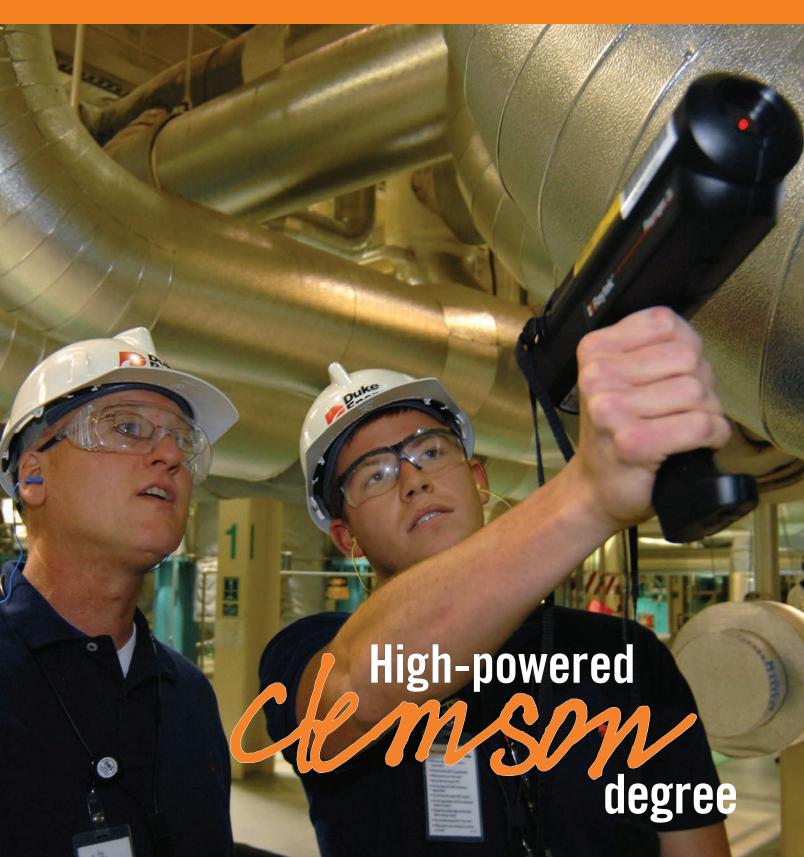
# CLEWSON

WORLD M A G A Z I N E

SPRING 2009

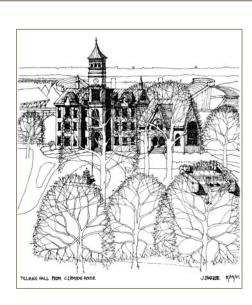




# Educating the next 'Greatest Generation'

"To some generations much is given.

Of other generations, much is expected."



s I write this, we do not yet have a clear picture of Clemson's budget for the fiscal year beginning in July.

Many questions remain, for our university and for your family. Will the recession deepen, or have we hit bottom? Will unemployment and state revenues continue to decline, or stabilize? What will be the impact of federal stimulus funds?

Since I can't answer these questions, let me concentrate on what I do know.

First on that list, I know that Clemson is a very good (some would say great) university. It is, in fact, one of the top-ranked universities in the nation.

At the beginning of our top-20 quest in 2001, we were ahead of only Auburn and Mississippi State on a list of public universities we chose as benchmarks. Today, we have passed N.C. State, Virginia Tech, Michigan State, Texas A&M and several others. We have also been recognized for value and return-on-investment, as you can read in the feature story "High yield of a Clemson degree."

Surveys show that our students are engaged in their studies and happy, the happiest students in the country according to *The Princeton Review*. The statistically rigorous National Survey of Student Engagement found that more than 91 percent of our seniors would choose Clemson again if they had it to do over, compared to an average of just 79 percent at peer institutions.

If surveys and rankings don't impress you, pay attention to the marketplace. We have more than 16,000 applications, a new record, for 2,800 slots in our freshman class next fall. Clemson has a very strong reputation, and universities with strong reputations tend to be very resilient in recessions.

Our investments in IT infrastructure and research capacity are beginning to pay off in economic development benefits for South Carolina. An external study of the state's endowed chairs program called it one of the nation's best.

At Clemson, we have gone from zero spinoff companies in 2001 to seven in the past two years alone. A company like American Titanium Works would not be bringing its applications development and engineering technical center to Greenville if not for the Clemson University International Center for Automotive Research.

In meetings with faculty and staff this semester, I asked them to remember that Clemson does not have a quality crisis. We do not have an enrollment crisis. We do not have a faculty productivity crisis. We do not have a reputation crisis.

What we have is a state funding crisis. It is serious, and we have to deal with it, but we will do so in ways that do not create another crisis.

Next year's budget will be tight, but it will protect our core mission areas. That means protecting academic quality in the classroom, the laboratory and the field — everywhere we interact directly with our most important constituents, especially our students.

We have refocused our private fundraising priorities to emphasize student and faculty support — scholarships, fellowships, professorships and chairs.

Here's another thing I know for sure. Spring has returned to Clemson in all its glory. On May 8, we awarded about 2,300 degrees to an eager, well-prepared group of new graduates.

They understand the challenges they face, but they are prepared and determined to use their Clemson educations to meet them. There is genuine greatness in each of these graduates.

In talks to both high school and college students this semester, I've shared a quote from President Franklin Roosevelt, speaking in the depths of the Great Depression in 1936: "There is a mysterious cycle in human events. To some generations much is given. Of other generations, much is expected. This generation of Americans has a rendezvous with destiny."

The young people President Roosevelt spoke of were the grandparents and greatgrandparents of our students today. Tom Brokaw called them the "Greatest Generation."

They came of age during the Depression and World War II. They fought fascism and tyranny around the globe.

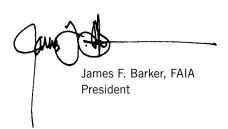
Then they put aside the weapons of war and armed themselves for the challenges ahead with a college education that many of them received through the GI Bill. Brokaw called that legislation "the greatest investment in higher education that any society ever made" and "a brilliant and enduring commitment to the nation's future."

I believe, sincerely, that the students we educate today are the next "Greatest Generation."

I am very encouraged by the determination I see in today's Clemson students to use what they are learning to tackle the problems of *their* generation — the global struggle *against* terrorism, extremism and poverty, and the urgent need *for* energy independence and environmental and economic sustainability.

These students are very pragmatic. They are looking for solutions. And, as you will learn in this issue, they have prepared themselves well to be the next generation of global citizens, thinkers, leaders and entrepreneurs.

To that, I can just say: Go Tigers!



Learn more about Clemson's investments in cyberinfrastructure to support teaching and research in the President's Report at www.clemson.edu/president/report.



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#### Clemson helps boost state's economy

CLEMSON AND OTHER S.C. RESEARCH UNIVERSITIES ARE KEY TO THE STATE'S financial growth through the Centers of Economic Excellence (CoEE) Program created by the S.C. Legislature.

In just six years, the CoEE Program has generated more than 2,000 S.C. jobs and boosted the state's economy by nearly a quarter of a billion dollars in nonstate investment or pledges to the program.

The S.C. Legislature created the CoEE Program in 2002 to stimulate research and development at the state's three senior research universities



(Clemson, University of South Carolina and Medical University of South Carolina) to enhance economic opportunities and increase the number of wellpaying jobs in the state. State funds appropriated from S.C. Education Lottery proceeds are awarded to the universities on a competitive basis.

Universities must raise nonstate, dollar-for-dollar matching

funds prior to accessing state funds. Both the state and nonstate funds are used to establish research centers in knowledgeintensive areas such as biotechnology, nanotechnology and automotive engineering. The universities then recruit top scientists and engineers to lead the centers.

For more on the Centers of Economic Excellence, go to www.sccoee.org.



#### Model UN team outstanding!

CLEMSON STUDENTS ADEDOYIN Salami and Natasha Korba received the Outstanding Delegation award to the Food and Agriculture Committee at the fifth annual Stockholm Model United Nations Conference in Sweden.

The Clemson team also included students Michelle Gottfried, Chris Godbey, Sarah Layton, Rosalyn Morrison, Emnet Sebhatu and Lad Williamson and political science professor and faculty adviser Michael

During the conference, Clemson students competed with more than 150 students from around the world representing 40 countries and engaged in debates in the Security Council, the Food and Agriculture Organization and the Organization of Security and Cooperation in Europe.

#### **Detoxing water from drilling**

CLEMSON SCIENTISTS JIM CASTLE AND JOHN RODGERS HAVE BEEN AWARDED

more than \$800,000 to find economical and environmentally sensible ways to treat the billions of gallons of contaminated water that come out of the ground during oil and natural gas production.

Their work may help the nation achieve energy self-sufficiency and environmental sustainability.

Castle, environmental engineering and earth sciences professor, and Rodgers, forestry and natural resources professor, are developing constructed wetland systems to treat the contaminated water for reuse. The research funding includes \$689,500 from the U.S. Department of Energy and \$120,000 from Chevron of Houston, Texas.

Department of Energy experts say that co-produced water "comprises 98 percent of all waste generated by U.S. oil and natural gas operations. Handling and disposal of this water is the single greatest environmental impediment to natural gas and oil exploration and production."

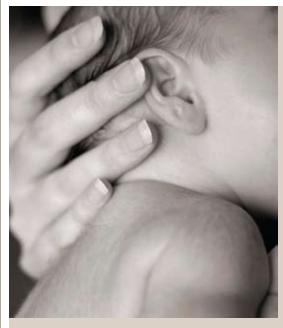


#### **ATW ioins CU-ICAR**

#### CHICAGO-BASED AMERICAN TITANIUM

Works LLC will locate its applications development and engineering technical center at the Clemson University International Center for Automotive Research (CU-ICAR) campus, in connection with a \$422 million titanium mini-mill facility the company plans to locate in Laurens County.

The ATW Tech Center at CU-ICAR will create 40 applied engineering jobs that will specialize in prototype development and fabrication techniques for multiple industry sectors. The manufacturing facility will employ 320 people.



#### Repairing "early" hearing loss

#### **CLEMSON SCIENTIST**

Susan Chapman has received a \$1 million grant from the National Institutes of Health to study the development of the middle ear. The research seeks to help scientists and medical experts identify genetic problems and repair hearing defects while a child is still in the womb.

Chapman, a neuroscientist and developmental biologist, seeks to unlock a puzzle: How do cells in an embryo develop into the elaborate structure of the ear? By studying chicken embryos (which share similar development of ear

structures to the human embryo), Chapman is researching the cells that help create the middle ear and the genetic signals the cells receive to build the

About three in 1,000 babies are born with hearing impairment. Chapman is optimistic that the research will provide a way to deal with some of those hearing losses.

#### 'Best Architecture and Design Schools 2009'

Clemson's architecture and landscape architecture programs have been recognized as some of the best in the country by the Design **Futures Council publication** DesignIntelligence.

Clemson's graduate program in architecture is ranked 11th nationally, and the planning and landscape architecture program is 12th among undergraduate programs. DesignIntelligence also ranked Clemson a "World Class School of Architecture with High Distinction."

#### Pershing Rifles RULE!

CLEMSON PERSHING RIFLES Company C-4 has won the national championship for the sixth straight year, its eighth top title in 10 years.

Members won the 2009 national varsity championship of the Joseph Memorial Drill Competition, hosted this year at Clemson.

The Pershing Rifles competed against 14 other top teams from around the country. For more on Clemson's famed precision drill team, go to business.clemson.edu/Armyrotc/Activities/ prs.htm.



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#### Ethics Bowl team among top

CLEMSON'S INTERCOLLEGIATE ETHICS
Bowl team earned its second trophy in as many
years at the national Ethics Bowl Championships
in Cincinnati, Ohio. The "Orange Wave"
outperformed more than 100 other teams and
earned the second-place spot as they defended
their national championship from last year.

Clemson is the only university in the nation with teams that have reached the quarterfinal rounds at each national competition in the past seven years.

The team is sponsored by Clemson's Robert J. Rutland Institute for Ethics and

philosophy and religion department and is coached by Kelly Smith and Charles Starkey, professors and Fellows of the Rutland Institute. Students are Brad Saad, Kelsey Sontag, Rahul Loungani, Michael DeWitt, Nikesh Patel and assistants Margaret Nicholson, Neil Barrett, Caroline Rash, Ashley Rube and Ian Wood.

The Rutland Institute provides a forum for exploration of ethical issues on and off campus. Its programs include leadership and training in Clemson's Ethics Across the Curriculum program. For more on the Rutland Institute, go to <a href="https://www.clemson.edu/ethics">www.clemson.edu/ethics</a>.



#### CLEMSON RESEARCHER ANGELA FRASER IS FIGHTING AN INVISIBLE

enemy in child care centers — bacteria and other food-borne microbes that cause illnesses.

Fraser, a food science and human nutrition professor, has received a \$577,000 federal grant for improving the food handling, hygiene and sanitation in child care settings in North and South Carolina.

Findings from Fraser and other food-safety experts will be used to develop training for educators who provide foodsafety training to child care workers. Information and materials will be available through the FightBAC! Web site — fightbac.org — created by the Partnership for Food Safety Education.



# Master of Real Estate Development — among top in nation

Clemson's Master of Real Estate Development program was featured in the *Journal of Real Estate Literature* as one of the top new programs in the nation.

Clemson's program is a joint project between the College of Business and Behavioral Science and the College of Architecture, Arts and Humanities, making it Clemson's only graduate program connecting development design and business. Students take courses in law, finance, management, architecture, construction science, and city and regional planning.



Sept. 5 — Middle Tennessee State

(Hall of Fame Day, Youth Day)

Sept. 10 — at Georgia Tech

Sept. 19 — Boston College (Family Weekend)

Sept. 26 — Texas Christian (Football Reunion Weekend)

ct. 3 — at Maryland

Oct. 17 — Wake Forest (IPTAY Day)

Oct. 24 — at Miami (Fla.)

Oct. 31 — Coastal Carolina (Homecoming)

Nov. 7 — Florida State (Solid Orange Day)

Nov. 14 — at North Carolina State

Nov. 21 — Virginia (Military Appreciation Day)

Nov. 28 — at South Carolin

Fan Appreciation Day is Sunday, Aug. 23, at 3 p.m.

#### Follow the TIGERS!

For 2009 Clemson football away games, be sure to plan your trips with the Alumni Association's Clemson Sports Travel Program. Call (864) 656-2345 for the latest information on away-game headquarters and pregame tailgate gatherings or visit the Web at *cualumni.clemson.edu/trave.* 

#### Students score slam-dunk



LEAVE IT TO ENGINEERS TO WONDER HOW MUCH force is generated when a 240-pound forward slam-dunks a basketball. And leave it to Clemson engineers to figure it out.

Civil engineering professor Scott Schiff and his students have created a first-of-its-kind system that not only measures the intensity of the dunks, but also displays that information on the video board for fans almost immediately.

The device uses a combination of two accelerometers, which measure acceleration, and the principles of basic physics to allow students to calculate within 15 seconds of the dunk how much energy was imparted to the basketball goal.

The rating system is a joint venture between the Clemson Student Chapter of the Structural Engineers Association and the Clemson Athletic Department.



#### 'Cradle to grave'

#### CLEMSON ENVIRONMENTAL ENGINEER SHELIE MILLER HAS RECEIVED A PRESTIGIOUS

CAREER Award and grant of \$400,000 for her life-cycle assessment research.

She identifies the life-cycle steps, ranging from raw materials through disposing or recycling. She then evaluates a product's cumulative impact on the environment. Life-cycle assessments provide industry and public leaders with "cradle to grave" analyses of how products and processes affect the environment.

Miller is currently analyzing switchgrass, a hardy perennial grass that shows a lot of promise as a biofuel. Researchers at the Clemson Pee Dee Research and Education Center in Florence and on campus are finding ways to unlock the energy stored in plant materials. Miller's role is to figure out if switchgrass as a fuel produces a net benefit to the environment after all its costs are identified and evaluated.

6 ® Clemson World — SPRING 2009



CLEMSON STUDENTS TRAVELED TO MEMPHIS, TENN., FOR THE 2009 MARTIN LUTHER KING Commemorative Trip as part of the University's annual MLK Celebration.

They visited the National Civil Rights Museum, W.C. Handy House Museum, Slave Haven Underground Railroad Museum, STAX Museum of American Soul Music and Alex Haley House Museum.

The annual trip is sponsored by the Martin Luther King Jr. Enhancement Committee coordinated through the Gantt Intercultural Center. For more on the center, go to www.clemson.edu/gic.

#### International teaching excellence

#### **C**LEMSON PROFESSOR HALA NASSAR HAS RECEIVED

the Award of Recognition for Excellence in Research,

Teaching and Service to the Profession from the Council of Educators in Landscape Architecture.

The award applauded her research and teaching efforts in establishing an international cross-cultural partnership between landscape architecture students at Clemson and architecture students at Ain Shams University in Cairo, Egypt.



Since 2006, students and faculty from both schools have worked on Creative Inquiry projects to provide design solutions for urban sprawl at some of the world's greatest sites of antiquities, including the urban edge of the Giza plateau near the Great Pyramids and along the Avenue of the Sphinxes in Luxor, Egypt.

For more on the Luxor project, go to "Challenge of the Sphinxes" at www.clemson.edu/clemsonworld/2008/winter/article5.html and www.clemson. edu/newsroom/multimedia/video/2008/egypt.html.

#### **Enterprising alumni**

#### THE SPIRO INSTITUTE FOR

Entrepreneurial Leadership held its fourth annual Celebration of Clemson Alumni Entrepreneurs, recognizing two distinguished business leaders with the Clemson Alumni Entrepreneur Award.

Gary Parsons '72, computer and electrical engineering gradu-



ate, is chairman of Sirius XM Radio Inc. Parsons founded XM Satellite Radio in the mid-1990s and served as chairman there until the merger of Sirius and XM Radio last year. He holds many patents in the telecommunications industry. He's also chairman of SkyTerra GP, a board member of Canadian Satellite Radio and Devas Multimedia, and vice chairman of the National Alliance to End Homelessness.

Doug Haugh '94, chemical engineering graduate, is executive vice president and CIO of Mansfield Oil Co., a nationwide provider of fuel supply, distribution logistics and delivery services. Haugh also cofounded FuelQuest Inc., founded three companies in industries including real estate development and media software, and serves on the board of BioBlend Renewable Resources. In 2006, he received the Ernst & Young Entrepreneur of the Year™ award in the energy technology category for the Houston and Gulf Coast region.

Clemson's Spiro Institute supports programs that promote entrepreneurial activity and economic development. For more information, go to business.clemson.edu/Spiro.

#### Alumni support No. 4 in nation

Clemson alumni support, as measured by alumni giving, is among the top in public universities in the nation according to *U.S.News* & World Report.

Last year's alumni participation rose from 27 percent to 28.5 percent, a huge increase considering the fact that the University adds more than 3,800 new alumni to the list each year. Alumni giving is considered a measure of how satisfied graduates are with their college experience and with the value of the education they received.

#### Cyber steps to combat dropout crisis

PICTURE THIS: IT'S AN IN-SERVICE DAY IN A TYPICAL S.C. ELEMENTARY school. The staff is in the school library learning about bullying prevention with international expert Susan Limber.

But Limber — a professor with Clemson's Institute on Family and Neighborhood Life — isn't there. In fact, she's busy elsewhere with research. How does she do this?

Solutions Center (NDPC) at Clemson and Clemson Limber, the National Dropout Prevention to the Incommit Chillis Radio Productions have found a way to reach those in need of research-based solutions,

deliver the information and provide the resources — all at no cost to the

Last year, Limber presented a live radio webcast and provided resources for her audience to use during the broadcast. The resources were kept on the NDPC Web site, and the audio program was recorded and archived by Clemson Radio Productions, downloadable from the Web site and available on iTunes.

In response to the growing need for solutions to the dropout crisis amid budget woes, the National Dropout Prevention Center began to produce a monthly live radio webcast last year — Solutions to the Dropout Crisis. Now, with the archived versions available, even more school and community leaders are tuning in to find out how to make specific improvements in their schools.

For more information, go to www.dropoutprevention.org/webcast.



#### **Robotics rock!**

#### THE FIRST ROBOTICS COMPETITION

Palmetto Regional at Littleiohn Coliseum in March attracted 1,000 high school students — from the Carolinas, Georgia, Florida, West Virginia, Alabama, New Jersey, Missouri and an international squad from Brazil. The teams competed for top honors in what's described as a rock concert and sporting event rolled into one.

Clemson's College of Engineering and Science hosted the event. For more information, go to www.usfirst.org or www.ces.clemson.edu/main/FRC/index. html.

#### Packaging design and graphics institute

#### IN MARCH. CLEMSON DEDICATED THE HARRIS A. SMITH BUILDING. HOME TO THE

Sonoco Institute of Packaging Design and Graphics, where students and researchers will study not only how packaging is designed and manufactured but also how products will be perceived, marketed and consumed in the future.

It's the only university program in the country that will bring together packaging



science, graphic communication, materials, environmental science. manufacturing. marketing and psychology disciplines to study packaging methods, says Chip Tonkin, the institute's director.

The 28.000square-foot building is named for Harris A. Smith of Atlanta, Ga., former chair-

man, president and chief executive officer of Smith Container Corp., founded by the Smith family in 1907. He sold the company a few years ago and saw an opportunity to create a global center for packaging innovation by investing in Clemson.

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#### **CU-ICAR STUDENTS DESIGNED A SUSPENSION SYSTEM FOR THE ULTRA-** fast DiMora Motorcar sport sedan.

Automotive engineering graduate students at the Clemson University International Center for Automotive Research (CU-ICAR) collaborated with the unique vehicle development company to design a suspension system that can handle speeds in excess of 240 mph.

Because CU-ICAR fills the gap between basic research and commercial application of automotive technologies, DiMora Motorcar challenged it to assess suspension-technology options for the Natalia SLS 2 sport luxury sedan. A team of students, under faculty supervision, accepted that challenge last semester.

"The designs they produced are excellent," says DiMora Motorcar Founder Alfred DiMora. "We were already impressed by CU-ICAR's facilities, equipment and staff. Now we know that the graduate students working here are outstanding as well."

# Two-sport SPEED Cheryl Treworts

#### SOCIOLOGY MAJOR AND Tiger wide receiver Jacoby Ford recently earned a track national championship when he won the 60-meter dash at the NCAA Indoor Championships.

### Design-Build students No. 2 in nation

Clemson's award-winning Design-Build student team earned the praise of a panel of national construction professionals as among the most skilled future construction managers and builders in the country.

The team, which traveled to the San Diego-based national convention of the Associated General Contractors of America for the event, won second place in the National Student Championship Design Build Division.



#### 'International Leaders in Education'

#### **CLEMSON IS HOSTING 14 TEACHERS FROM**

around the world as part of the International Leaders in Education Program, a professional and academic exchange program funded by a U.S. Department of State grant. The visiting secondary education teachers, from 11 countries, are taking classes on campus and will complete an internship with a partner teacher at nearby Daniel High School.

Clemson was one of only five schools chosen to participate in the competitive academic exchange program.

The grant is administered through the International Research and Exchange Board, a nonprofit organization that promotes global education and training.

#### Getting the big picture in geology

#### **ENVIRONMENTAL ENGINEERING AND EARTH**

sciences professor John Wagner has found a way to give his students the big picture of geology.

He arranges air field trips for his classes in geomorphology — the study of surface features of the earth — on the University plane. University pilot Heyward Douglass navigates students over the Appalachian Mountains while Wagner points out from midair examples of surface features studied in the classroom and laboratory.

Students actually view four landform regions: the Piedmont, Blue Ridge, Valley and Ridge, and Cumberland Plateau, while noting mining activity and other surface features as they analyze the terrain for evidence of geologic, climatic and tectonic effects.

"We don't know of any other university that does this with a comparable undergraduate class," says Wagner. "It's another way we're working to provide unique opportunities for Clemson students with administration support and University resources."





#### Carnegie Foundation recognition

The Carnegie Foundation for the Advancement of Teaching has recognized Clemson with a community engagement classification in the areas of curricular engagement and outreach and partnerships.

Curricular engagement focuses on service-learning and community-based research in addressing community needs as part of the learning experience. The focus of outreach and partnerships is on sharing knowledge and resources and collaborating locally, nationally and globally to improve quality of life and advance economic development.

10 ® Clemson World — SPRING 2009



#### **Prince Scholars**

RECIPIENTS OF SCHOLARSHIPS SPONSORED BY OR NAMED FOR CLEMSON PRESIDENT EMERITUS PHIL PRINCE GATHERED WITH HIM at the President's Box in Memorial Stadium.

Emcees for the event were Kate Parks and Kyle Roedersheimer, beneficiaries of the Prince Alumni Presidential Scholarship, provided by the Clemson Alumni Association.

Prince was introduced to the students by psychology professor Robin Kowalski, 2008 winner of the Prince Award for Innovation in Teaching, which recognizes outstanding teachers who demonstrate creative and novel teaching methods in the classroom.

#### 'Tanner's Totes'

#### PRE-BUSINESS STUDENT ATHLETE

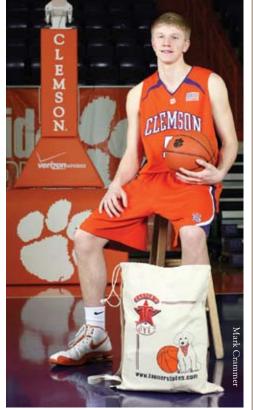
Tanner Smith made news this spring for his contributions on the basketball court and his accomplishments in the classroom (Academic All-ACC team for men's basketball).

All the while, another facet of his life

— Tanner's Totes — has gained national attention. Tanner's Totes — a nonprofit he started while in grade school with help from his parents — continues to cheer up preteens and teens who are undergoing treatment for cancer or other long-term illnesses with bags of gifts, craft materials and other fun items.

Smith and his organization have been featured by ESPN, HGTV and others.

For more on Tanner's Totes, go to tannerstotes.com. For more on the Smith family, go to sports.espn.go.com/ncb/columns/story?columnist=oneil\_dana&id=3914889.



#### **Quiet Reflections**

#### A 128-PAGE, FULL-COLOR BOOK

by nature photographer Tommy Wyche and naturalist John Garton captures the beauty of the Clemson Experimental Forest in all four seasons.

The coffee-table book showcases the natural and cultural history of the University's 17,500-acre forest. The Clemson Forest is an outstanding example of conservation that's home to more than 195 species of birds and 900 species of plants, including some of the largest trees of their kind in the state, as well as several rare or endangered species.

For more on the book, go to www.clemson.edu/psapublishing or call (888) 772-2665. Proceeds go to the Clemson Forest operating fund to support research and education programs.

# Help students achieve their dreams.

ears ago, Wayne Ouzts '61
established The Ouzts Family
Scholarship Endowment for
students who need financial help
to pay for college. More recently,
Ouzts included provisions in his estate
plans to ensure that many more worthy
students have a chance to obtain a college
education and realize their dreams.

You, too, can help students achieve their dreams by creating an annual or endowed scholarship today and/or through a gift in your estate plan, which can:

- Endow a scholarship, fellowship, professorship or other fund in your name.
- Provide important University programs that serve society.
- Strengthen future programs for your favorite discipline or school.
- Provide you with income tax and/or estate tax benefits.



To learn more about making students' dreams come true, please contact the Office of Gift and Estate Planning:

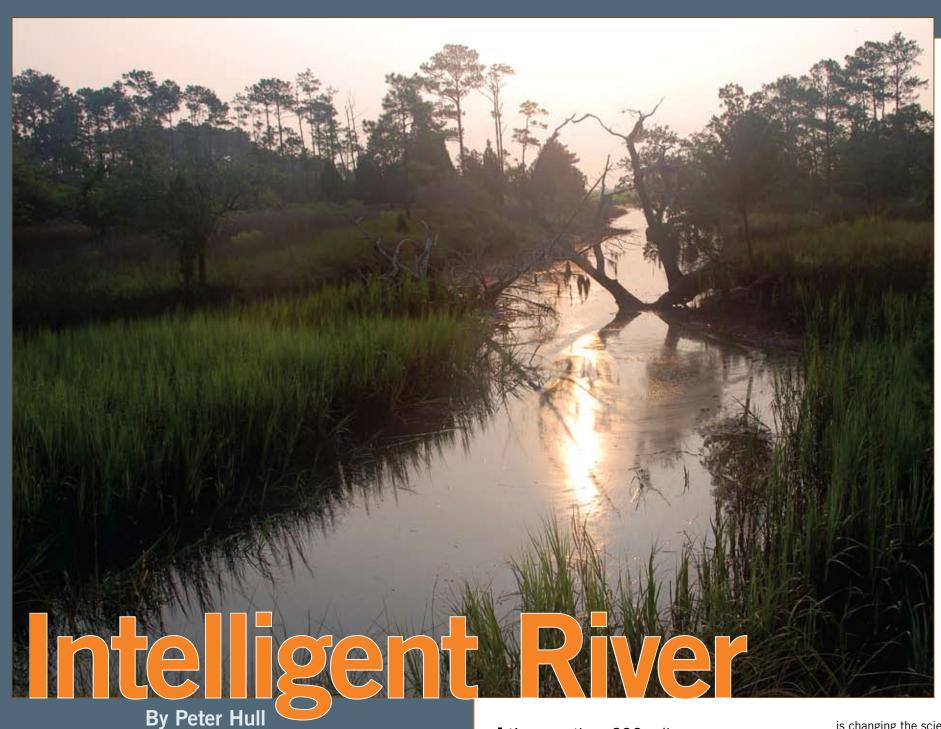
- Request information on the reply card.
- Call JoVanna King at (864) 656-0663.
- Email jovanna@clemson.edu.
- Visit online at www.clemson.planyourlegacy.org.





"I attribute no small part of my success to the Clemson Experience. Giving back shows that I value what I was given during my years as a student. Taking care of the needs that are here now allows me to see the results of my giving while I am alive — and that's very rewarding."

— Wayne Ouzts '61, Engineering



Clemson collaboration is casting a digital net over the Savannah River.

t's more than 200 miles as the crow flies from Upstate South Carolina to where the Savannah River flows through Jasper County.

But if ecologist Gene Eidson wants to know the condition of the river as it meanders beneath Interstate 95, he'll soon be able to be there in a matter of seconds — virtually — thanks to promising research at the University.

Eidson, director of the Clemson **University Center** for Watershed Excellence and the ecology focus area of the Restoration Institute, heads up a project developing a network of sensors and probes along the length of the river to transmit vast amounts of information wirelessly.

"Put simply, our watersheds are at risk," says Eidson. "If ignored, our natural resources will not be able to cope with the demand. We're at the point where we need to revolutionize how we manage our water resources."

### Economic growth and the environment

The project, called the Intelligent River™,

is changing the science of river management using cyberinfrastructure and remote data gathering.

Data, including temperature, turbidity and dissolved oxygen, are collected in a database that can be viewed via the Internet.

"Having real-time data to monitor environmental characteristics — water quality, storm-water runoff, even tree growth — from any Internet access point will improve watershed management," says Eidson, principal investigator of the Intelligent River project.

"When completed, this system of remote sensors will provide real-time information to the public, scientists and professional environmental managers. The system will supply hands-on practical information to help promote objective, science-based discussions about economic growth and the environment."

#### **Strained resources**

The Savannah River is complex. The waterway is shared by two states with many users that create zones of extreme demand. For example, the Savannah supplies the Upstate, including Greenville, which isn't on the river. Further, the population boom along the coast requires delivery of large quantities of high-quality water.

That puts a burden on the entire river.

"Historically, there's been enough water to go around, but meeting the increased demand requires real-time data," says Eidson. "We need to manage the river so we can meet those challenges."

Such is the magnitude of the project that more than 25 scientists — faculty, staff and students — in

departments across the University are working to navigate its tricky waters.

Some are working on a system to collect and process thousands of data points at one time, which will be new intellectual property for Clemson. Others are working on how to transmit the data wirelessly from within dense wooded environments.

#### Surpassing 'natural limitations'

Kuang-Ching Wang and Jason Hallstrom are two Clemson faculty members breaking new ground with their research.

Wang's job is to build a wireless monitoring network for watersheds in a dense forest environment, a natural limitation of wireless technology.

"Data doesn't travel far before another tree blocks the signal," says Wang.

Helped by graduate students, the electrical and computer engineering professor is developing a "mesh network" — a series of base stations that communicate wirelessly, passing data from one to the next like a baton in a relay, until the signal reaches a hard-wired connection.

Hallstrom, a computer science professor, leads a group developing hardware and software to ensure all the deployed sensors work as they should. His group has worked on similar applications for more than four years but never had a real-world application to put theory into practice.

"This has the potential to revolutionize how science is done and provide real



14 ® Clemson World — SPRING 2009

#### value to Clemson and the surrounding communities," says Hallstrom.

Forestry and natural resources doctoral candidate Sam Esswein, who also received his bachelor's and master's degrees from Clemson, is working on software for the Intelligent River. He spent his summers in the field under the guidance of faculty at the Baruch Institute in Georgetown. "Putting theory into practice has proved invaluable," says Esswein. He's among the growing "green" work force



— engineers, scientists, technicians, environmentalists and other professionals learning to support new energy technology.

#### Communicating with the river

The final piece of the puzzle, where the collaboration comes together, is a Web site.

The project is intended to have a public face and a private face, says Clemson's David L. White, a research

scientist coordinating development of the Web site.

The public site will display some of the sensor activity to demonstrate how the project works. The private site will contain all data within the Intelligent River and be available via subscription.

Independent companies and researchers will be able to buy data tailored for their needs.

Through the Web site, users will not only see data on a computer screen in real time, but by using programs such as Google Earth will be able to visualize the river.

#### Green sense

The Intelligent River is one example of Clemson's strengths and expertise in alternative energy technologies, water resources, sustainable agriculture, the built environment and the natural environment.

"Managing natural resources and developing sustainable alternative energy sources are among the most critical challenges facing the world today," says John Kelly, vice president for Public Service and Agriculture.

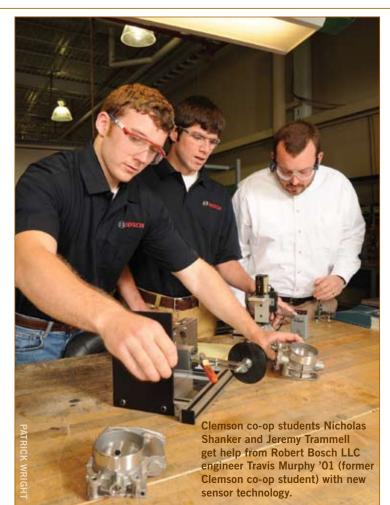
"The Restoration Institute's work in protecting South Carolina watersheds is vital to our future. And the technology developed in the process — along with our preparation of students for a green work force — will have positive impact far beyond our own state."

# High yield of a Clemson degree

by Carrie DuPre



James Hembree '97, manager of one of the largest Sherwin-Williams stores in the Upstate, works with Clemson's career services to recruit new graduates.



Approximately 90 percent of Clemson students either have jobs or are in graduate school six months after graduation.

## The Clemson degree's bankable assets make it a high-yield investment.

hey are more than 115,000 strong. They live all across the country and the world. They contribute to the fields of architecture and zoology and every field in between. And a couple thousand join their ranks each year.

They are Clemson graduates, and their value in the job market keeps rising.

Kiplinger's "Best Values in Public Colleges for 2008-2009" ranks Clemson among the best educational buys in the nation and the highest-ranked public university in South Carolina, citing top-quality education offered at reasonable prices.

SmartMoney ranks Clemson No. 8 among public and private universities in "payback" — the ratio of graduates' earnings to tuition paid.

Clemson is among the 35 members of General Electric's elite nationwide group of "Executive Schools," from which it draws candidates for engineering jobs and other key positions.

Clemson's Career Services is ranked No. 8 by the 2009 *Princeton Review*.

"The time for this recognition could not be better, given the current competition in the job market," says Flora Riley, executive director of career services and the Michelin® Career Center.

16 @ Clemson World — SPRING 2009



Duke Energy engineer Bill Edge goes over drawings with Clemson co-op student Marshall Lynn at the Oconee Nuclear Station.

"The job market has become very competitive, but Clemson graduates have also become sought after in the market place," says Riley. "Our students are very bright, energetic, articulate and team players. These are all attributes that employers look for in candidates."

A survey conducted by the National Association of Colleges and Employers echoes that sentiment, showing that industry leaders overwhelmingly report looking at more than just high GPAs in job candidates. Strong grades are important, but if students can't also demonstrate effective communication skills, strong work ethics and the ability to work in a team, they won't catch an employer's eye.

#### Earning an edge

Employers in the survey also expressed a preference for candidates with relevant work experience, namely internships and cooperative education (co-op) assignments.

Approximately 72 percent of Clemson students will complete an internship as part of their overall education.

Mechanical engineering graduate Amy Bolton is one. When she was a sophomore in 2001, she met with General Electric representatives at a Clemson career fair. That first meeting turned into three internships and — after she graduated in 2003 — a job offer. She's been with GE for five years now and is currently the optimization and control sales manager in Charlotte, N.C.

"As an intern, I learned how to solve complex problems," she says. "I also learned how to budget my time to be as efficient as possible. Most importantly though, I learned

how to work well on a team with people from all backgrounds to achieve a common goal or solve a problem."

Apart from the career center, Clemson's Cooperative Education Program has a similar goal of giving students real-world work experience and an edge in the job market. Students alternate semesters of academic study with semesters of career-related experience. Approximately 250 employers actively recruit Clemson students for co-op assignments.

"Because the educational focus is so important," says

Neil Burton, director of Clemson's Cooperative Education Program, "co-op faculty and staff spend a great deal of time evaluating the assignments our students accept. We want to make sure that they're actually learning and not just running errands for their mentors.

"Employers understand that bringing aboard a Clemson co-op student carries with it the responsibility to teach the student how to apply classroom knowledge in a professional setting. This also means that employers looking for new professionals put a premium on Clemson co-op students because those students have already engaged what they learned in class."

R. Thomas Haselden Jr. '75, executive vice president for BP Barber, has seen the co-op program from both sides, first as a Clemson undergraduate with a co-op placement and now as a co-op employer who participates in the University's program. As a student, the co-op experience helped him decide the direction to take his engineering studies.

Now as an employer, he sees co-ops as a major component of BP Barber's recruitment. "Co-op

graduates are beneficial from a financial standpoint since the co-op experience reduces time for training and allows them to be profitable in a shorter period of time."

#### Employers like what they see

"Employers like what they see with our grads," says Deb Herman, director of employer relations and recruiting for the Michelin Career Center.





nterprise

















Working closely with the center's 21 corporate partners and other employers seeking to hire Clemson students, Herman often hears praise for students' involvement in community service and leadership, FLUOR capability to work in teams and ability to relate classroom learning to the workplace.

> "Some of our top recruiters are Clemson graduates themselves," says Riley.

For example, economics graduate David Peebles '49 is a former president of Ferguson Enterprises within Wolseley NA. Management and business administration graduate Cheri Phyfer '93, M '99 is president of Sherwin-Williams Western Division. Engineering technology graduate Wayne Culbertson '74 is executive vice president of personnel and chief human resources officer for Michelin NA. Mechanical engineering graduate James Gregory '81 is director of manufacturing and research at Timken. And the list goes on.

"As our graduates move up in leadership in their companies, they or their representatives come back to campus to recruit," says Riley. "It's that whole Clemson Family concept. They want to give back and help other grads. And it's a good business decision.

"Through their own experiences with the University, they know the high yield of hiring Clemson graduates." @

#### More bankable assets of the Clemson experience

#### **Creative Inquiry**

Now in its fourth year, this unique initiative brings together undergraduates, graduate students and faculty to learn from each other and to research important issues that affect our world. About 50 percent of sophomores, juniors and seniors are pursuing degrees that require some form of Creative Inquiry.

In her new book, The College Solution: A Guide for Everyone Looking for the Right School at the Right Price, financial writer Lynn O'Shaughnessy profiled Clemson's Creative Inquiry program as a best practice in undergraduate research.

#### **Living learning communities**

Clemson has 12 living learning communities in which students with common academic interests live together in the same residential area and have staff, programming and curricular resources dedicated specifically to them.

The National Study of Living Learning Programs recently rated Clemson's living learning communities among the best in the nation.











#### **Community service**

Whether it's Habitat for Humanity, Engineers Without Borders, Save the Nation, Safe Kids Upstate or other organizations and projects, Clemson students are very giving of their time and skills. They, in turn, receive invaluable learning experiences, teamwork skills and knowledge beyond their own backgrounds. Clemson had an estimated 8,400 students engaged in service and an estimated 90,800 student service hours for the 2007-2008 school year.

The University's Habitat for Humanity chapter has been named the top chapter in the nation. Earlier this year, the Corporation for National and Community Service named Clemson to the President's Higher Education Community Service Honor Roll for exemplary service efforts and service to America's communities.

#### Study Abroad

About 28 percent of the student body enriched their education through study abroad last year. Students in a variety of majors have opportunities at the Archbold Center in Dominica; the Daniel Center in Genoa, Italy; the Clemson University Brussels Center in Belgium; and other locations.

David Reinking, Eugene T. Moore Professor of Teacher Education, recently earned national honors when his program won the prestigious Andrew Heiskell Award for Innovation in International Education.

SPRING 2009 — Clemson World 

19 18 @ Clemson World — SPRING 2009

## Doing the math for SMAN by Liz Newall Clemson researchers and students

are doing one-of-a-kind research to improve electric power grids.

improve distribution efficiency, save energy and reduce operating

"The basis of math for technology is often forgotten," says Khan. "For example, common medical X-rays are based on inversion photons passing through the body. This modeling is based on laws

however, are human-made. The network is vast, complex, timevariant and nonlinear."

Millions of light bulbs, computers, televisions, appliances, heaters and electrical motors are constantly going on and off.

By creating mathematical models of complex power-distribution

#### Solving problems —

undergraduate, graduate and postgraduate students as well as faculty. In addition, it has a Creative Inquiry component.

The method of operation? Fundamental math — through mathematical models.

#### Laws of human nature

of mathematical models of the distribution of X-ray particles or

"The variables we're dealing with in electric power networks,

They contribute to the disorderly pattern of variations of voltage, current and impedance of the alternating current network.

networks, the Clemson team is searching for new information that may help to improve the electrical distribution system.

#### a team effort

The team includes

Itron is providing \$285,000 of financial backing, advanced measurement tools, access to cutting-edge technology and general technical support.

Mathematical sciences graduate student Jack Cooper is performing sparse signal representation in electrical power system signal. His mission is twofold: to use the latest mathematical techniques to model the power system waveforms, and to do so with the smallest amount of stored information.

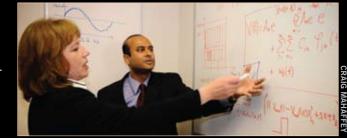
Statistics graduate student Chendi Jiang is performing noise modeling in electric power system signal. Physics graduate student Jason Puls is working with fast real-time measurements of electric voltage and current.

Electrical and computer engineering graduate student Zhenhua Wang is building a physical model of the power systems waveforms. Xiaoxiao Huang, another electrical and computer engineering graduate student, provides engineering feedback on vector signal analyzer measurements.

Computer science graduate student Dhruba Kulkarni is working with large data

sets that need to be analyzed and classified. He also provides IT help to other team members.

Undergraduate student Josh McGinnis is the Creative Inquiry project leader. The



Creative Inquiry work has three teams of undergraduate students in a variety of majors. One team measures data from the vector signal analyzer. Another team analyzes the data. A third team provides in-depth information to solve the formulated problem (provided by professors Khan and Viktorova).

#### **Greater \$avings** — fewer blackouts

"Our overall research goal is to model the smart electric power grid network on a micro scale, starting with a single node, to the macro scale of the entire grid," says Khan.

The modeling will help optimize the efficiency of the power grid as well as prevent system failure such as blackouts.

The short term research is one year. The expected outcome is smart meters that can efficiently record usage over 15-minute intervals resulting in consumer savings on their electricity bill.

The long term research of modeling the entire power grid and developing information theory for the entire network will require at least five years. The possible outcome is a computationally efficient mathematical model of a smart electrical distribution network that can lead to new sensing and control technologies for the smart grid.

"Mathematical modeling has proven its feasibility as an efficient tool of optimization," says Vladimir Borisov, Clemson's technical liaison and senior principal engineer with Itron. "The Clemson project promises to be instrumental to our continual effort to improve performance and reliability of Itron's products." #

#### **Best job in America** today — mathematician!

In the recent "The 10 Best Jobs in America Today," JobsRated.com picks mathematician as No. 1. In fact, five of the top 10 are mathematical related. (See www.careercast.com/

#### Doing the math at Clemson

Clemson's mathematical sciences department is doing its part to prepare students for these top jobs. In the process, it provides major contributions to the overall instructional and research mission of the University.

Enrollments average 5.000 to 6.000 300 sections of math sciences courses, ranging from beginning freshman courses to cutting-edge

Prominent research activities include more than 100 publications a year, national and international professional involvement, and funded research of more than \$1 million.

Clemson has 60 smart classrooms interspersed around campus that enable the sharing of work to solve They also facilitate online guizzes — either in or out of class — and

Degree programs are organized by discipline into five areas in the and discrete mathematics, applied operations research, and probability and statistics.

For more information, go to www. Taylor, department chair, at rtaylo2

"With the ability to monitor the entire power grid in real time," says Viktorova, "the utility can ensure uninterrupted service,

There should be a way to reduce power usage (and

power bills!), help the environment and become

more energy independent — without giving up

Mathematical sciences professors Taufiquar Khan and Irina

project to make smarter electric power networks for the nation's

Viktorova have gathered a team of Clemson students for a

They're working with the support of industry partner Itron

comfort and convenience.

Inc., a leading technology

provider and critical source of

and water industries. Itron's

OpenWay platform combines

the best available solutions

infrastructure technologies.

from the smart metering

and advanced metering

knowledge to the global energy

Clemson researchers believe there is.

need to boost the economy and ecology.

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### Planning your next trip to campus?

## Don't forget to eat!

It would be a shame to not take advantage of all the wonderful places to eat on campus the next time you make a visit. With great restaurants like Chili's Too, Einstein Bros. Bagels, Pizza Hut, Burger King, JUMP Asian, Seasons by the Lake and more — each a short walk or bus ride away — a satisfying meal is always within reach!

So before you make your next trip to Clemson, visit *www.clemson.edu/dining* and check out all the options available for the best in campus dining.













# Clemson's own 'heroes'

Meet five Clemson heroes — the Alumni Association's 2009 Distinguished Service Award recipients.

by Dot Yandle



To learn more about nominating outstanding Clemson alumni for next year's award, go to *cualumni.clemson. edu/dsa* or call (864) 656-2345.

From Vail to Charleston, this year's Alumni Distinguished Service Award recipients display their own super powers — in business, community service and University support.

#### Harry H. Frampton III '67

arry Frampton is attracted by people who're "outliers" — achievers not typical of their peers — who think boldly, adopt new strategies and generally accomplish goals in untraditional ways. It may be that he's an outlier himself.

He's made a distinctive mark on many communities since leaving Clemson with an economics degree. The Hartsville native was hired by legendary community developer Charles Fraser to join the Sea Pines Co., beginning a career in residential and resort development that moved from the South Carolina coast to Charlotte, N.C.; Richmond, Va.; and on to the high mountains of Vail, Colo., his home for the past 25 years.

As senior managing partner of East West Partners, Frampton has led the development of resort properties in Vail and Breckenridge, Colo.; Lake Tahoe, Calif.; and Deer Valley, Utah. Recently he was inducted into the Colorado Business Hall of Fame. He has been Citizen of the Year both in Vail and Beaver Creek and, as a volunteer, chairman of the 40,000-member Urban Land Institute. Frampton has an international reputation for promoting responsible development and for giving back to the community around him.

In Vail, Frampton founded and has led for 25 years the Vail Valley Foundation, a nonprofit that helped make Vail special by sponsoring performances by the New York Philharmonic, Bolshoi Ballet and others. The foundation built and operates the Gerald R. Ford Amphitheater.

For Clemson, he's been chairman and served as a board member of the Clemson University Foundation for 12 years. He supports an endowment in architecture honoring his longtime mentor Charles Fraser and gives annual scholarships to S.C. minority students. He's also a 40-year donor to IPTAY.

Frampton and his wife, Susan, an honored community volunteer, have two sons, Christopher and Matthew, and two grandchildren.

#### Eddie M. Robinson '79

ddie Robinson likes Tuesdays. That's the day he does surgery in the morning and sees his small animal patients in the afternoon at his thriving Midlands Veterinary Practice in Columbia.

He enjoys the variety that his work brings. He remembers thinking, as a child visiting his grandfather's farm when the local veterinarian was there, that medicine was like putting the parts of a puzzle together. He still relishes the challenges and pleasures of operating a veterinary practice.

Robinson came to Clemson on the advice of his Lewisville High School counselor in Richburg, who told him it would be a good choice for a pre-veterinary program. He enrolled, sight unseen. After earning his Clemson degree in zoology, he went on to the Tuskegee University School of Veterinary Medicine. Soon after graduating, he became deeply involved in Clemson alumni activities.

Robinson worked first with the Clemson Black Alumni Council, the Columbia Clemson Club and Second Century Society. He also served on the Clemson University Board of Visitors from 1993 through 1998. He became a member of the Alumni National Council and was its president in 2003-04. He served on the University's Humanities Advancement Board from 2003 through 2008. Currently, he's a board member of both IPTAY and the Clemson University Foundation.

Add to that a multitude of Columbia and statewide commitments — from mentoring elementary schoolchildren to serving on state commissions. And this year he's president of the Lake Murray/Irmo Rotary Club, which named him a Paul Harris Fellow in 2003.

Robinson and his wife, Cynthia, deputy director of the Richland County Recreation Commission, were introduced by a mutual friend who attended Clemson with Eddie. They have a daughter, Lawryn, and a son, Randall, a sophomore at Clemson in financial management.







#### Kenneth L. Smith '81

n his multifaceted job as senior vice president of Fluor Corp.'s Government Group, Ken Smith flies over the Atlantic more times in a year than most of us take in a movie.

He estimates that he's made more than 60 trips to the United Kingdom alone and countless others to countries in Europe, Asia, Africa and the Middle East during his 13 years with the giant engineering and construction firm. But he still makes time to do those things at home in South Carolina that he feels truly passionate about.

One object of his passion is the state itself and his firm belief that an ever-greater Clemson University can provide the leadership that will make South Carolina better. The Greenville native works hard to make that happen by contributing time, resources and influence to help the University achieve its top-20 goals for the future. His time and expertise are valued in the Greenville community and statewide, as well.

A graduate in mechanical engineering, Smith currently chairs the College of Engineering and Science Advisory Board and has been responsible for helping to acquire well over \$2 million in gifts from Fluor Corp., used both as matching funds to establish the Fluor Endowed Chair in Supply Chain and Logistics and to fund several other vital Clemson programs. His generous personal gifts support academics and athletics.

While successful in business, Smith is most proud of his family. He likes to tell that he had a brief sixth-grade romance with his wife, Layne (Bailey) '81 — with whom he celebrates 25 years of marriage this spring — but never dated her again until both had graduated from Clemson. The couple has three daughters, Kelly '08, Haley (a Clemson sophomore) and Cameron, a high school senior.

#### Neil C. Robinson Jr. '66

t's hard to put a finger, so to speak, on Charleston attorney Neil Robinson. His interests are so wide and his dedication to all of them so deep that just when you seem to have him "pegged," he surprises you with a new twist or turn.

People who know and work with him describe him as "engaging" and having "great communication skills." They say he's "respected," having been named one of the "Best Lawyers in America" by his peers for 15 consecutive years. He's also been named to "Chambers USA: America's Leading Business Lawyers."

Robinson has used all those personal attributes in his work for Clemson over the years, and he applies them to two of his long-running causes: the Charleston Education Network, which he founded in 1996, and the annual Southeastern Wildlife Exposition, which he serves as board president. The Expo, at the top of the state's tourism attractions, celebrates it 27th year in 2009 in Charleston.

As for the University, he's a Clemson Fund donor (for 42 years) and a life scholarship donor to IPTAY. When he comes back to Clemson and stands to sing the Alma Mater, he says it's "like the national anthem — gives me goose bumps!"

Currently on the board of directors of the Clemson University Foundation, he's been a member and president of the Clemson Advancement Foundation as well. Robinson, whose specialty is real estate law, is a member of the Clemson Board of Visitors and a founding member of the Clemson Real Estate Development Foundation. He's also served on the Clemson University Humanities Advancement Board.

He and his wife, Vicki, an interior designer and artist, have three children: Hunter '99, married to Stephen Forstchen '99; Neil III (Trey), a Clemson junior; and 13-year-old Taylor.

#### Jane S. Sosebee '78

She balances a high-powered career, a full slate of civic commitments, and — with the help of a husband-made-in-heaven — a smooth-running family life with the grace of a professional juggler.

Jane Senn Sosebee, born in Laurens, describes herself as rather shy when she came to Clemson. But she got over that. She played every intramural sport and fell hard for public speaking under the expert tutelage of speech team coach Buddy Goodall.

After she graduated with an English degree, her first job in business was with Southern Bell. The company evolved through BellSouth to AT&T, where Sosebee is now external affairs director for South Carolina. She leads the statewide team that works with local governments and community groups on public policy issues, economic development opportunities and other initiatives to improve the quality of life for all South Carolinians. She's past chairman of the Upstate Alliance, Innovate Anderson and the Greenville Chamber of Commerce board of directors.

For Clemson, Sosebee is vice president and a fifth-year member of the Clemson University Foundation Board. Her skills have directly helped the University achieve remarkable help from AT&T for a number of projects, just one of which was the telecommunications infrastructure for the Clemson University International Center for Automotive Research in Greenville, resulting in the naming of the AT&T Auditorium on the CU-ICAR campus.

A significant gift to the Madren Center resulted in the naming of the center's BellSouth Auditorium, and her efforts for the Clemson University Advanced Materials Center in Anderson have aided in its expansion.

Though her work is based in Columbia, where she spends part of every week, Sosebee and her family live in Clemson. She and her husband, Greg, owner of a surveying company, have two daughters, Katherine and Laura, both Clemson students.



#### **CW** Classmates



Santos Valdes '63, \*Juan Bofill '62 and Alfredo Himiob '62, friends and architects, gather to celebrate Valdes' 70th birthday.

#### 1951

\*Gerald Zakim (A&S) of Wanaque, N.J., was appointed to a team of independent experts by the Tile Council of North America and the National Tile Contractors Association, He's president of GZA. a consulting firm designed to meet the changing needs in the construction industry.

#### 1955

year.

\*Roy B. Jeffcoat (ARCHENG) of

'War Horse' lawyer

\*J. Lewis Cromer '57

↑ lumnus and attorney Lewis Cromer, of

Association's War Horse award earlier this

The prestigious award is given to trial

advocacy experience in state and federal

national officer of the American Board of

courts who've demonstrated professional and

Cromer has served as state, regional and

received the Southern Trial Lawyers

lawyers with 30 years or more of trial

public service excellence.

Cromer and Mabry law firm in Columbia,

Anderson was the community recipient of the University's 2009 MLK Excellence in Service Award. He's the CEO of Energy Conversion Corp.

#### 1972

John W. Richards Jr. (PREMED) of Evans, Ga., is president and CEO of AWAC, LLC.

#### 1974 \*Robert R. Kiser

(ACCT) of Marietta. Ga., is managing partner with Moore

Trial Advocates and was named South Carolina's Best Trial Lawyer by that

organization in 2000. He also received the Compleat Lawyer award from the

USC School of Law. He has served as vice chairman of the S.C. Commission

on Aging and is currently on Clemson's Humanities Advancement Board. He

made a recent gift to help the Clemson Ethics Bowl team travel to the national

competition in Cincinnati, Ohio, where the team placed second in the country.

Colson certified public accountant firm in Atlanta.

#### 1977

\*Cvnthia Bruce Langley (PSYCH) of Matthews, N.C., is a human resources management consultant in Charlotte, N.C.

#### 1979

Members of the Class of 1979 have established the Class of 1979 Unrestricted Scholarship Endowment in honor of their upcoming 30th reunion. For more information contact: Amy Csernak Craft, Clemson Fund-Annual Giving Office, 110 Daniel Dr., Clemson, SC 29631; or call (864) 656-1240.

(FINMGT) of Chapin is executive vice of consumer lending

#### William C. Smith Jr. (ADMMGT) of the 2008 March of

#### 1980

\*Earle R. Taylor (FINMGT) of Atlanta, Ga., is a Fellow in the American College of Bond Counsel. He's a partner with Kilpatrick Stockton.

#### \*Curtis D. White (AGSC) of Seneca was the faculty-staff recipient of the University's 2009 MLK Excellence in Service Award. He's a professor of agriculture

#### 1981

education.

George M. Sharpe Jr. (ME) of Holly Springs, N.C., is director of business development for Giffels/IBI Group in Raleigh.

#### 1982

William D. Berry president and director for First Citizens Bank.

### Columbia was awarded **Dimes Real Estate**

Award. He's the CEO and co-founder of Red Rock Developments.

#### 1983

Steve F. Harvin (AGE, M '85 ME) of Poquoson, Va., was awarded the NASA Medal for Exceptional Engineering Achievement. He's an aeronautical engineer at NASA's Langley Air Force Base in Hampton.

#### 1987

Jacob H. Bryan (EE) of Easley is major projects engineering supervisor at Duke Energy's Oconee Nuclear Plant.

#### 1989

\*John A. Cadena (INDMGT) of Columbia was promoted to manager of community/ economic development and local government affairs for SCANA Corp.

Stacy L. Yike (ME) of Montgomery, Ala., a lieutenant colonel in the U.S. Air Force. commanded the 338th Training Squadron,



Stacev D'Angelo Thompson '89 skydives in a fundraiser for the North Georgia Sexual Assault



SC Farmer of the Year

\* family

#### Kendall W. "Kent" Wannamaker '78

A gronomy graduate Kent Wannamaker of St. Matthews was named 2008 Swisher Sweets/Sunbelt Expo Southeastern Farmer of the Year for the

Wannamaker followed in the footsteps of his grandfather Whitfield Wesley Wannamaker Jr., Class of 1907, who earned a certificate of merit from Clemson for seed breeding in 1920 for the Wannamaker Big Boll cotton variety. Kent's son, Kendall, is continuing the Clemson tradition as a sophomore majoring in biological sciences.

Wannamaker raised hogs from 1984 until 2000 and has been growing row crops since 1995. He's a commissioner with the Calhoun County Soil & Water Conservation District, a Clemson Extension Service advisory committee member, a director on the Southern Cotton Growers Inc. board and a delegate to the National Cotton Council. He's also president of Carolina Peanut LLC in Cameron and Farmers Gin LLC in St. Matthews.

known as the Dark Knights, at Keesler Air Force Base, Under her command, the squadron received the Gen. William Looney Award as the top technical training squadron for 2008. She's now at the Air War College.

#### 1991

Tim R. Elsea (CE). county engineer for Missoula, Mont., was instrumental in the refurbishment of the historic Black Bridge in Bonner.

#### 1992 Craig M. Ramsey

(CE) of Minot Air Force Base, N.D.,

\* Active Clemson Fund donor for 2009 Fiscal Year (July 1, 2008 -June 30, 2009) through March 23. For more information, call Annual Giving at (864) 656-5896.

was promoted to lieutenant colonel. U.S. Air Force, by Christopher B. Ayres '85 (ET), colonel and commander of the 91st Missile Wing, Ramsey is operations officer for the 91st Operations Support Squadron.

#### 1993

\*Susan Shattuck Snurr (ENGL) is married and living in Blythewood. She's a certified professional in human



#### Champion for historic preservation

#### Richard D. Marks III '85

nonstruction science and management Ugraduate Richard Marks sees the value in preserving the state's history and in educating a new generation to do the same.

He's president of Richard Marks Restorations, a premier builder and restoration construction company in the Lowcountry, and a champion of Clemson's historic preservation graduate program in Charleston.

The program trains young preservationists in a practical, applied approach to understanding the failures of historic materials and the appropriate interventions to repairing them.

When the program began, Marks purchased and renovated 43 Radcliffe Street as a dorm and workplace for students and social center where students, professionals and others gather for informal talks and learning opportunities.

He's also taken the lead to repair and renovate the Meeting Street property for use by the program.

Marks' knowledge and experience in Charleston have given students access to excellent projects and craftspeople. (For more on the program, go to www.clemson.edu/caah/ pla/mhp.)

SPRING 2009 — Clemson World # 27 26 @ Clemson World — SPRING 2009

#### **CW** Classmates



#### **Family tradition**

#### Team Shuler, DVM

Members of the Shuler family of the Lowcountry have a long history of supporting their communities through quality veterinary care. They also have a long history with Clemson.

Photographed at a recent wedding are the Shuler veterinarians: seated Marian Shuler-Holladay '01 (animal science) and Lanier Shuler; standing from left, Glen, Ken (K.C.) '74 (pre-med), Heather Stevenson Shuler '97 (animal science), Kenneth C. '95, M '97 (animal science and animal and food industries), Kevin E. '98 (animal science) and Laura Huckabee Shuler '99 (animal science).

1997

Scott E. Frick (MICRO)

of Greenville was

elected shareholder

with Haynesworth

Sinkler Boyd P.A. law

resources and is an administrator for Komatsu Corp., utility division, in Newberry.

#### 1994

# \*Tony G. Gillespie Jr. (ACCT) of Duncan is football offensive coordinator and math teacher at Byrnes High School. The football team won its sixth state championship in the

#### 1995

K. Wesley Porter (MKTG) of Piedmont opened an Allstate Insurance Agency.

last seven years.

#### 1998

\*Christopher R. Koon (POSC) of Columbia was included in *The State* newspaper's "20 under 40" list for 2009. He's vice president and general counsel for Electric Cooperatives of South Carolina.

Kevin R. Laird (AGRON) of Greenville is office manager and engineer with Goodwyn, Mills and Cawood architectural and engineering firm.

**Cynthia Kopkowski McCabe** (ENGL) is married and living in Washington, D.C.

Robert W. Rogers (HIST) of Knoxville, Tenn., is an attorney.

#### 1999

Michael O. Allen (DESIGN) of Duncan is architecture project manager with Goodwyn, Mills and Cawood architectural and engineering firm.

Tiffany Sweeney
Garner (CPINSYS) is



Timothy Burg M '91, PhD '96, Tyler Lesley '06, Lisa Bosman M '07 and Karen Burg M '90, PhD '96, the Clemson Mud Tiger team, complete the ultimate challenge course sponsored by the U.S. Marine Corps.

married and living in Jacksonville, Fla. She's an analyst with Penobscot Bay Media consulting firm.

Byron A. Hammond (CHEM) of Simpsonville is the owner of a real estate law firm in Greenville.

#### 2000

Shara Witherspoon (MKTG) and Tim B. (CSM) Clark are married and living in Charlotte, N.C. She's a brand manager for Hunter Douglas, and he's a project manager for Edifice Inc.

#### 2002

Jessica E. Adkins (TC) of Water Valley, Miss., received a Ph.D. in pharmaceutical sciences from the University of Mississippi.

Alan S. Brannon (EE) of Boulder, Colo., received a Ph.D. in electrical engineering from the University of Colorado-Boulder. He's an electrical engineer with Lucent in Denver.

**G. Brice Elvington** (CHE) is married and living in Florence.

#### 2003

Misty M. Lippard (CE) of Salisbury, N.C., a registered professional engineer, is a project engineer with Alley, Williams, Carmen & King Inc. in Kannapolis.



Iron(wo)man Suzanne Ayres Schlotterback '94, M '00 finishes the Ironman Wisconsin Triathlon in Tiger style.

#### 2004

Scott C. Radcliff (M ARCH) of North Canton, Ohio, achieved LEED® status by the Green Building Certification Institute. He's associate director of facility planning at BAS LifeStructures.

#### 2006

Jonathan C. (ARCH) and Lindsey Moore (ECHED) Edens are married and living in Charleston. He's a graduate student at the Clemson Architecture Center in Charleston.

#### 2007

Melanie R. Anderson (ARCH) and Alexander S. Lay (ARCH) are with Clark Nexsen in Charlotte, N.C. They each achieved LEED® status by the Green Building Certification Institute.

#### # family

#### NFL Pro Bowl again

#### Brian P. Dawkins '96

mamed Clemson All-American Brian Dawkins

I — longtime
Philadelphia Eagle,
now Denver Bronco
— was named to
the NFL Pro Bowl
for the seventh time
in his celebrated
career. He was also
a finalist for NFL
Man of the Year.

With the 2009 selection, Dawkins has been chosen for his league's all-star game more than any other former Tiger

in any sport. Dawkins, an industrial education graduate, also made the Pro Bowl after the 1999, 2001, 2002, 2004, 2005 and 2006 seasons.



#### **Festival of Flowers**

#### Kav Kirbv Self '91

anguage and international trade graduate Kay Self (married to Furman Self '91) is using her experience in hosting, scheduling and promoting events and working with community volunteers at home in Greenwood.

In her third year as executive director of the S.C. Festival of Flowers presented by Park Seed Co., she has helped the festival reach a whole new level of tourism and financial impact.

In fact, the 2009 Carolina Showfest conference (representing event planner associations from both Carolinas) recognized Self as S.C. Director of the Year and the S.C. Festival of Flowers as the Overall Festival Event of the Year. For more on the upcoming festival, go to www.scfestivalofflowers.org.



The Yon family: Sally, Drake, Lydia, Kevin and Corbin

#### National environmental farm family

Lydia McGill '87, M '89 and Kevin '88 Yon

The Yon family, owner of Yon Family Farms in Ridge Spring, has received the National Environmental Stewardship Award for their commitment to conserving natural resources.

Kevin and Lydia both have degrees in animal science. Lydia also has a master's degree in animal and food industries.

They received the award — presented by the National Cattlemen's Foundation and sponsored by Dow AgroSciences, the U.S. Department of Agriculture's Natural Resources Conservation Service and the U.S. Fish and Wildlife Service — at the 2009 Cattle Industry Annual Convention in Phoenix.

The Yons started their Saluda County farm 12 years ago with 100 cows on 100 acres. Today they manage 1,200 acres of pasture and 300 acres of crops and more than 800 brood cows, most of which are purebred Angus

Their environmental efforts include irrigating crops with pond water using an efficient, low-pressure watering system; managing farm ponds to encourage healthy wildlife habitats; and installing 28 water troughs and more than 55,000 feet of fencing for rotational grazing on pasture land.

\* Active Clemson Fund donor for 2009 Fiscal Year (July 1, 2008 - June 30, 2009) through March 23. For more information, call Annual Giving at (864) 656-5896.

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#### **CW** Classmates

#### 'Theater that matters'

#### Matt S. Opatrny '96

Balumnus of the Clemson Players theater group, is making waves in New York's Off-Off-Broadway scene.

As managing director and founding member of New York's Blessed Unrest experimental theater company, he wrote a play called *Burn, Crave, Hold: The James Wilde Project* that earned Outstanding Production of a Play at the 2008 Innovative Theatre Awards.

In presenting the award, Edward Albee referred to the play as "theater that matters."

Opatrny has written, directed and appeared in productions ranging from Off-Broadway to the National Shakespeare Company. He's also taught and directed movement and stage combat and has trained with the SITI Company. He'll be touring this summer with his Blessed Unrest play *Doruntine* (in a collaboration with a Kosovo company) in Albania, Macedonia and Kosovo.



#### 'All-American' honor

#### Christopher M. Rauch '01

Agricultural economics graduate Chris Rauch of Lexington, a captain in the S.C. Army National Guard, was honored — along with 84 other service members who served in Iraq or Afghanistan — at the U.S. Army All-American Bowl earlier this year.

As the nation's premier high school all-star football game, the All-American Bowl highlights the ideals of leadership, courage and strength that these elite athletes and soldiers share.

In 2006, Rauch was awarded the Bronze Star and Army Commendation Medal with Valor and the Purple Heart for his service in Iraq in 2003-04. He's pictured with All-American Bowl offensive lineman Morgan Moses from Virginia.

\* Active Clemson Fund donor for 2009 Fiscal Year (July 1, 2008 - June 30, 2009) through March 23. For more information, call Annual Giving at (864) 656-5896.

#### 'Good Samaritan donor'

#### Zachary W. Sutton '02, M '05

For a young man, Zachary Sutton has a wide range of knowledge and life experiences. At Clemson, he earned a bachelor's degree in speech and communications and a master's in applied sociology. He's currently enrolled at the Medical University of South Carolina in the physician assistant (PA) program.



In between academic pursuits, he's taught at the college level and followed other interests. To say he's totally immersed in the PA program's mission now — to prepare compassionate, diverse graduates to collaborate with physicians to provide high quality health care to all patients — is an understatement.

Last fall, Sutton donated a kidney to a patient who'd been on dialysis for 15 years, a person he didn't know and hadn't met until shortly before the surgery. And although he hasn't wanted publicity, the news of his unusual selflessness has had an impact on convincing others to do the same.

While there have been S.C. kidney donors to family members and friends, Sutton was first in the state to sign up for the transplant list. But since, five more individuals — "good Samaritan donors" — have agreed to donate to people they don't know.

Both patients are doing well. In fact, Sutton, who's also president of the PA student society, is planning two medical mission trips. He's also a volunteer at the CARES health care clinic in Mount Pleasant, a free clinic run by students, an officer in the cycling club and a representative of LifePoint — the organ procurement organization and donor education center for most of the state. (For more on LifePoint and organ donation, go to www.lifepoint-sc.org.)



#### clemson in D.C.

These Clemson folks traveled to Washington, D.C., to witness the historic inauguration of President Barack Obama.



\*Teddi Fishman M '95, M '96, English professor and Center for Academic Integrity director



William Cleveland, building and grounds specialist, and friend Roger Godine



Communication studies major Whitney Anderson



\*Charlotte Swafford, accountant/ fiscal analyst, with husband and son, Keith and Garrett

# The Litter Hitter wants YOU to conserve water!





www.clemson.edu/solidgreen

30 @ Clemson World — SPRING 2009 SPRING 2009

#### CW Passings

Cephas P. Quattlebaum '36. Florence

**John H. Green '37**, Athens, Ga.

Robert B. Fickling '39, Edisto Island

Reginald J. Berry '41, Westminster, retired dean of admissions

Frank H. Inabnit Jr. '41, Clemson

Clyde R. Wright '41, Gastonia. N.C.

Charles M. Campbell '42. Stuart. Fla.

William A. Robinson '42. Greer

James C. Stone '43, North Myrtle Beach

Boyd Joseph "B.J." Todd '44, M '48, Clemson, industrial management professor emeritus

Julius Eugene Campbell Jr. '47, Columbia

Andrew R. Jones '47, Murrysville. Pa.

Steven Epps Sr. '49, Lancaster

Henry Eugene Lollis '49. Greenville

Derl J. Hinson '59, Loris

E. St. Clair Mellard Jr. '69, Kennesaw, Ga.

Betty Sue West Jordan M '73, Greenville

Ronald P. Barnette
'74. Central, Walker

Golf Course food services. Memorials may be made in his honor to the Ronald P. Barnette Scholarship in Agriculture, Clemson University Foundation, PO Box 1889. Clemson.

SC 29633-1889.

Gary D. Almers '75,

Columbia

Duncan McGregor Huntley '75, Ruby Luanne Harmon Mayer M '78. Little Mountain

Elizabeth Gage Crowther '80 M '83, Clemson Melissa Davis Wylie '80.

Charles W. Hester Jr. '81. Charleston

Robert G. Riley '82,

Susan Springle Cross
'92, Bernardsville, N.J.

Daniel M. Black '08, Charleston

Andrew W. Evans '08, Charleston

#### FACULTY AND STAFF

**Betty Moss Campbell**, Seneca, retired business associate

Giles O. Crandall, Central, retired environmental systems operator Elizabeth Belser Fuller,

Clemson, former artist in residence for the S.C. Botanical Garden. She established two endowments that help support the gardens and the Fuller Gallery, which displays her

J. Leslie Grigsby, Seneca, graduate

work.

school student services coordinator, international admissions

Kathleen M. Hardeman, LaFrance, facilities building and grounds specialist James K. "Buddy" Hood, Central, housing warehouse manager

Donald R. LaTorre, Pendleton, mathematical sciences professor emeritus

Richard A. Shaw, Walhalla, retired housing trades specialist

**Evelyn Carol Voelker**, Mountain Rest, art and architectural history professor

#### CLEMSON MEMORIALS

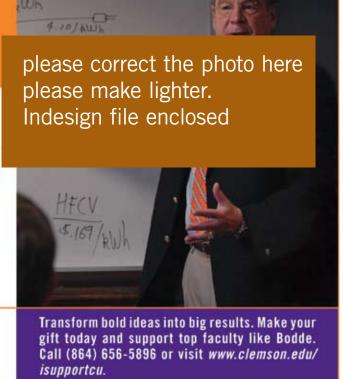
Family, friends and former classmates may choose to remember a loved one by supporting Clemson. To find out how to establish a memorial in someone's honor, please contact Ann Smith at annsmit@clemson.edu or (864) 656-5895.

# RESEARCH LEADER. CALLED TO CLEMSON. DRIVING INNOVATION.

"There are startup companies around the world with innovations that can revolutionize the auto industry. The trick is to connect them to the innovation processes of the established car companies — and that's what I aim to do at Clemson."

Dr. David L. Bodde
 Professor and Senior Fellow, Arthur M. Spiro Institute
 for Entrepreneurial Leadership





#### # family



Spring 2009

#### What's new? We like to hear from you.

#### Sorry for the delay!

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

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

Address changed? Please tape your old address information from the back cover in the space below and write in your new address.

Has anything new happened to you?

Maior

Use the space below for your name, year of graduation, major, and town and state.

Name (Please include maiden name.)

Year of Graduation

Town and State

Comments: (Please specify which subject.) General comments □ Address information □ Class notes □ Other □

Send your news by FAX to (864) 656-5004 or by email to sleigh@clemson.edu.

Or tear along perforated lines and mail your news to Clemson World, 114 Daniel Drive, Clemson, SC 29631-1520.

You can also update your information online at <a href="https://www.clemson.edu/alumni/updates.html">www.clemson.edu/alumni/updates.html</a>.

G. Austin '87 and Michelle Friday '92 Norris, a daughter, Hope Mikaela, May 26, 2008.

Randy E. Mazey '88, M'93, a daughter, Sierra Marande, Aug. 24, 2008.

John A. Candena '89. a daughter, Gabrielle Grace, June 9, 2008.

Connie Cooke '92 and Charles T. '93 Blandford, a daughter. Natalie Ann. Oct. 15, 2008.

Jennifer Rivers and William T. Bentley '93, a daughter, Kasey Elaine, Aug. 29, 2008.

Kevin O. '93 and Amv Dawkins '04 Hatchell, a son. Manning Ryan, June 4, 2008.

Nicole Zirk Keens '93, a son, Michael Lewis, Oct. 30, 2008.

Dana Marting and Stephen E. Roberts '93. a son. Jack David, Jan. 31, 2008.

Susan Shattuck Snurr '93. a son, Jason Brandon, Sept. 24, 2008.

Brett A. '93 and Suzanne Spaulding '97 Turner, a son. Wyatt McNeely, July 31, 2008.

Shane T. '94 and Erin Rogers '97 Bulman, a son, Rvan Thomas, May 22, 2008.

David B. '95 and Carolyn Hazel '01 DeBruhl, a son. John Thomas, Sept. 24, 2006. grandson of Samuel M. Hazel

Shelley Heuer Miksis '95, a daughter. Ella Madison. Sept. 12, 2008.

K. Wesley Porter '95, a daughter, Audrey Ann, March 24, 2007.



Robert B. Thompson III '95. a son, William Blalock, July 12, 2007.

Sharon Hazel Witkin '95. a son. Philip Michael, Aug. 18. 2008, grandson of Samuel M. Hazel '72.

Heath E. Duncan '96. a daughter, Annabelle Ruth, Oct. 30, 2008, granddaughter of Larry W. Duncan '72.

N. Jordan '96 and Anna Campbell M '03 Franklin. a daughter, Ayla Lee, March 26, 2008.

Lura DiAntonio and Mark T. Godfrey '96, a son, Samuel Thomas, Aug. 14, 2008.

Melissa Banks '96 and Christopher D. '98 Howe. a son, Anderson Banks, Dec. 8, 2008.

Laura Harrill '97 and L. Wil '00 Brasington, a daughter. Elizabeth Grady, Jan. 7, 2009.

John M. Lynn '97, a daughter, Hannah Arlene, Aug. 26, 2008.

Malee Free '97 and Raymond J. '98 Taylor. a daughter, Addison Carmen, Aug. 28, 2008.



Jane Cramer Varian '97. a son, Brady Cramer, Nov. 17, 2008.

Karen McAlhany Drawdy '98, a son, Madison Luke, Dec. 9, 2008.

Jill Imparato Galligan '98. M'99, a son, Matthew Thomas, Sept. 10, 2008.

April Howle '98 and Byron A. '99 Hammond, a son, Quinn Alexander, Dec. 8, 2008. grandson of Art H. Howle '73 and Richard A. Hammond

Joseph W. Jr. '98 and Amy Brown '99 Seaman, a son, Joseph William III, May 27, 2008.

Kristy McDermott and R. Glen Adair '99, a son, Mason Conor Torin, March 6, 2008.

Bridgitte Boy Arthur '99, a daughter, Gabrielle Rae, Feb. 8, 2008.

Jill Shipp D'Amato '99. a son. Lance Alexander, Aug. 1, 2007

Alvsha Campbell DeRenzo '99. a son. Rome Santino. May 23, 2008, grandson of Leslie Heyniger Campbell

Elizabeth Siblev Smith '99. a son, Collin Acker, Nov. 20, 2008, grandson of Charles A. Sibley '71 and great-grandson of the late Mack I. Patten '51.

Jennifer Fitz '99, M '01 and Matthew A. '99 Vissage. a son, William Matthew. Nov. 26, 2008.

Robert J. Etheridge '00, M '07, a daughter, Rose Nicole, Oct. 6, 2008.

Rita Bolt '01 and J. Jacob M. '02 Barker, a daughter. Madeline Evans. March 9. 2009, granddaughter of James F. Barker '70.

Jonah J. '02 and Emma Decot '03 Mikutowicz, a son, Caleb Paul, Sept. 15, 2008.

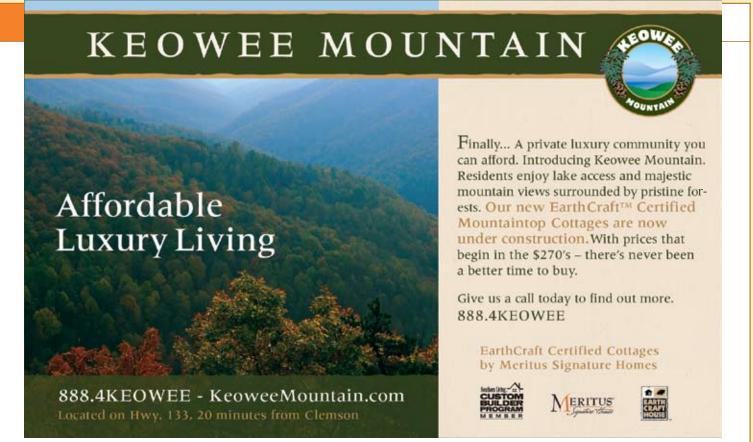
Beth Shelton-Brooks '02, a son and two daughters, Shelton Wesley, July 4, 2003. Brayden Elise, Jan. 22, 2007. and Logann Christina, July 18,

Annette Kirton Vaughan '03, a son, Garrison Kyle, March 4,

Rvan P. '04 and Jennifer Banks '05 Harris, a son. Austin Ryan, Oct. 15, 2008

James A. '04 and Jennifer Lorin '07 Thackston, a son. Hunter Aiden, Sept. 29, 2008. grandson of Hoyt K. '78 and Anne Wyse '79 Thackston. and great-great-grandson of the late Fredrick C. Wyse

Ashlev Dunn Clardy '07. a daughter, Sayler Grey, Oct. 18, 2008.





SPRING 2009 — Clemson World @ 35 34 @ Clemson World — SPRING 2009

#### **CW** Travelers

#### # family

#### 1. National Mall, D.C.

The Barrons — Jeremy '99, M '01, Mary Goodwin '00, \*Tommy '76 and John '41 at the WWII Memorial

#### 2 Indi

**John '51** and **Sue Peeler** at the Tai Mahal

#### 3. Italy

Ann Batson, Margaret Asmussen M '88 and Carl Batson '57 on the Amalfi Coast

#### 4. British Virgin Islands

\*John '58 and \*Carol Bradley on the island, Tortola

#### 5. Russia

**\*E. DuBose Blakeney III '59** and wife, **\*Nancy**, in St. Petersburg

#### 6. Canada

\*Jim '62 and \*Barbara Floyd on Athabasca Glacier, Columbia Icefield, Jasper Provincial National Park

#### 7. Turkey

\*Doug '64 and \*Wilmer Richardson and \*Bill '64 and \*Rita Vandiver in Istanbul

#### 8. Alaska

Wilson II '70 and Wilson III '09 Cropp catching "orange"

#### 9. Italy

\*Andy '70, M '75 and \*Lynn '73, M '74 Demori with \*Marianna Demori '02 and \*Alan '02 Magee on the island of Capri

#### 10. Switzerland

Bryan Freeman, student, and \*Bert Taylor '74 atop Mount Pilates near Lucerne

#### 11. Mackinac Island, Mich.

\*Bill '75 and \*Tina Fogle '81 Mostertz, Susan Bowden '79 and \*Matt Watkins '77, M '81 at the Grand Hotel on Mackinac Island

#### 12. Fort Worth, Texas

Timothy R. Pope '76 and son, Adam '05, M '07, at the USGA Senior Amateur Championship, Shady Oaks Country Club





6.









# 2.











# \*Pat Ivester '77, Harriet McKee Hart M '77, Geri McSwain, Kathy McGee, Sally Trapnell and Martha Grigsby at Isola Bella in Lake Maggiore 14. Costa Rica \*Randy Elrod '82 and daughter, Jennifer (student), Libby Crowe

\*Randy Elrod '82 and daughter, Jennifer (student), Libby Crowe M '80 and Barry Stone '82 in front of Volcano Irazu on a mission trip

#### 15. China

Voice of America sportscaster **Jim Stevenson '82** at the Beijing Olympics

#### 16. Germany

Scott Reeves '83 and son, Townsend, at Checkpoint Charlie in Berlin

#### 17. Botswana

\*Mark H. Johnson '92 and G. Scott Shipes '84 in Old Naledi, Gaborone

#### 18. Portugal

Sean '84 and Rebecca Tuten '86 with Hooper,\*John and Andrew Schultz at Praça do Comércio in Lisbon

#### 19. Muir Forest, Calif.

Allyson '84 and Jere Wagner with children Marshall, Sarah and Olivia in Muir Woods Redwood Forest outside San Francisco

#### 20. Death Valley, Calif.

\*Jerry '84 and \*Amy Jett '88 Wylie and sons, Justin and Jacob, visit the "other" Death Valley

#### 21. Austria

**Lisa Little Griffin '88** at Swarovski Crystal Worlds, Innsbruck











\* Active Clemson Fund donor for 2009 Fiscal Year (July 1, 2008 -June 30, 2009) through March 23. For more information, call Annual Giving at (864) 656-5896.





#### **Travelers**

#### # family

#### 22. England

\*Mary Robinson Dickey '89 at Windsor Castle

#### 23. D.C.

Blake Tollison, incoming student, Andy Cassity '94 and Megan Cassity, student, at the 2008 Marine Corps Marathon finish line

#### 24. Switzerland

PRTM Professor \*Deborah '94 and \*Allen Thomason at the Matterhorn

#### 25. South Africa

Jimm '94, M '95 and Charlotte **Hughes '94 Thompkins** at the Cape of Good Hope

#### 26. Nevada

Lisa Britt '01 and Brett Stansell '96 in Las Vegas

#### **27. Rome**

Adam '04 and Will '01 Zamorski at the Colosseum

#### 28. Fiji

Brice Elvington '02 and wife, **Kim**, during their Fiji honeymoon

#### 29. Horn of Africa

Capt. \*D. Neil Medlin '02 at Camp Lemonier in Djibouti

#### 30. Barbados

Nicholas Gambrell M '03 and Daniel Capps, student, Barbados

#### 31. Costa Rica

Shaun Callahan '04 and Gina Salamone on a canopy tour in the Monteverde Cloud Forest

#### 32. Mexico City

Jeffrey Gallagher M '04, PhD '08 at the Teotihuacan pyramids

#### 33. Canada

Charles and Austin '04 **Grantham** hunting in Alberto

34. Santiago, Chile Ashley Neal '05 at the foothills of the Andes Mountains at Centro Artesanal de Los Dominicos









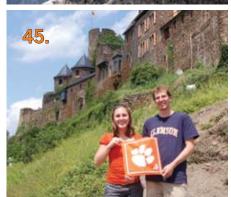
















#### 36. Turkey

\*Jessica '06 and \*Zach Shuler '08 visiting the Aya Sofya in Istanbul

#### **37. Rome**

Aaron Hassell '07, Lindsey Walton '08. Amber Bouchillon '08 and Stephanie Godfrey '07 in front of Fontana di Trevi

#### 38. China

Luna PhD '07 and Ralph M '08 Johnson at the Forbidden City

#### 39. Alaska

Jordan '07 and Jeff Mitchell. student, at Denali National Park

#### 40. Washington State

Chris Watt '07 and Laura Watkins '07 at a Dave Matthews Band concert at the Gorge Amphitheatre

#### 41. St. Lucia

Christopher '09 and Jonathan Boguski, student, 50 feet under at Gros Piton

#### 42. Costa Rica

Class of 2009 — Douglas Piper, Ned Reynolds, Jason Ellis and Matt Burghardt — on a Youth Life mission trip

#### 43. Alaska

Whitney Jenkins '09 near the Chugach Mountains at Cook Inlet in Anchorage

#### 44. Yosemite, Calif.

Emma Konkel '09 at Yosemite Falls, Yosemite National Park

#### 45. Germany

Audrey Moore, student, and Stefan Schilling, former Clemson exchange student, in Burg Thurant, a fort in Alken

#### 46. Canada

Scouts and leaders of Troop 235, Clemson, at Algonquin Provincial Park, Ontario, including faculty and staff members \*Vic Shelburne, Billy Bridges and Doug Henry

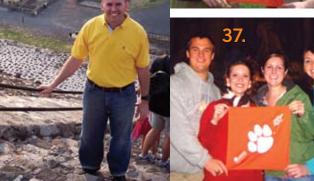






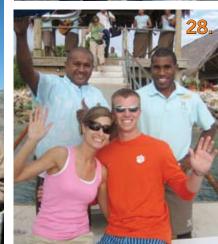


















### *lops* in public service

Wildlife's best friend — forestry and natural resources professor Greg Yarrow — is the new Clemson Alumni Distinguished Cooperative Extension Public Service Award recipient.

Through Clemson Cooperative Extension, Yarrow's Master Wildlifer program has reached more than 6.000 private landowners for economic and recreational use of land in a sustainable way. The program earned four awards, including the USDA Secretary's Honor Award.

Yarrow is a co-founder of the Internet Center for Wildlife Damage Management, the leading nationwide resource on this field, and author of Managing Wildlife, a reference for professionals and a text at several universities.

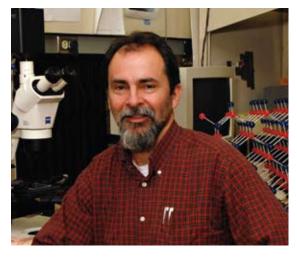
#### Calling all MBA alumni

Clemson's College of Business and Behavioral Science has a new society for master of business administration alumni. The group will develop and strengthen relationships among MBA alumni, students and the University through monthly meetings, social and special interest events and other activities. For information, call (864) 656-3975 or email mba@clemson.edu.

#### Va. Tiger tags

#### Class of 1939 Award

Chemistry professor Bill Pennington has been recognized by his peers and the Class of 1939 as one of Clemson University's best. He received the Class of 1939 Award for Excellence, which recognizes faculty for highest achievement in service to the student body, the University and the community.



His research, focused on solid-state chemistry, is important to pharmaceuticals both in shelf life and in a "green" approach to chemistry. His research group is also studying polymers that may lead to the development of "smart" bandages.

Pennington established Clemson's Molecular Structure Center. He's editor of the Journal of Chemical Crystallography and director of EUREKA! summer research program. He has received a variety of awards including the Class of 1940 Bradbury Award for his contributions to Clemson's Honors College.



#### Tiger art for CBAC

Clemson Black Alumni Council (CBAC) is using its Tiger R.O.A.R. — Responsibility. Opportunity. Action. Respect. — campaign to raise money for Fort Hill Preservation and CBAC scholarships, programs and initiatives.

As part of the fundraising, CBAC is offering 5-by-7 note cards created from original tiger artwork by Mark Palmer. His work is on display at the Martin Inn.

Each set of 10 cards costs \$17 (including shipping and handling). To purchase them and support CBAC initiatives, contact CBAC president Crystal Pressley '01 (thepressleys@alumni.clemson.edu) or president-elect Kellye Whitaker '90 (kellye.whitaker@alumni.clemson.edu), or go to www.clemson. edu/giving/clubimages/cbac\_notecards.pdf.

All card purchasers will be entered for a chance to win the original framed artwork to be given away this summer.

#### \* family

#### Running with EEES

In some friendly competition, Clemson **Environmental Engineering and Earth Sciences** (EEES) faculty, students and alumni took part in the Charlotte Thunder Road Marathon as three separate relay teams.

The faculty team edged out the student team for the win, but alumni and students are already looking forward to a rematch as part of an annual EEES event in the fall. For more information. contact Brian Powell at (864) 656-3276.

Pictured are (front row, from left) Dina Mauldin '03. Jim Chamberlain M '94. Tara Matheny, (back row) Darryl Jones '07, Treavor Kendall (with Alden), Brian Powell '01, PhD '04, Shelie Miller, Dan Matz and Amy Hixon.



#### What's new with you?

As life changes, so do you — your family dynamics, addresses, career paths. Keep us posted at cualumni.clemson.edu/update so we can better serve you wherever your life takes you.



#### Dixie Skydivers Reunion 2009

Fifty years and counting — the Dixie Skydivers organization is still jumping. The club is celebrating its golden anniversary with all members, past and present, during the July 4th weekend. For a calendar of events, housing information and free registration, contact club co-founder Ed Selby: call (239) 261-9724. email oldpacknaples@earthlink.net or write him at 4010 Crayton Road, Naples, FL 34103-3533. But hurry — deadline is June 1.



Back to Clemson weekend, other activities and closer involvement with the Student Alumni Council to allow for an easier transition for graduates as they move out into the

For more on Young Alumni Council activities, contact Elizabeth Milhous at milhou3@clemson.edu.

#### The 2008-09 Clemson Alumni **Association Board**

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

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

E. Grant Burns '88, past-president Greer, grant.burns@alumni clemson edu

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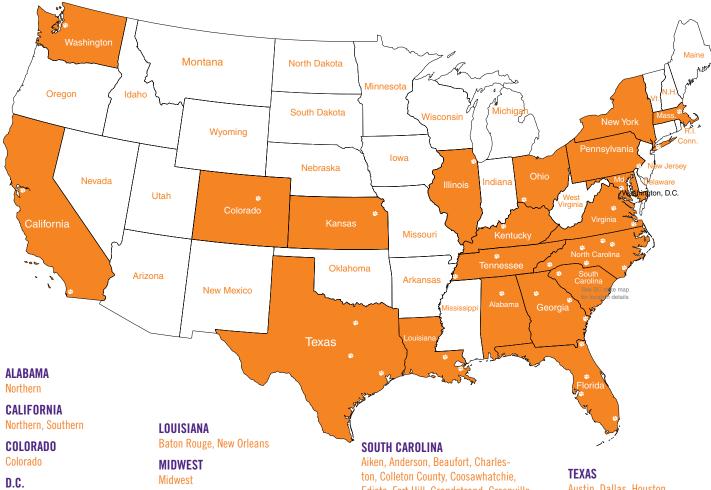
Clemson license plates are now available in Virginia! You can find more information about the Virginia tag as well as other state Tiger tags at cualumni.clemson.edu/licensetags.

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#### **CW** Club Spotlight

#### # family

### U.S. CLEMSON CLUBS



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Jacksonville, South Florida, Orlando, Tampa

GEORGIA

Atlanta, Augusta, Savannah

Chicago

KENTUCKY Louisville

ILLINOIS

**NEW YORK** New York OHIO

**New England** 

**NEW ENGLAND** 

**NORTH CAROLINA** 

Piedmont, Triangle, Western

Cape Fear, Catawba Valley, Charlotte,

Ohio **PENNSYLVANIA** Philadelphia

Edisto, Fort Hill, Grandstrand, Greenville, Greenwood, Kershaw County, Lancaster, Lexington, Richland, Spartanburg, Sumter, Union County, York County

**TENNESSEE** Memphis, Nashville Austin, Dallas, Houston

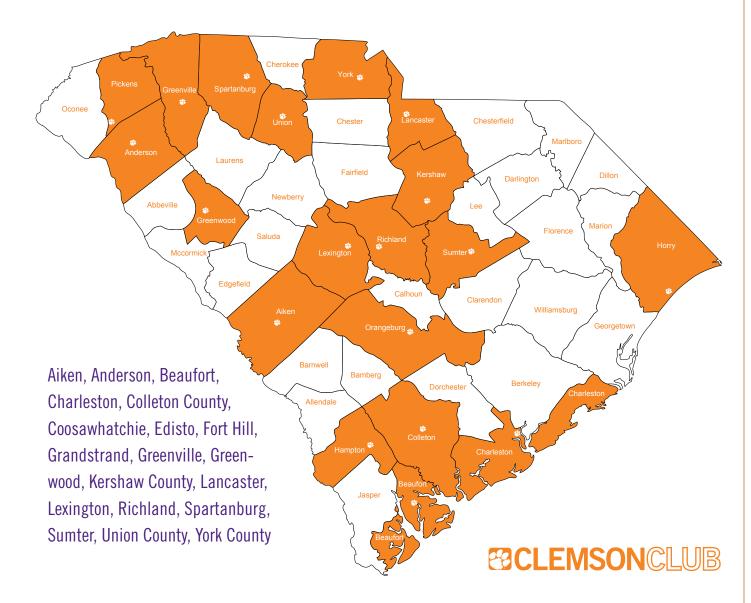
**VIRGINIA** 

Tidewater, Richmond

WASHINGTON **Washington State** 

**ECLEMSONCLUB** 

### S.C. CLEMSON CLUBS



#### A Clemson Club near you

The Clemson Club network provides a great way for you to find Clemson friends and keep up with what's going on "at home" no matter where you live.

The clubs bring together alumni, IPTAY members, friends and parents to support the University and have fun. They promote high school recruitment, support academics and athletics, plan fundraisers for scholarships and other University needs and spread Clemson good will.

Currently we have more than 50 Clemson Clubs across the country — including two new ones: Anderson Area and Baton Rouge clubs.

To find a Clemson Club near you or to learn more about the network, contact Reed Cole at lcole@clemson.edu or (864) 656-2345.

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— Jennifer Rahn '10 Clemson National Scholar, biological sciences

Transform bold ideas into big results. Make your gift today and support students like Jennifer. Call (864) 656-5896 or visit www.clemson.edu/isupportcu.



#### CW Landmarks & Legends

#### Do you know about Hopewell?

hen you think of historic houses at Clemson, Fort Hill and Hanover House spring to mind. But the lesser-known Hopewell, just off Cherry Road and overlooking Hartwell Lake, holds the story of an amazing family and the early stages of a nation.

Hopewell, which began as a basic log structure, was built around 1785 by Gen. Andrew Pickens and his wife, Rebecca Calhoun, a relative of John C. Calhoun.

The Pickens couple, though still young, had already experienced the dangerous and exciting years of the American Revolution. Gen. Pickens had been a key player in the Upstate's role in the war. In fact, he was later honored by the U.S. Congress for his "gallantry and bravery."

After the war, the Pickenses bought a plot of land and built Hopewell. As their young family grew, so did the house, eventually into a 10-room manor with outbuildings and other features of a plantation.

Gen. Pickens became an important participant in the evolution of the newly formed nation and of his own state of South Carolina. He served as a member of the state house of representatives, an Indian commissioner and a U.S. congressman.

Finding a peace with the Native Americans — the Cherokees, Chickasaws, Choctaws and Creeks became his new goal. He was feared as a great warrior but respected for his









honor, compassion and leadership. He was called "Skyagunsta" (Wizard Owl) by his former adversaries.

In November 1785, representatives of the Cherokee Indian nation gathered at Hopewell and began negotiations. Early the next year, hostilities ceased — the Treaty of Hopewell was signed in the shade of a giant oak tree on the Hopewell Plantation with the Choctaw and Chickasaw people to "bury the hatchet" forever.

The Calhoun-Pickens legacy continued long after Rebecca and the general. Son Ezekiel Pickens graduated from Princeton as valedictorian and served as S.C. lieutenant governor. Son Andrew Jr. was a Phi Beta Kappa graduate of Brown University and a governor of South Carolina. Grandson Francis was a U.S. congressman and an ambassador to Russia.

The Hopewell home passed to Andrew Jr. and was sold in 1824. In the 1930s, the land was purchased by the Federal Resettlement Administration as part of a New Deal-era economic-relief program aimed at assisting farmers.

It was through this program that Hopewell came to Clemson College to be converted into a self-sufficient farm known as the Cherry Farm.

Today, the University is researching ways to bring Hopewell back to its original state, honoring the legacy of the Pickens family. To learn more about Hopewell or how you can help with its restoration, contact Will Hiott of Historic Properties at (864) 656-7920 or hiottw@clemson.edu.

44 ® Clemson World — SPRING 2009

#### **CW** Giving Back



#### Supporting students

Clemson friend Albert D. McAlister has created a charitable remainder trust that will benefit Clemson students. He irrevocably assigned the Clemson Foundation as the charitable beneficiary. At the conclusion of the trust, Clemson will receive the proceeds from his \$1 million gift and use them for scholarships.

McAlister, an attorney and partner in McAlister and McAlister Law Firm in Laurens, is honoring his late father, Paul W. McAlister. Paul was a member of Clemson's Class of 1941, a life trustee and generous University supporter. A trust in his name already supports Clemson's National Scholars program.

"Education is the greatest gift we can give our children. It's the only thing we can take with us," says Albert McAlister. "This is a gift not only to Clemson, but to future generations of students."

He also has aided athletics at Clemson with a \$250,000 gift to the WestZone project.

"Clemson needs support more than ever right now," says McAlister. "I wanted to do my part to ensure that the University is able to continue offering a top-quality education well into the future."

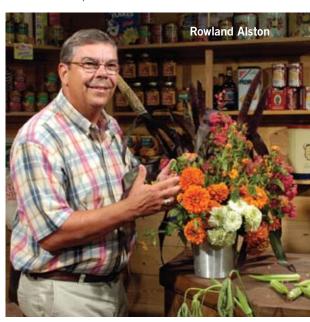
#### Supporting faculty and staff

If you watch PBS or grow your own garden, chances are you know Rowland Alston, the plaid-shirted host of the Emmy Award-winning "Making It Grow!" The genial and knowledgeable ETV personality welcomes gardening experts, invites call-ins and highlights interesting places and products from around the state. In other words, he promotes South Carolina.

But you may not know just how much he promotes the University.

A Clemson alumnus ('70, M '72), longtime Extension agent and assistant to the PSA vice president, Alston has established an endowment to recognize communication excellence among other University personnel.

The endowment — in memory of his father, Rowland P. Alston Sr. '42 — will fund awards for outstanding faculty and staff members involved in agriculture and natural resource areas that have provided Clemson with positive visibility throughout South Carolina, the United States and the world.



#### **Audit of donor records**

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

# Clemson Alumni

- Maxing a Difference







Clemson alumni lead in every field. They're using the education they earn at Clemson and their determined Clemson spirit to make the world a better place.

#### A Clemson degree is more valuable now than ever.

Because of your investment in Clemson, we've continued to make significant strides toward our goal of becoming a top-tier research university.

Clemson is now the 22nd best national public university in the country, according to the annual ranking by *U.S.News & World Report*, second on a new list of "up and coming" institutions and **No. 4 in alumni participation**.

But we need your continued support to help Clemson compete with the very best and change the course of the future — for our students, for our state and for our nation.

#### "Go Green" but stay Solid Orange.

Make a gift to the Clemson Fund by June 30 to help us reach our goal of 28 percent alumni participation, and we'll send you a FREE "go green," insulated and zippered shopping bag. You can order additional bags for \$5 each (includes shipping and handling).

There are many ways to make a gift. See the enclosed gift envelope for details. Or call (864) 656-5896 or go online (www.clemson.edu/isupportcu).





#### **CW** | My Clemson



have the most beautiful office in South Carolina.

Each day, I come to work in the Fran Hanson Discovery Center (formerly the Wren House) on a vast green hill in the middle of the South Carolina Botanical Garden at

As the marketing and membership director for the Garden, I spend every day sharing my love for this beautiful place with the community, the state and visitors from around the world.

I came to Clemson when my husband, Darren, moved here to earn his Ph.D. in educational leadership. He grew up in Clemson, where his father was on the faculty for 25 years. I had visited his family often, and every time I came to town, we made time to walk in the Garden. Its lush hiking trails and peaceful seclusion made it my favorite place in Clemson, though I didn't know then what a large role it would later play in my life.

As my husband finished his doctoral studies, he was hired by Clemson. I decided then to end my home-office job so I could start working in the community where we lived. I was thrilled to see a marketing position open at the Garden, a place whose story I knew I could passionately share.

To me, the S.C. Botanical Garden is the perfect representation of the town-and-gown feel of Clemson. On these gorgeous spring afternoons, I see students playing Frisbee, jogging or sprawled across the lawns, books and laptops in hand. Young families and children flock to the Duck Pond. Professors lead classes around the arboretum, making notes of the tree species. Community members attend regular gardening classes, while elementary schoolchildren learn about the natural world through the Sprouting Wings program.

We have this amazing 295-acre gem right in our own backyard.

And whether you come here to learn about woodland plants, get tips for your home garden, visit the Campbell Geology Museum or just relax and enjoy connecting with nature, the Garden becomes a part of your Clemson experience.

The University has much to be proud of, but none more wonderful than this living classroom.

I'm claiporne Linvill and this is my clemson.

#### 48 @ Clemson World — SPRING 2009

#### THOMAS GREEN CLEMSON

A new biography of the University's founder — is a must-read for alumni and friends.

Written for general readers as well as scholars, history buffs and students, the biography is being published by the Clemson University Digital Press. It brings together scholars of history, science, agriculture, engineering, music, art, diplomacy and law as well as communications experts to tell the story of Clemson's remarkable life, the times that helped shape him and his ongoing influence today.

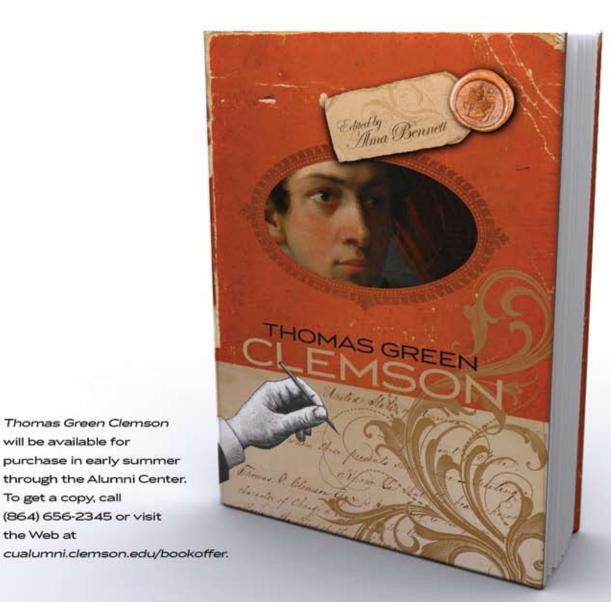
The 350-page book includes two eight-page color signatures of historical portraits and selections from Mr. Clemson's art collection. In addition to each chapter's illustrations, the biography features genealogy charts of the Clemson and Calhoun families dating from the 1600s to the 1970s.

will be available for

To get a copy, call

the Web at

(864) 656-2345 or visit





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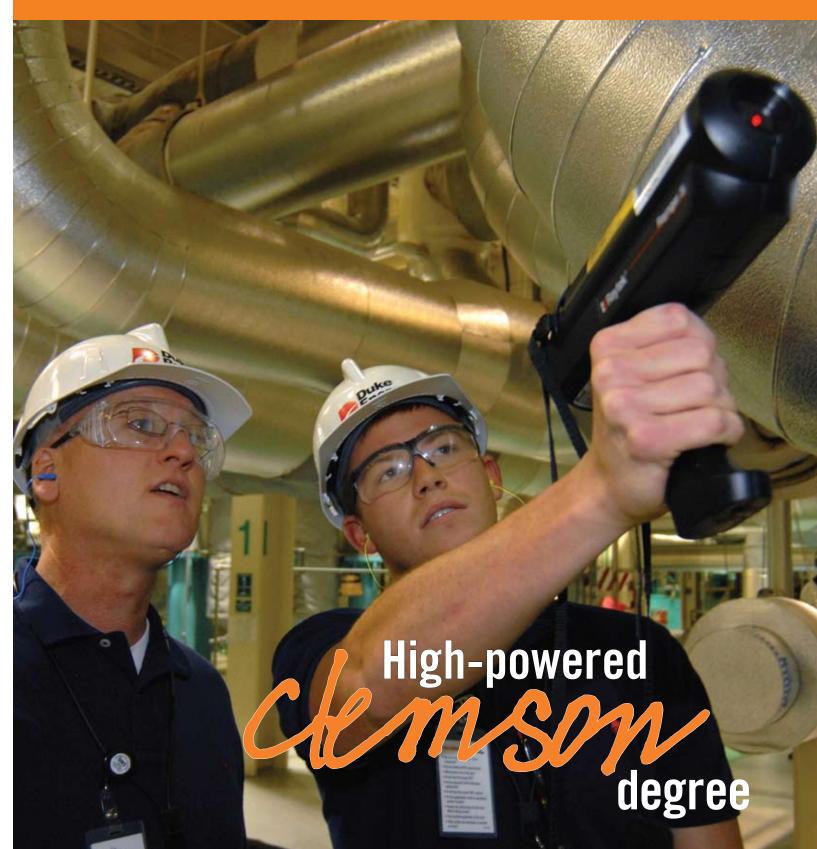


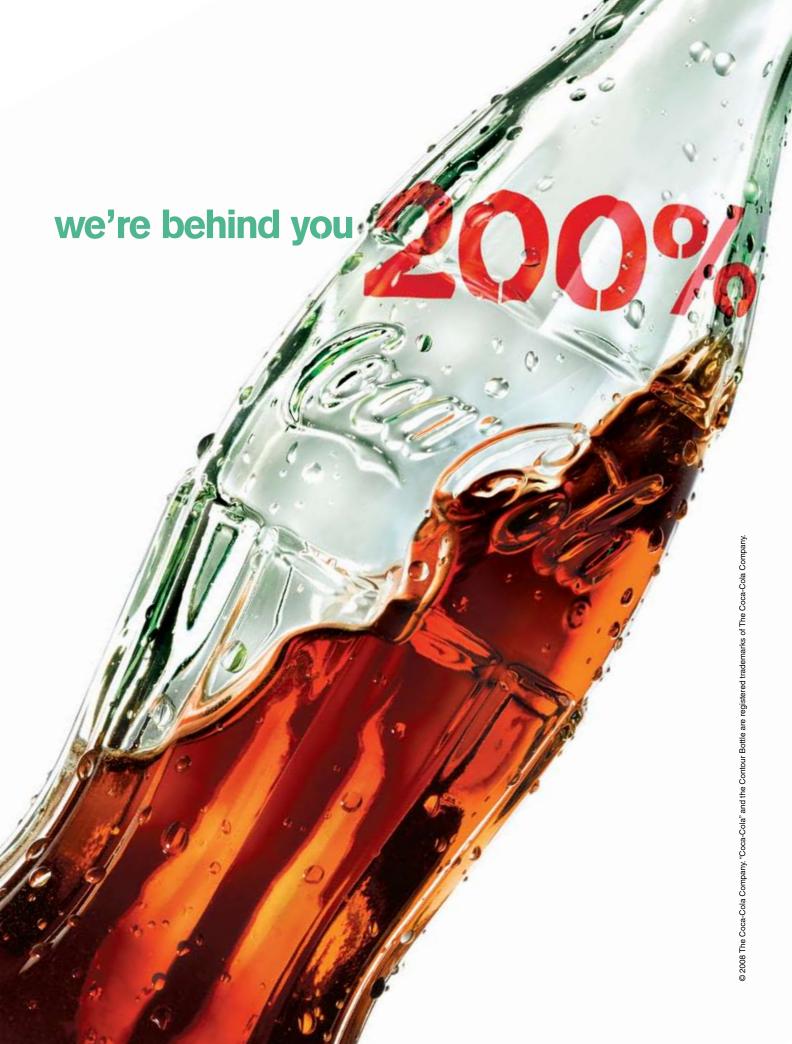
Intelligent River | High yield of a Clemson degree | Clemson's 'heroes' | Smarter power network

# CLEWSON'

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SPRING 2009





# Contents











Hopewell: the Pickens home

S.C. Botanical Garden

staffer Claiborne Linvill

**DEPARTMENTS** 

#### **FEATURES**

14 Intelligent River

Clemson collaboration is casting a digital net over the Savannah River.

High yield of a Clemson degree

The Clemson degree's bankable assets make it more valuable than ever.

Doing the math for smart power

Discover one-of-a-kind research to improve electric power grids.

Clemson's own 'heroes'

Meet five Clemson heroes — the Alumni Association's 2009 Distinguished Service Award recipients.

#### **EXTRAS ON THE WEB**

Keep up with the latest University news at twitter.com/ clemsonnews.

Check out winners of the 2009 International Photo Contest at *clemson*. edu/ia/contest.

See how Clemson has leaped into the ranks of information technology leadership at clemson.edu/ president/report.

Cover photo: Duke Energy engineer Steve Benesole supervises Clemson co-op student Ryan Harris — photography by Patrick Wright.

www.clemson.edu/clemsonworld