And while technologies have advanced tremendously in their processing power, the ability of individuals to process and digest information hasn't increased in comparison. The result is increased workloads. And when they are used ineffectively, technologies are also a great source of interruptions that hamper our ability to focus on the tasks at hand. As most of us can attest, all too frequently while working on tasks, we are distracted by an email, phone call, text, instant message, tweet or status update. These constant interruptions increase costs of switching to and from work, and effectively add to the workload.

It is not uncommon for individuals to work from home during off-hours or weekends or even on vacations. The accessibility provided by technologies is increasingly straining roles individuals have to play in work and family spheres and blurring the line between the two.

Compounding these issues is the concept of the "tragedy of commons." Some highly motivated individuals in the workplace are available after-hours and make others feel like slackers. The tragedy of commons implies that eventually, what was an exception is becoming a norm. *If you are the only one who doesn't respond to emails in the evenings or on the weekends, how does that look?*

In addition, these technologies have resulted in some confusion and role ambiguity among professionals regarding their roles when their technologies are so intertwined with work. If their devices or software breaks down or needs upgrading, whose responsibility is that? If an individual spends a day resolving technical issues, there is added pressure that real work is not being accomplished.

This role ambiguity, coupled with the increased workload and resulting work-home conflict, contributes to the condition we've come to call technostress.

CONTROLLING CONSUMPTION

So what can be done about this growing problem? If technological power is not properly harnessed, it can be detrimental to our overall health. Harnessing technology must involve proactively controlling the consumption of technology resources.

Different industries are exploring innovative solutions to control technology consumption. Some restaurants, for example, are providing a discount if mobile devices are checked in, with the goal of providing an enhanced dining experience. Similarly, hotels are offering the service of locking up mobile devices during supposed vacation periods. And some have proposed the idea of a technology/Internet Sabbath.

THE BENEFITS — AND CHALLENGES — OF DISCONNECTING

It would have a positive impact on not only our productivity at work, but our satisfaction at home as well, if we can begin to find ways to disconnect. The biggest challenge in attempting this will be to manage expectations — to set limitations when one will be not available.

So how can this be accomplished? Some companies are experimenting with already established norms. For example, one company extended "casual Friday" to include being email free to encourage picking up the phone, or meeting face-to-face. Other employers have encouraged employees to set aside a portion of the workday to be free of interruptions and request support from colleagues to preserve this interruption-free time. Another strategy being tried is to leave your cell phone and PDA off one day per week — even if it is a weekend day. Whatever the strategy, it is sage advice to not go it alone — ask a colleague or spouse to help enforce the rules.

Overall, management should take initiative in establishing strong work-home boundaries. This might seem counterproductive for the firm; after all why should management encourage individuals NOT to work during off-hours? However, the potential effects of technostress are real — increasing health care costs to organizations and reducing employee productivity and morale. Further, possibly the greatest enemy of creativity and innovation are the partners of technostress — overload and fatigue.

It is not far-fetched to think that employers would encourage behaviors that would reduce the risk of technostress. Currently, employers (and some health insurance companies) encourage, and even pay, individuals to lead healthier lifestyles. Rising health care costs and obesity issues are forcing employers to think of innovative ideas such as incentive-laden wellness programs. In these programs, individuals are paid to lose weight in the hope that benefits are realized through reduced health care costs and increased energy and productivity.

We can draw a parallel between obesity and technostress. A simplistic explanation for obesity can be provided in terms of food availability (e.g., convenience food) and consumption. In technology terms, we now have convenience technology available (e.g., smartphones), and our present consumption of technology is unbridled. Isn't it time we put boundaries on our technology consumption habits? Consideration of this issue might lead to corporate guidelines regarding *managing expectations* about an individual's availability at work and after work, and establishment of stricter work-home boundaries.

REDUCING TECHNOSTRESS

Our world is certainly not going to become less technological in the future. It seems that every year, or often every month, there is yet another gadget, program or time-saving device that is supposed to make our lives easier. And while they often accrue real benefits and time savings, there are often downside risks that negate such benefits.

And so, ironically, we face the challenge of periodically disconnecting from our technological support system in order to recharge, both personally and professionally, to lessen our own technostress.©

Varun Grover is the William S. Lee Distinguished Professor in Information Systems at Clemson. He ranks eighth out of 400 prominent management information systems researchers in the 2012 update of the University of Arizona's h-index ranking, widely accepted as the metric that assesses the productivity and impact of a scientist or scholar. Ramakrishna Ayyagari completed his Ph.D. from Clemson and is currently a faculty member at the University of Massachusetts, Boston, and Russell Purvis is an associate professor in the Department of Management.

BLURRING THE LINE BETWEEN WORK AND HOME




Lisa Knott Walker '03, our cover model, spends her workdays as a home health physical therapist, traveling to patients across the Upstate. She and her husband, Todd, are parents of two children, Avery and Warren, under the age of 3. She loves to run when she can find the time, and the whole family cheers on the Tigers every fall.

Her life is much easier — and more complicated — because of the electronic devices that are an integral part of work and home. The smartphone is always on, for communicating with co-workers (during and after hours) and looking up patient-related questions, as well as for those calls that may come from the daycare center. Her GPS helps her find her way. Her laptop provides information about her patients, unless there are problems with Internet availability and she can't find what she needs to do her job.

That's when technostress raises its ugly head. And again when the phone is not working and she's in some remote area, worried that the car may break down.

The technology definitely blurs the line between work and home. But that has both positive and negative implications.

"Because I document patient charts on my laptop," she says, "I often find myself sitting on the couch after the kids have gone to bed working on patient charts. I don't always mind though, because often it gives me a chance to spend more time with my kids during the day knowing I can finish up work after they are in bed."



The Roots of the University

by Jonathan Veit

*The Student Organic Farm leads
the way in sustainable farming*

*N*ine billion. That's how many people will inhabit the earth by 2050. How do we feed nine billion people? How do we feed them well in a way that is both economically and environmentally sustainable? In a way that will make a profit and open new markets for farmers while leaving the planet a place where those nine billion people and their descendants will want to live?

These are some of the big questions being asked and answered by Clemson's Sustainable Agriculture Program, the centerpiece of which is the Student Organic Farm (SOF), a 15-acre working organic farm and experiential teaching center dedicated to researching profitable, practical sustainable farming techniques that can benefit students and farmers across the state.



Shawn Jadrnicek (left) and William Craig



The history of the farm

In 2001, the area between Hartwell Lake and Perimeter Road known as “The Bottoms” was primarily being used to test row crop varieties and grow feed for livestock at the Clemson livestock farms.

A group of faculty from the College of Agriculture, Forestry and Life Sciences (CAFLS) suggested the land be used to create a small market garden that would produce fruits, vegetables and flowers for sale to consumers on campus and in the local community.

That group of faculty included Geoff Zehnder, professor of entomology in the School of Agricultural, Forest and Environmental Sciences (SAFES) and director of Clemson’s Sustainable Agriculture Program.

“We secured a USDA Sustainable Agriculture Research and Education training grant and started with four 100-square-foot plots for vegetable production and four small areas for growing medicinal and edible herbs, blueberries and beneficial insect-attracting plants,” said Zehnder.

In 2005, the SOF earned its organic certification from the Organic Certification Program in Clemson’s Department of Plant Industry. Today, with funding from grants and produce sales through its Community Supported Agriculture (CSA) program, that former market garden is a productive organic farming operation and a showcase for sustainable farming techniques that advances Clemson’s land-grant heritage of teaching, research and extension and embodies Thomas Green Clemson’s founding vision of an agricultural college that would help the people of South Carolina prosper through instruction and outreach in the agricultural and natural sciences.

The SOF is located on land that is part of an area with a deep agricultural heritage and is now officially named “Calhoun Fields.” **The land is said to have first been farmed by Cherokee Indians, then by John C. Calhoun and Clemson himself back in the days when a man’s gait was measured in furrows because he plowed his acreage walking behind a mule-drawn sodbuster.** Back long before there was a university or before Clemson President Robert Cook Edwards (1958-1979) saved the land from inundation by Hartwell Lake.

Back in the days when the food we put on our tables and in our mouths was born of the sweat that stung our eyes and our own callused and mud-streaked hands.

What is sustainable agriculture?

Sustainable agriculture is more than just an abstract idea. The results of a strong sustainable agriculture operation are measurable as increased profitability, decreased farm debt and purchase of off-farm feed and fertilizer, and reduced reliance on government subsidies. This is accomplished by working with nature rather than against it.

On a perfect sustainable agriculture operation, there is no bare ground. Clean water flows through the farm’s ditches and streams. Wildlife is abundant and the farm landscape hosts a diversity of vegetation. Crops are diversified and plant and animal agriculture is integrated, reducing market risk and increasing profit. Solar energy is captured and used across the farm systems. The water cycle is managed in a way that reduces surface

runoff, soil surface evaporation, and drought and flood incidence, and increases transpiration by plants and seepage into underground reservoirs. And a well-functioning mineral cycle moves nutrients from the soil through the crops and animals and back to the soil through on-farm feeding of livestock, thoughtful manure and crop residue management, and the use of catch crops to reduce nutrient-leaching losses.

The SOF aims to show Clemson agricultural and natural resources students and farmers across the state of South Carolina that, done right, sustainable farming can make more money for farmers, feed more people more efficiently, conserve natural resources and support surrounding businesses by circulating more dollars within the local economy.

“The Student Organic Farm is a working farm,” Zehnder says. “But it’s also an experiential learning environment. It’s a place where we can demonstrate farming systems and strategies that are economically, ecologically and socially sustainable.”

Sustainable organic farming in action

Shawn Jadrnicek, a former farmer and South Carolina extension agent, manages the SOF’s day-to-day operations, including soliciting and managing volunteer and paid student labor, giving tours to curious farmers, students and extension agents, and designing and implementing many of the sustainable agriculture systems currently being used. The SOF is a sort of canvas for Jadrnicek’s farming imagination.

“That small market garden expanded and evolved over the years,” Zehnder says. “But Shawn’s work has really taken the farm to the next level.”

There are five greenhouses on the farm and each is oriented to take maximum advantage of passive heating and cooling techniques. A series of 55-gallon drums on the south side of one greenhouse collects solar heat during the day and emits that heat into the greenhouse at night.

In winter each solar-heated barrel produces over 9,000 BTUs of heat per day, which

means that the heat generated from all the barrels is equivalent to burning one gallon of propane.

“The double-poly greenhouses with the 55-gallon drums give up to 13 degrees of frost protection without spending a penny on electricity or propane,” Jadrnicek said.

To augment the passive heating system, the greenhouses utilize a hydronic closed-loop active heating system that pumps warm water through pipes and a grid of tubing. Plant flats are placed directly on the tubing grid and kept warm by heat transfer. In this way, heat is placed exactly where it’s needed at the soil underneath the plants rather than wasting energy by heating the entire cavernous greenhouse space.

The greenhouses themselves are constructed of two layers of greenhouse plastic to reduce condensation and create insulation, and they are oriented to take advantage of the prevailing breezes. As the breezes move across the land, they are cooled by the ponds before entering the greenhouses. On extremely hot days, a recirculating fountain in an adjacent pond creates evaporative cooling. A series of solar-powered vents with expanding and



contracting wax-filled switches allows hot air to escape and cool air to fill in behind it.

A rainwater collecting system captures water and feeds a cistern and a series of ponds used for irrigation and aquaculture. The ponds are strategically placed to control temperature and create microclimates. Plants and vegetation around the ponds capture and channel wind to the greenhouses. The ponds are also designed to create microclimates that provide a diversity of habitat for a variety of plants.

Some of the greenhouses partially encapsulate the ponds. Heat captured by the pond water is released into the greenhouses. Tilapia fingerlings are overwintered in one greenhouse pond and then transferred to outdoor ponds when the weather warms. The water in which the tilapia are raised, rich in organic matter, is used as fertilizer.

Laura Lengnick, director of the sustainable agriculture program at Warren Wilson College in Asheville, N.C., and lead author on the recently released USDA report, “Climate Change and Agriculture: Effects and Adaptation,” says that the SOF’s microclimate and keyline management practices offer examples of ways to create resilience to climate change.

“Shawn is doing some really groundbreaking work in managing microclimates and the large-scale movement of air and water across the landscape,” says Lengnick. “These features are unique among college farms.”

The SOF is also experimenting with a prototype soldier fly digester. The digester is used to recycle food and plant waste from

campus dining halls and the farm. The soldier fly larvae consume the waste. The larvae are then processed in the Clemson Biosystems Engineering laboratory, where they are dehydrated and pressed for oil to make biodiesel. The remaining soldier fly meal can be used to feed chickens or fish. The digester is connected to a greenhouse. CO₂ and heat from the digester are captured inside the greenhouse, while the greenhouse warms the digester and extends the life of the soldier flies and their larvae.

“We estimate that the school could produce over 4,000 gallons of oil and \$40,000 in high protein meal if we used all the food waste on campus in soldier fly digesters,” Jadrnicek says.

An enormous compost pile is cozier up against one of the greenhouses so its heat can help warm plants in winter. Water pipes run through the compost pile transferring heat into the hydronic system and reducing energy use.

The SOF maintains soil health by cover cropping rather than using fertilizers from offsite sources.

“Every part of the farm is cover cropped at some point during the year,” Zehnder says. “Cover cropping provides soil organic matter and nutrients and keeps fertilizer costs to an absolute minimum. Cover crops also suppress weeds and insects.”

Even the crop rows are planted with sustainability and efficiency in mind. They are planted on the high points of the fields so they can stay dry on the low-lying piece

of land. The beds slope off the rows at a half-percent grade or less, allowing the fields to drain gradually without water loss or soil erosion.

Teaching and outreach at the SOF

The work that’s being done at the SOF isn’t theoretical. Like a stone dropped in a still pond, Jadrnicek and Zehnder hope the sustainable farming practices on display ripple outward.

“The ultimate goal of the Student Organic Farm is to try techniques that will help farmers increase profitability and sustainability, and decrease farm debt. We also want to ignite the imaginations of the next generation of farmers,” Zehnder says.

Extension agents from across South Carolina visit the SOF to receive training in sustainable and organic farming practices. The agents then impart what they learn to producers interested in implementing sustainable farming practices and diversifying into emerging markets, including organic production.

“Producers are becoming more interested in organic and sustainable farming practices,” says Danny Howard, Greenville County extension agent. “The hands-on demonstrations we can provide through the Student Organic Farm are the best teacher of all. And current organic producers who are having challenges with weed, disease and

insect control can learn how to solve these problems through the SOF’s outreach.”

During the 2012 Carolina Farm Stewardship Conference in Greenville, which was attended by more than 800 participants, the SOF conducted educational tours for agricultural stakeholders from across the Southeast.

Lee Meyer, extension professor in the University of Kentucky’s Department of Agricultural Economics, praises the SOF for showing farmers that sustainable farming systems are profitable and practical.

“When I talk about sustainable or organic farming alternatives, farmers often say to me, ‘That’s a great idea in theory, but you can’t do that in the real world!’ Well, yes you can, and you can see it in action at Clemson’s Student Organic Farm,” Meyer says. “Geoff and Shawn listen to farmers’ problems and try to both find solutions and demonstrate their effectiveness.”

Students and faculty from a wide array of disciplines use the SOF for teaching and research. Horticulture professor Ellen Vincent takes her students on tours of the SOF.

“The Student Organic Farm is a great place for students to see cutting-edge sustainability practices in action,” Vincent says. “Geoff and Shawn have created a powerful environment for students to learn and grow.”

The SOF has also been the focus of Creative Inquiry projects in aquaponics, vegetable transplant, greenhouse design and architecture. One three-year Creative Inquiry project headed by associate professor of architecture Dan Harding led to the design and construction of several new structures at the SOF and the rebranding of The Bottoms as “Calhoun Fields.”

“When we were trying to understand the DNA of The Bottoms area, we decided that our agriculture programs are one of our strongest traditions,” said William Craig, a senior architecture major who worked on the project. **“Agriculture is the reason we’re here in the first place. We wouldn’t have a Clemson University if Thomas Green Clemson hadn’t looked at those fields and imagined how they could be used to educate for the future. They are special, fertile fields. They are where the roots of this university lie.”** 🌱

Organic produce for sale here!

The Student Organic Farm distributes organic produce and partially funds its research and outreach initiatives through its Community Supported Agriculture (CSA) program. CSA shareholders pay an upfront seasonal membership fee that covers production costs in exchange for a weekly share of local in-season organic food.

For 2013, the SOF will offer two 14-week shares, the Summer Share (April 30 – Aug. 1), and the Fall Share (Aug. 27 – Nov. 28). Some of the produce that shareholders can expect to receive:

SPRING: arugula, beets, broccoli, cabbage, carrots, cauliflower, cilantro, collards, green onions, kale, kohlrabi, lettuce, mustard greens, pac choi, radishes, spinach, Swiss chard, turnips

SUMMER: basil, cucumbers, eggplant, garlic, green onions, herbs, okra, peppers, potatoes, snap beans, zucchini, yellow squash, sweet corn, Swiss chard, tomatoes, watermelons, cantaloupe

FALL: arugula, basil, beets, broccoli, cabbage, carrots, collards, cauliflower, eggplant, garlic, green onions, kale, kohlrabi, lettuce, mustard greens, okra, pac choi, peppers, radishes, spinach, storage onions, sweet potatoes, tomatoes, turnips, winter squash

Fruit shares are also available during the Summer Share period. Though the fruit is not certified organic, the blackberries are treated organically, while the peaches, harvested from a local farm in Seneca, are minimally sprayed.

Learn more about the CSA by visiting www.clemson.edu/sustainableag/csaprogram.html or by calling 864-656-5057.



Determined Spirits

Clemson honors five with Distinguished Service Awards

In April, five Clemson alumni joined a select group and received the highest honor bestowed upon a former student by the Alumni Association. All five of these honorees have experienced success in their lives, personally and professionally.

But one quality ties them together, more than all the others. And that's their determination. They were determined in the classroom and on the playing field, in their communities and their careers, in their public personas and in their personal lives. And they bring that determination to their continuing involvement with Clemson.

Pictured from left:
Roy Abercrombie
Mitch Norville
Jimmy Addison
Russell Ashmore
Ed Duckworth

Photo by
Craig Mahaffey '98

A can-do attitude

William L. "Roy" Abercrombie Jr. '69 learned early on in his life that "Can't can never do anything." That can-do attitude was nurtured along by his professors at Clemson, including Dean Wallace Trevillian, who required shirts and ties at all his management classes.

Though he started out in sales, Abercrombie ended up in banking. He rose to chair of the board, CEO and president at American Federal, where he served until 1997, when the bank merged with CCB—Central Carolina Bank. He continued with CCB until his retirement in 2003. He currently serves as chair of Colliers International—Greenville.

Abercrombie is a life IPTAY member, WestZone Initiative and Heisman-level donor, member of the Leadership Circle, and former member and past chair of the Board of Visitors. He was instrumental in securing

resources needed to enable the board to promote the University. Past chair of the Clemson Real Estate Foundation, he is a founding member and chair of the Clemson Land Stewardship Foundation.

A thinker and a problem-solver

E. Mitchell "Mitch" Norville '80 got his degree in engineering, but thanks to Professor Douglas Bradbury, he came to see himself as a thinker and problem-solver. He worked as an engineer for a couple of years before going to the University of Virginia to earn his MBA and continue his career at Boston Properties, one of the largest self-managed real estate investment trusts specializing in the development and ownership of office, industrial and hotel properties in the United States.

Clemson may not be the city on his driver's license, but it does have his heart. A board

member for the Baltimore/Washington D.C. Clemson Club, he has made significant financial contributions to Clemson's basketball program and the WestZone, where Gate 6 was named the "Norville Family Gate" in honor of his family.

A founding member of the President's Leadership Circle, he endowed the Ernest R. Norville Chair in Biomedical Engineering in honor of his father. He serves on the Clemson University Foundation Board of Directors, the President's Advisory Board and the Advancement Board for Real Estate Development.

The eye of the needle

At 6 feet and 135 pounds, James Warren "Jimmy" Addison '68 didn't see himself as a potential college football star. Fortunately, Coach Fred Cone thought differently and recruited the young man known as "the Needle." Addison went on

to capture honors including All ACC Quarterback, S.C. Athlete of the Year and an NCAA Postgraduate Scholarship. Three ACC Championships helped cement his membership in the Athletic Hall of Fame.

His determination on the field was matched in the classroom and in ROTC. A member of Scabbard and Blade, he graduated with both the Norris Medal and the Algernon Sidney Sullivan Award. He went on to law school at the University of Virginia and now chairs the Commercial Real Estate Section at Troutman Sanders LLP.

Addison has served on the Alumni Association Board of Directors and the Advancement Board for the School of Humanities. He also established the Virginia and Bill Addison Endowment for the Humanities and has served as chair of Clemson's Athletic Hall of Fame. In addition, Addison has given much of his recent

time to the Clemson University Foundation Board.

Paving the way to success

Russell Carlton Ashmore Jr. '50 has always had a way of turning roadblocks into opportunities — in athletics and academics, professionally and personally. When his football career ended for medical reasons, he served as an Army cadet and focused on his studies. When his pre-med dreams met a queasy stomach, he still found ways to provide medical care, both here and abroad, to those unable to afford it.

After graduation, Ashmore served in the U.S. Army and the Reserves, then returned to Clemson to pursue his interest in ceramic engineering, after which he took a position at General Shale in Tennessee. While on his way up the corporate ladder, he was convinced to return to the family business in

grading, paving and excavation. He not only helped guide the family business, but also served as an industry leader.

For more than five decades, Ashmore has been a member of IPTAY and an annual donor to the Clemson Fund. An active supporter of Clemson Corps, he was one of the principal organizers and fundraising chair for the Military Heritage Plaza and Cadet Monument. President of the Class of 1950, he is co-founder of the Taylors Clemson Touring Club — the originators of orange overalls at football games.

One Clemson

"There's never been a Duckworth who didn't want to win," says Edgar James "Ed" Duckworth '61. But as competitive as he may be, Duckworth believes that it's not winning or losing that matters in the long run, but how you play the game. And though he is a supporter of

View video features of this year's DSA recipients:

William L. "Roy" Abercrombie
http://youtu.be/iIO-CezA1_M

E. Mitchell "Mitch" Norville
http://youtu.be/O5u_nlcld3s

James Warren "Jimmy" Addison
<http://youtu.be/vdYkq4m1ZG4>

Russell Carlton Ashmore
<http://youtu.be/U0mt8eaRLxM>

James "Ed" Duckworth
<http://youtu.be/BJLmUhO6Blo>

Clemson athletics, it is the philosophy of "One Clemson" that has captured his heart.

Duckworth graduated with a degree in civil engineering, then transitioned into the world of finance, where he has had a 40-year career in the securities industry as a broker, dealer and financial adviser. He is currently the senior member of an elite group of financial advisers for Morgan Stanley in Atlanta.

A member of the Clemson University Foundation Board of Directors, Duckworth is vice chair of the finance committee and a member of the Will to Lead National Campaign Committee. He was instrumental in helping the Atlanta Clemson Club fund the Clemson Tiger Paw license plate in Georgia, and continues to support IPTAY, Clemson Fund, alumni activities and the Class of 1961. He and his family recently made a major contribution to build the Duckworth Family Pavilion to support Clemson's tennis teams.

We hear you.

In 2009, we surveyed you about your experiences as students and alumni. We learned that you wanted more effective communication, more professional development and networking opportunities, more information about alumni resources, more engagement of young and out-of-state alumni, and more opportunities for feedback. We heard you! As a result of that survey, we

- created a new brand for Clemson Alumni Association,
- launched new *Echo e-newsletter* to communicate to all alumni every other week,
- launched new social media outlets (*Facebook* and *LinkedIn*),
- built events around young alumni and
- launched a new Career Services online resource portal and job posting board.

So this year, we've asked you again: Are we effectively serving you as alumni of Clemson?

Here are a few snapshots of the survey results:

Emails sent	59,894
Response rate of opened emails	25.24%

WHO RESPONDED

By region	
In-state	49%
Out-of-state	50%
Another country	1%

By top 10 professions

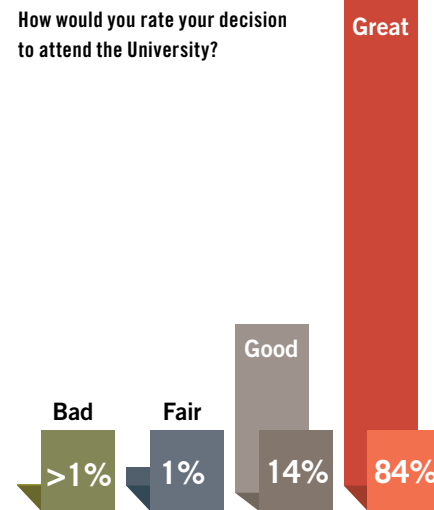
Retired	429
Education	339
Engineering	316
Management	137
Student	113
Medical/Health Services	110
Sales	107
Government/non-elected	95
Consulting	94
Law/Legal Services	94



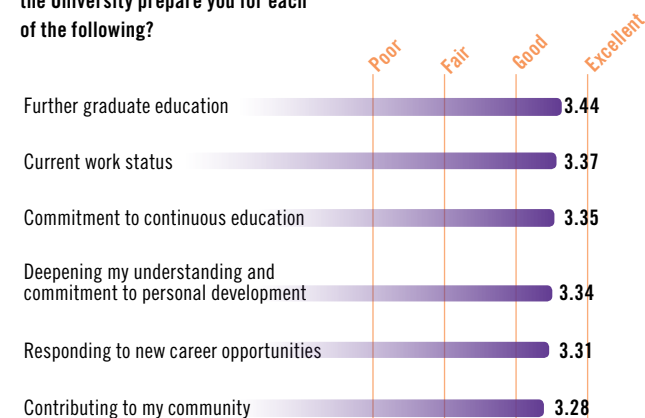
By graduating era

WWII/Post-WWII (before 1964)	290
Woodstock/Vietnam (1964–1973)	448
Post-Watergate (1974–1980)	414
Yuppie/End of Cold War (1981–1993)	472
Electronic Revolution/Dot-Com (1994–2000)	880
Post-9/11 (2000 or after)	762

Your student experience



How well did the highest degree from the University prepare you for each of the following?



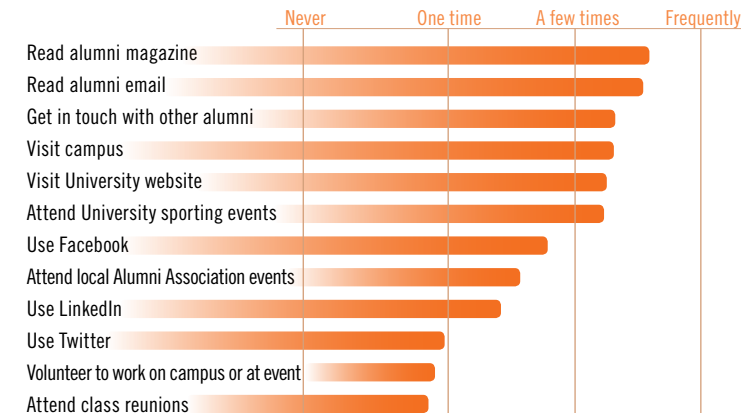
Your Alumni Experience

Please indicate how much each of the following impacts your overall current opinion of the University:

Value and respect for degree	95%
History and tradition	91%
Campus aesthetics	87%
Accomplishments of students	84%
Providing scholarships	84%
Accomplishments of alumni	80%
Media visibility	77%
Outreach to community	75%
School rankings (e.g., <i>U.S. News & World Report</i>)	75%
Accomplishments of faculty	73%
Success of athletic teams	70%

Alumni activities

In your relationship with the University, describe how often you do or have done the following:



Modes of communication

The most important and most frequently used modes of communication are *Clemson World* magazine and email. When asked about effectiveness as compared to importance, older alumni found effectiveness to exceed importance for every form of communication.

For younger alumni, we found that we're not as effectively communicating regarding services and benefits, invitations to activities and reunion, and email.

What things are important for alumni to do and how well does Clemson support alumni in doing those things?

The results showed the top three in importance are:

But we need to provide you more support in doing those things.

Serving as ambassadors or advocates for Clemson

Identifying job opportunities

Recruiting students

Key Take-Aways

These are some of the key things we confirmed in this survey:

- Alumni want to know that the value of their degree is greater to them today than the day they graduated, and they want to know what the University is doing to increase that value.
- Alumni are focused on how their degree helped them in their lives and particularly how the degree is an enhancement to their career.
- Alumni want to know that other alumni and their association are playing an important role in enhancing the student experience.

Thank you for your willingness to let us know what you think. What's next for us is to begin to respond to these key take-aways, and that's what we are doing. As we move forward, we'll communicate with you about the process and ask for your feedback. We really do care what you think, and we will make every effort to exceed your expectations.

For complete results of the 2012 Alumni Attitude Study, go to clemson.edu/alumni or email the Alumni Association with any questions at info@alumni.clemson.edu.

Thanks again.

The 2012-13 Clemson Alumni Association Board

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John N. "Nicky" McCarter Jr., Board of Trustees, Columbia

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

Having fun and getting it done

Want to get involved? Interested in seeing what's going on in your area? Check out our Alumni Group Accolades page at clemson.edu/alumni/accolades. In this issue of *Clemson World*, the "Doing it right, doing it better" highlight features the Baltimore/Washington D.C. Club.

DOING IT RIGHT, DOING IT BETTER:

Baltimore/Washington D.C. Clemson Club



The Baltimore/Washington D.C. Clemson Club is a well-oiled machine that produces results. The club organizes 15–20 events each year that range from congressional and embassy receptions to send-off parties for local students, Crab Feasts, Pig Pickin's and everything in between. In their spare time, the club supports initiatives such as the Will to Lead campaign where they helped raise more than \$15 million. Their endowment at Clemson totals more than \$145,000, which goes to support scholarships for students. The club is governed by a board of 50 volunteers who dedicate their time, talent and resources for the betterment of Clemson and her students.

Way to go Baltimore/Washington D.C. Clemson Club!



Never got your Clemson Ring?

If you've been wanting to purchase a Clemson Ring for yourself or someone you love, you can find all the information you need on our website. Whether it's a ring you need, or other Ring Crest accessories such as a pendant or bracelet, go to clemson.edu/alumni/ring for pricing or ordering.

The color of the season was pink ... and ORANGE!



The Greater Austin Clemson Club helped lead the way in the Susan G. Komen Race for the Cure in November. What a way to represent and make a difference, Greater Austin! **GO TIGERS!**

Mark your calendar!

- May 17-19 Bring Your Daughter Weekend
- May 20 Raleigh Prowl & Growl
- May 22 Atlanta Prowl & Growl
- May 23 Columbia Prowl & Growl
- June 6–8 Golden Tiger Reunion
(www.clemson.edu/alumni/reunion)

For more information on any of these events, go to clemson.edu/alumni or call 864-656-2345.

Seasoned & successful ... the Lancaster County Club

The Lancaster County Clemson Club has proved that figuring out their mission has been the key to their success. The club decided many years ago that their goal was to help Lancaster County students attend Clemson. Today, they have two endowments at Clemson, one totaling more than \$124,000 and another totaling more than \$65,000. This fall, the club awarded \$14,000 in four separate scholarships. Thank you for making a difference, Lancaster County Club!



The Fort Hill Clemson Club wraps it up and ties it ... with an ORANGE bow!

The Fort Hill Clemson Club hosted the seventh annual Wendy's Recruiting Wrap-up with Coach Dabo Swinney. This year's event raised \$30,000 that will go toward scholarships for students in Pickens and Oconee counties, as well as the Pendleton area.

Triangle Club supports Tiger rescue

The Triangle Clemson Club volunteered on a recent Saturday afternoon at the Carolina Tiger Rescue near Pittsboro, N.C. They cleared brush, organized tools and helped clean up the property so that CTR can continue rescuing tigers and other wild cats. Members enjoyed being together while they helped an organization near and dear to any Clemson Tiger's heart.



Stay in touch!

Whether it's in person at an event, on Facebook or Twitter, or sharing pictures on Instagram, you can keep in touch with Clemson friends and family. We also have a new website especially for young alumni (clemson.edu/alumni/ya) with resources for you.



www.facebook.com/ClemsonYoungAlumni or
Clemson Young Alumni



@clemyoungalumni
Clemson Young Alumni



@clemsonyoungalumni
Clemson Young Alumni

YOUNG Alumni

Meet Anna Louise & Scott

Ever wonder who is behind the planning of our young alumni events, social network postings and more? Meet Anna Louise Carter '11, director of alumni engagement, and Scott Sampson '08, M '10, young alumni annual giving officer. A major part of their jobs is engaging young alumni around the country. Go to <http://www.clemson.edu/alumni/ya/contact-us.html> to find out more.



CLEMSON'S HISTORY IN 8-INCH SQUARES

As you enter Hardin Hall, you're greeted with an artistic rendering of Clemson's history. Some very abstract, others more representational, 84 tiles spread across a curved wall that stretches for 60 feet.

Installed in 2004 in the then newly renovated home of the history, philosophy and religion departments, the project was sponsored by the Art Partnership Program and funded through the R.C. Edwards Endowment. Artist Kathy Triplett was chosen through a regional competition that spanned six Southern states.

"The title ["Ontogeny Recapitulates Phylogeny"] is inspired by the idea of the single cell and how it progresses to a complex organism," said Triplett. "I used this idea of progression as a metaphor to represent the development and evolution of the University, from the initial spark of an idea in Thomas Green Clemson's mind, through its expansion, diversification and growth into a complex and more open



institution, which is in many ways like the growth of the individual student."

The tiles range from the expected — commemorating Thomas Green Clemson and M.B. Hardin and the always present Tiger — to the unexpected — depicting the development of the Phorid Fly and the illusion of parallel lines.

In an interview in 2009, Triplett compared the work to a poem. "At first you grasp it with the heart," she said.

Perhaps the best description comes from Denise Woodward-Detrich, director of Lee Gallery, who said, "Standing at either end of the installation, you can't see the other end. Just like the arc of the University's history." 🌐

A Feast for the Eyes and the Palate



Enjoy the sensations of a uniquely Clemson dining experience. Seasons by the Lake restaurant offers picturesque views of Hartwell Lake and savory Southern fare.

These are just a few of our delectable entrees:

- The famous Clemson Shrimp and Grits
- Bourbon Molasses-Glazed Pork Tenderloin
- Heirloom Tomato Risotto

Seasons is located lakeside at Clemson University in the Conference Center and Inn.

Now serving a hot breakfast buffet!

Monday–Sunday, 6:30–9:30 a.m.



The Food. The View. The Experience.

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CLEMSON CIRCLE OF
GRATITUDE
UNITED. THANKFUL. LOYAL.

The Circle of Gratitude is Clemson's way of recognizing something that we all know to be true. Donors like you are vital to making Clemson better, stronger and more successful. Private support has never been more important.

The Circle of Gratitude is a graphic representation of the spirit of thankfulness that links Clemson students, alumni, friends, faculty and staff together. We all benefit from the generosity of our donors – and for that we are all grateful.

That is the Circle of Gratitude.



Breaking ground on Tiger Band Plaza

With more than \$1 million raised for construction, Tiger Band Association broke ground on the Tiger Band Plaza during homecoming weekend.

"The groundbreaking brings to fruition a huge commitment by many people over the last few years," said Mark Spede, Clemson's band director. "Once finished, it will be an incredible gateway to the Tiger Band practice field and a new destination point for all Clemson fans."

Tiger Band Association President Ed Evans said that the plaza will create an ongoing legacy for band alumni. "Band alumni, both young and old, can participate in this legacy. By purchasing a brick, their contribution to Clemson and Tiger Band will be preserved forever. Each graduating Tiger Band member will be able to add his or her name to the plaza," he said. Funds raised above the cost of construction will go into an endowment for Tiger Band scholarships.

Donations for the project are a part of the Will to Lead for Clemson campaign to raise \$1 billion to support students and faculty with scholarships, professorships, facilities, technology and enhanced opportunities for learning and research.



Celebrating diversity and funding its future



Open a Clemson yearbook from 1950 and you'll find a sea of faces that look alike. All male. All white. By 1955, the military system was dropped and women were admitted. By 1963, integration began with the enrollment of Harvey B. Gantt, who went on to serve two terms as mayor of Charlotte, N.C.

Today, the sea of faces that smile at you from Clemson TAPS is diverse, brilliant and full of promise. Fifty years has made a profound difference. We are a smarter, stronger university because our students and faculty come from all walks of life, all ethnicities. Today, we enjoy a vast pool of input, knowledge and potential.

In celebration of that progress and to fund its continuation, the University has established "50 for 50" — 50 Endowments for Diversity to Commemorate 50 Years of Integration. A gala dinner, "A Legacy of Inclusion," held in January served the dual purpose of commemorating 50 years of integration and raising funds for the 50 for 50 endowments.

For information on how to support these endowments, contact Corrine Grant at 864-656-3019 or email lizac@clemson.edu.

Sharing stories of success

Female students and alumnae exchanged stories of empowerment in male-dominated fields — thanks to the support of the Women in Science and Engineering (WISE) program — during a dinner in February. Industrial engineering alumna Sonya Spratley Balogun '89 shared her motivation for creating a diversity scholarship endowment for WISE.



Orlando-area family gathering

Clemson alumni and friends gathered in December for a Will to Lead campaign event at the Country Club of Orlando. President Barker spoke of the University's recent successes in regards to academics, students and faculty because of the strong support of the Clemson Family.



Happy birthday, Anna Calhoun Clemson!

On February 13, the Women's Alumni Council celebrated the 196th birthday of Anna Calhoun Clemson — the woman whose family land became the site of the University through the bequest of her husband, Thomas Green Clemson. The council is raising awareness and funds to honor Mrs. Clemson in a campus memorial. Actors portraying Mr. and Mrs. Clemson distributed heart-shaped chocolates to students and others passing by Fort Hill, the Clemsons' historic home in the center of campus.

A few words can change the future for so many.

Generous donors have included Clemson University in their wills and made their marks all over campus. From the first bequest of Thomas and Anna Clemson establishing the University to the Madren Center, the Brooks Center and dozens of important endowed chairs, scholarships and fellowships, planned gifts have made a huge difference.

Find out how including Clemson in your will or estate plans can make a difference for generations to come. Call JoVanna King at 864-656-0663 or visit legacy.vg/clemson.

THE WILL TO LEAD FOR CLEMSON

Mike '80 and Karen Cheatham, with son, Michael '12, sign the Legacy Society registry in Ft. Hill.

Engineering student discovers another side of life.

I entered Clemson with a rock solid plan for my future. I knew that I wanted to get a B.S. in bioengineering and then continue on straight into a Ph.D. in bioengineering and become a professor at a research university.

As my time passed, I continued happily in bioengineering, but I also began to get involved in programs outside of my major. Specifically, I got involved with Clemson's New Student Dialogue diversity education program during my junior year. It is difficult to say what made me decide to get involved with this program, but I believe it was a combination of having a great experience with One Clemson as a freshman and my desire to learn about everything (even outside of the world of bioengineering!).

I didn't know what to expect, but looking back, I can safely say that becoming a peer dialogue facilitator changed my life. Learning about and implementing dialogue between incoming freshmen and transfer students opened up an entirely different world of skills and experiences for me. I learned to introspect; I learned to listen; and, most importantly, I learned to really open my mind and experience real empathy for others.

I already possessed those skills, but the New Student Dialogue program allowed me to realize that they were there and that they are just as important to develop as my problem-solving, engineering-based skills. I also became involved with the new Intergroup Dialogue program for students of all levels. In that program, I was able to find my voice as a peer leader. I worked closely with my co-facilitators and my supervisor to help shape the curriculum, which gave me the confidence to take ownership of my own education. I wouldn't trade those experiences for the world.

These new experiences allowed me to get in touch with a side of myself I had previously discounted. My newly honed interpersonal skills needed an outlet, but I was shocked to find that perhaps my trusty "life road map" wasn't leading me to a career that would enable me to reach my full potential. I was so passionate about bioengineering; how could I have been so wrong? Was it even possible to reconcile my scientific, bioengineering life with my empathetic, Peer Dialogue Facilitator life?

After quite a bit of denial, self-doubt and pro/con lists, I came to realize that I needed to adjust my plan. Spring break of my senior year, I sat down and took a serious look at where I had been and where I thought I was going. I came up with not only a new road map, but also an entirely different destination! I applied and was accepted to Columbia University's master's of bioethics program. I finally found a way to use my medical background and my interpersonal skills in a way that complement each other beautifully!

It is amazing for me to look back at the naively confident freshman I was when I first came to Clemson and compare her to the adventurously open-minded first-year master's student I am today. Bioethics, like bioengineering, is a field of unknowns that I am excited to explore. Even so, the idea of changing my plan a month before graduation was almost as scary as the prospect of moving from Clemson, South Carolina, to New York City! But I am thankful every day that I was able to trust my instincts and seize this amazing opportunity. Without my experiences of self-discovery in the New Student Dialogue and Intergroup Dialogue programs, I wouldn't have had the courage to take this giant leap of faith. I got what I consider to be a very well-rounded education by taking ownership of my learning and getting in touch with myself.

Always and forever, Go Tigers!

*I'm Alanna Walker, and
this is my Clemson. 🌐*



Alanna Walker '12