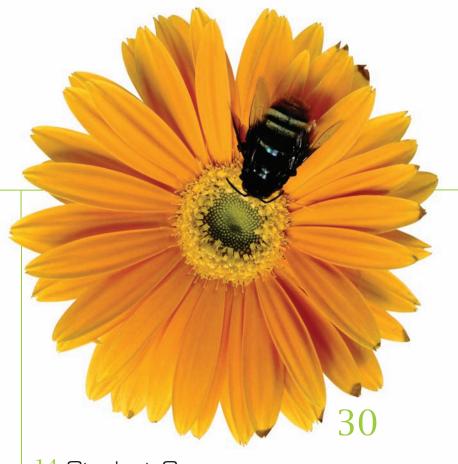




COVER STORY Rebecca Stoll is one of a growing number of USF undergrads embarking on a research experience. This summer, librarian Andy Huse to create an on-

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Photo: MARK WEMPLE

FROM THE PRESIDENT



USF is a high-impact, global research university dedicated to student success.



At USF's Spring Commencement we celebrated the achievements of more than 6,000 students and the completion of renovations to the USF Sun Dome. It was a time to reflect on accomplishments, and as you will read in this issue of USF Magazine, there have been many.

In April, USF joined an elite class of research universities, achieving top-50 ranking in the nation for research expenditures among all U.S. institutions, public or private. Our College of Nursing earned top ranking as well, breaking into the top 25 nursing schools in the nation receiving funding from the National Institutes of Health. And our students earned some of the most prestigious academic and research scholarships in the university's history.

At USF, our focus on research is stronger than ever. With a renewed commitment to undergraduate research, the Office for Undergraduate Research is working to ensure that students at all

levels and across all disciplines are given the chance to do the kind of real-world research that is usually reserved for graduate students. You will read about three of those students in our "Young Researchers" feature.

Like our commitment to research, our focus on a sustainable environment is front and center. Last month USF earned national recognition as the "Most Innovative Climate Leader" in the Second Nature Climate Leadership Awards. Don't miss our feature on the research, initiatives and strategies under way to ensure our position as a sustainability leader.

I hope you will enjoy reading this issue of USF Magazine and share my pride in the many outstanding accomplishments across this remarkable university.

President Judy Genshaft



New ranking by the National Science Foundation places USF in the elite top 50 of research universities nationwide.

USF now ranks 50th in the nation for research expenditures among all U.S. universities, public or private, according to the National Science Foundation.

The new ranking puts USF in the elite class of research universities, joining Johns Hopkins, Stanford, Yale and Harvard. Only one other Florida university made the list.

The rankings, which cover fiscal year 2010, show USF rising 15 spots from the previous NSF survey in 2007, when USF ranked 65th. The current research ranking shows USF had \$385 million in total research expenditures during FY 2010, of which \$243 million was federally funded.

Paul Sanberg, vice president for Research and Innovation, says the rankings show USF's maturity as a research university and the success of research faculty in responding to the needs of our community and the world.

The largest single group of research grants at the university are earned by the pediatric epidemiology center, headed by Jeffrey Krischer. Together with his team, Krischer leads international trials aimed at finding causes and treatments for Type 1 diabetes and other autoimmune diseases, and hosts the nation's Rare Disease Clinical Research Network.

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STUDENTS

Top Tier Scholars

The "firsts" were just the tip of

For students at USF, it was a year of notable firsts—a prestigious Marshall Scholarship, a highly selective Udall Scholarship, two extremely competitive Fulbright Scholarships for postgraduate study in the United Kingdom, two undergraduate Fulbright Scholarships also in the U.K., and the university's largest-ever group of postgraduate scholars.

total of seven Fulbright Scholarships, a Goldwater Scholarship, three Hollings Scholarships, a Critical Language Scholarship, 14 Gilman Scholarships, two Presidential Management Fellows, two Florida Gubernatorial Fellowships and a number of other top-tier scholarships.

"Clearly our strategic emphasis on student success has taken root and is bearing handsome results," says USF Provost and Executive Vice President Ralph Wilcox.





Marshall Scholarship • Jean Weatherwax

Senior electrical engineering major and Honors College students
Jean Weatherwax is among 37 American college students awarded
a Marshall Scholarship this year, and the first USF student ever. The
award will pay for postgraduate biomedical studies at Imperial College
London where Weatherwax will work with Dr. Pantelis Georgiou to
develop the first artificial pancreas for treating Type I diabetes. In
2011, Weatherwax was awarded a Barry M. Goldwater Scholarship,
the nation's highest honor for science undergrads, and she was a
NASA MUST scholar with internships in the summer. Each year
Marshall scholarships finance about 40 young Americans of high
ability to study in the United Kingdom.



Udall Scholarship • Shaza Hussein

Honors College junior Shaza Hussein is one of just 80 undergraduate students in the nation, and the only one in Florida, to receive a Udall Scholarship. The \$5,000 award, a first for USF, will support Hussein's environmental research. Hussein, who was awarded a Hollings Scholarship last year, will spend the summer in Maine as an intern at the Wells National Estuarine Research Reserve. She previously interned at the National Weather Service in Tampa. Udall scholarships are awarded annually to sophomore and junior level college students committed to careers in the environment, tribal public policy or Native American healthcare.

Spotligh

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Nursing Breaks Top 25

USF's College of Nursing has joined the ranks of the top 25 nursing schools in the nation receiving National Institutes of Health research funding.

The college attracted a record \$1.99 million from NIH in fiscal year 2011, a 16 percent jump from 2010. USF nursing has been on a fast track for national research prominence over the last several years. Just four years ago, the college ranked 66th in NIH funding.

"With passion for research excellence, creativity, teamwork and perseverance, the USF College of Nursing reached a major goal we strategically set out to attain," says Dianne Morrison-Beedy, dean of the College of Nursing and senior associate vice president of USF Health. "I could not be more proud of my outstanding colleagues whose untiring efforts made this success a reality."

When Morrison-Beedy arrived at USF in April 2010, she set the ambitious goal of breaking the top-25 within five years. Instead, the college did it in two.

USF's climb to the top was fueled by recruitment of new faculty who joined the nurse scientists already at the college and a strong Nursing Center for Research.

USF nursing research focuses on two broad-based initiatives—chronic illness and veterans' health.

ASHLEA HUDAK | College of Nursing



25 Rank among nursing schools receiving NIH funding

\$1.99 million NIH funding received in 2011

16% Jump in NIH funding since 2010

66 College of Nursing ranking in 2008

1973 First College of Nursing students admitted

7,987 Degrees awarded by the college to date



Dr. Brad Bjornstad, chief medical officer of Florida Hospital Tampa, sports his USF Bulls pride.

customize prevention, diagnosis and treatment of cardiovascular disease.

"No other providers in Tampa Bay will be able to replicate the level of how we begin to tailor procedures to individual patients to maintain their heart health," says Dr. Stephen Klasko, CEO of USF Health and dean of the Morsani College of Medicine.

A series of research and education partnerships with major healthcare providers, including Florida Hospital, Tampa General Hospital, Moffitt Cancer Center and HCA, is helping position USF's academic health center at the hub of medical care regionally and beyond.

Health Alliance

A strategic alliance forged this spring between Florida Hospital and USF Health will help translate the university's leading medical research into innovative, patient-centered treatments at four Tampa Bay hospitals.

The public-private partnership expands key specialty areas at hospitals in Hillsborough, Pinellas and Pasco counties. USF Health physicians join private physicians on multidisciplinary teams managing patient care in cardiology at Florida Hospital Pepin Heart Institute, breast health at Florida Hospital Tampa, neuroscience at Florida Hospital Zephyrhills, and surgical oncology, melanoma and breast cancer at Florida Hospital North Pinellas (formerly Helen Ellis Memorial Hospital) in Tarpon Springs.

"Our partnership with USF Health will bring their leading-edge research right to the doorsteps of residents in communities where we have hospitals in Tampa Bay," says Mike Schultz, president and CEO of the Florida Region for Adventist Health System, the parent company of Florida Hospital.

At Florida Hospital Pepin Heart Institute, for instance, patients will benefit from collaborative genomic screening research that uses an individual's genetic profile to



RESEARCH

Research Snapshots

College of Arts & Sciences

USF physicists have developed a new way to make solar cells that could transform how solar energy is utilized by replacing bulky, costly solar panels with special windows capable of producing electricity. These patentpending solar cells are sprayed onto transparent glass, which generates electricity from both natural and artificial light, and these windows could be installed in homes, office buildings and skyscrapers.

College of Behaviorial & **Community Sciences**

Project Latino STYLE, a five-year study funded by the National Institute of Mental Health, aims to improve the health of Latino teens

by encouraging parents and teens to discuss important health topics, providing parents with the skills to appropriately monitor their children, and enhancing teens' skills to engage in health-promoting behaviors. Health topics such as sex, alcohol/drug use, nutrition, exercise, and violence are discussed within the context of Latino cultural values.

College of Business

Funded by a National Science Foundation grant, a management information systems professor and five colleagues have developed a case study research course in which students examine technology challenges facing **businesses** and institutions and are asked to provide possible solutions. As the course draws to a close, the researchers are gauging whether a case study-based curriculum delivers an improved learning experience.

Amazing and innovative research, scholarship and artistic creativity are taking place in every college, every day at USF.

Solar Energy Teen Health Business & Technology STEM Teachers Cancer Tests Gulf Fisheries U.S. Veterans Health Malaria Research Clean Water Interdisciplinary Socially ConsciousTheatre

College of Education

Researchers in the college are preparing effective teachers for the 21st century classroom by engaging them in a research-based teacher education program that involves field-based clinical training supported by skilled practitioners. Graduates will enter the field prepared to teach STEM courses, thereby enhancing teacher retention and student learning. The program's effectiveness will be determined by examining teacher effectiveness and student learning and how the program components contribute to the development of effective teachers.

College of Engineering

An assistant professor in the Department of Mechanical Engineering is developing something that can save lives—a home test kit for early detection of ovarian cancer. At the heart of the concept is a sensor that can detect ovarian cancer as early as stage I. The test kit is inexpensive to produce, disposable and requires only a drop of urine, instead of a blood sample.

College of Marine Science

USF scientists have teamed up with commercial fishermen to determine if there are an abnormal number of sick fish in the northern Gulf following the 2010 Deepwater Horizon oil spill and if the increased incidence of diseases are connected to the environmental disaster. The study, funded by the National Marine Fisheries Service, is the first comprehensive study done on the health of fish in the Gulf and will establish a baseline for fish disease.

USF Health Morsani College of Medicine

Researchers in the School of Physical Therapy & Rehabilitation Sciences are working on two major studies funded by a Department of Defense grant. In one study, researchers are investigating whether a specific exercise training regimen may protect against low back injury in combat soldiers. In the second, researchers are evaluating the best prosthetic foot to accommodate soldiers and veterans with below-the-knee amputations who wish to return to active duty.

College of Nursing

RESTORE LIVES, a two-year, multi-study research initiative, is focusing on service members and veterans with symptoms of post-traumatic stress disorder and/or mild traumatic brain injury. One study is investigating the effectiveness of Accelerated Resolution Therapy, a revolutionary intervention for treating symptoms of psychological trauma, for veterans who have served in combat operations.

College of Pharmacy

An assistant professor in the College of Pharmacy has received a NIH grant to study medications that **treat cardiovascular diseases that affect electrical conduction in the heart**. This grant represents the first official federal grant for the new USF College of Pharmacy, which is placing special emphasis on research excellence. This research will hopefully lead to improved cardiovascular function for elderly patients.

College of Public Health

Research in the college has been increasingly targeted at prevention programs aimed at specific problems that disproportionately affect minority and economically disadvantaged groups. For instance, supported in part by studies funded by the Bill and Melinda Gates Foundation and the National Institutes of Health, faculty members, staff and students are tackling major challenges needed to end neglected diseases such as malaria, a preventable and treatable mosquito-borne pathogen accounting for two deaths every minute of every day.

College of The Arts

"What the Heart Remembers: the Women and Children of Darfur" is an interdisciplinary, multicultural collaborative theatre and dance production written and choreographed by two USF professors. Focusing on genocide in Darfur, the piece was inspired by the artwork of children and interviews with their mothers by a BBC journalist. In August, the entire student cast will travel to Scotland to restage the production at the 2012 International Collegiate Theatre Festival, part of the Edinburgh Fringe Festival.

Transportation Center Takes Lead

USF's transportation center, a national leader in transit research, has been awarded a \$3.5 million grant by the U.S. Department of Transportation to advance transportation research and support the work of local, state and federal transit agencies.

The university's National Center for Transit Research (NCTR) was one of 22 centers nationwide selected to receive the highly competitive grant, which brings with it designation as a national University Transportation Center. NCTR is a consortium of four universities—Florida International University, the University of Illinois at Chicago and North Dakota State University—led by USF.

The grant will be matched with an additional \$3.5 million from state and local sources. As the lead university, USF will retain half of the total grant, while the remainder is divided among the three other partners. All partners will collaborate to identify projects and share faculty resources.

Established in 1991, NCTR is part of the Center for Urban Transportation Research in the College of Engineering. The center focuses on improving the nation's transportation system by conducting research, training and teaching, and sharing information with an emphasis on public transportation and alternative forms of transportation that help minimize traffic congestion and offer alternatives to travelers.

This is the third time since 2002 that USF has been selected in a nationwide competition to serve as a federally funded University Transportation Center, according to Joel Volinski, NCTR director, adding that the current grant is by far the largest received by the center to date.

ANN CARNEY | USF News



SYSTEM

Marine Partnership

A partnership with Mote Marine Laboratory is set to bring together faculty and scientists for a new, marine science-based initiative focused on research and education.

Under the agreement, USFSM will complete the buildout of classrooms and teaching labs on Mote's Sarasota campus, including dry teaching labs, wet teaching labs, research labs and lab and academic support rooms. In addition, USFSM and Mote will create joint appointments for Mote researchers who will serve as faculty and allow USFSM faculty and students to work

closely with Mote staff on research programs and initiatives currently under way at the renowned marine research laboratory.

USFSM Regional Chancellor Arthur Guilford calls the new partnership a "win-win-win" with a focus on student success.

"This partnership will provide students the ability to work with exceptional scientists who are engaged in exciting fields of research," he says.



"This is a unique, real-world model for undergraduate research."

Mote President and CEO Kumar Mahadevan adds, "We're very excited that this agreement will create new avenues for Mote staff to help educate the next generation of marine scientists, and for USFSM faculty to have the opportunity to work with us on our world-recognized research programs."

CHRISTINE MANRING | USFSM

MBA for Veterans

A program for military veterans interested in pursuing a master's degree in business administration is being launched by USFSP's College of Business.

The two-year program will be funded through a \$409,299 grant from the Graduate Management Admission Council (GMAC), part of \$7.1 million awarded by the GMAC MET Fund to 12 organizations worldwide. The USFSP program has two primary goals: help veterans complete an expedited MBA course and integrate principles and practices of corporate social responsibility, a major focus for the USFSP College of Business.

The program will include a course to help participants prepare for the Graduate Management Admission Test, a workshop for veterans about returning to higher education and scholarships for a course on eight core business subjects. Students also will take a series of courses on corporate social responsibility, including a newly designed course focused on non-profits. MBA faculty will be trained to support veteran students and a dedicated advisor and career services counselor will guide students through their university experience and job search.

"GMAC MET Fund support enables us to provide much needed service to those who put their lives on the line for this country," says USFSP Regional Chancellor Margaret Sullivan.

TOM SCHERBERGER | USFSP

USF Sarasota-Manatee's three-story,108,000-square-foot Italian Mediterranean-style structure was inspired by some of the historic homes located on nearby Sarasota Bay.



cess



For the more than 6,000 students across the USF System receiving their diplomas in the spring, it was a weekend of pomp and circumstance. And, for students graduating from USF Tampa, it was a first look at the newly renovated Sun Dome.

6,037

Total number of degrees awarded to students across the USF System, including 5,136 at USF Tampa.

18

Number of King-O'Neal Scholars— USF students earning a cumulative grade point average of 4.0.

46

Number of graduates who will serve their country as commissioned officers in the armed forces.

91

Number of nations represented in the graduating class.

71

Age of the oldest graduating student, Monica Messer, receiving a doctorate in nursing.

✓ May 4, 2012 · 1:30 P.M

More than 700 graduates from the College of Arts & Sciences School of Social Sciences attended the first of five commencement ceremonies held at the Sun Dome.

hotos: pg. 16, USF AVC; pg. 17, AIMEE BLODGETT | USF News

Extreme



Incredible detail can be displayed on the LCD as shown in this graphic of a cell. The device can display data sets, photographs, digital scans, illustrations and film footage.



Scan the QR code to view video and read more about the Advanced Visualization Center.

Imagine taking the tiny machines that are developed in nanotechnologysome smaller and thinner than a human hair—and being able to manipulate them in ways never done before.

Think about what could be learned by examining an ancient artifact from Central America from every angle to study exactly what its creators were trying to communicate, without actually having to remove the treasure from its home country. Or consider what could be discovered by taking massive amounts of data and transforming it from numbers on a spreadsheet into meaningful displays that lead to discoveries.

That's exactly what will happen when USF's new Advanced Visualization Center is used by students and faculty, merging some of the best new digital 3D technology with learning in a way that's never been done before on campus.

"Visualization is not about seeing, it's about thinking," says Howard Kaplan, USF's advanced visualization specialist, who helped open the student technology fee-funded center this spring.

"I think it's a place for definitive research and discovery."

The center is located in USF's Physics Building and is available for use by all disciplines. In addition to the large video wall made up of 16 3D monitors, the center is connected to USF's high performance computing clusters, to transform massive data sets into cutting-edge information. With a resolution of 20 million pixels, the video wall is twice the resolution of an IMAX screen.

"The real big thing that sets us apart is that it's totally interactive," Kaplan says. "The way we built it you can use mobile devices, you can use wireless devices to power it, so that way you can actually have a more immersive experience than just viewing video or images. You can interact with your data."

The center has already been in use working with USF anthropologists who use advanced digital scanners to collect data on Mayan monuments and other historical ruins in need of restoration. The center is open to all departments on campus, with applications from every part of the campus from arts to sciences.

"The biggest highlight is being able to help students with their data and see their reaction when they've done all this work and research and now they have something almost physical that they can interact with," Kaplan says.

VICKIE CHACHERE | USF News



The 3D Advanced Visualization Center is the only one of its kind in the nation.

- The Advanced Visualization Center is a resource for student research and faculty instruction. Above, Provost Ralph Wilcox introduces the new device to the university community at a preview event in April.
- Faculty members wear 3D glasses to experience the level of image detail provided by the LCD video wall. Named "BullsEye," the wall can display multiple images, video and web content simultaneously.







thoto: pg. 21, AIMEE BLODGETT | USF News

Winning

Two decades after St. Petersburg resident Steven Grant earned an MBA from USF, he read about USF's new partnership with the Tampa Bay Lightning to create an MBA in Sport and Entertainment Management. He sent a high-priority text to his daughter, Jamie, in Georgia.

"When he read that the Lightning is working in tandem with USF to create a graduate degree emphasizing the foundational business aspects of the sports

Grant enjoys her work with the professional basketball team but aspires to work in the corporate offices of organizations such as the National Basketball Association or the National Hockey League.

"I have a great job working for an NBA franchise—and previously with an NHL team—that has given me some great experience in arena operations," says Grant. "I love my job and am fortunate that I have been able to gain some

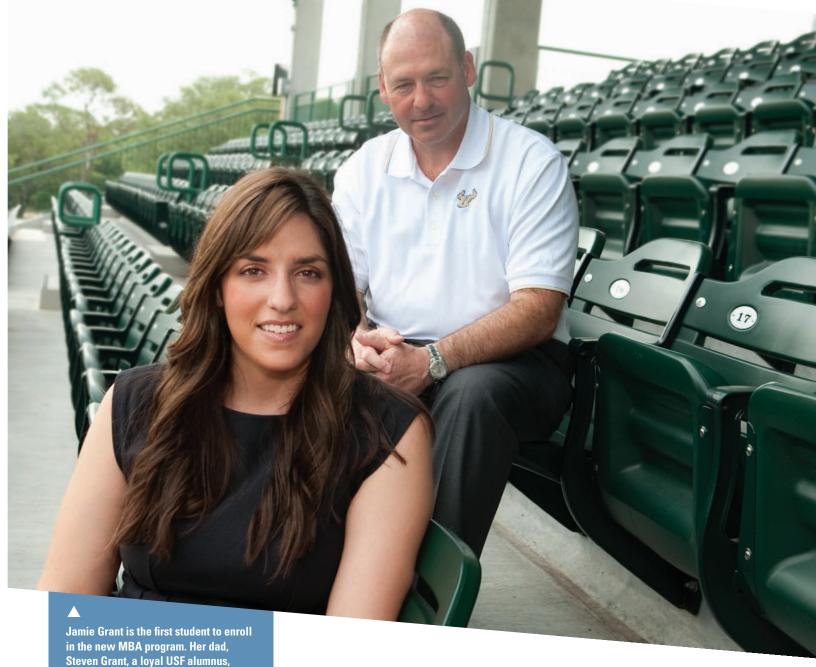
> real-world sports experience, but I have long known that I would need a graduate degree to catapult my career upward into league operations."

Made possible by a partnership with the Tampa Bay Lightning and The Lightning Foundation (which will fund the program for four years), the two-year degree will emphasize business fundamentals. Degree seekers will complete foundational MBA coursework tailored to the

industry, including classes in management, finance, marketing, information systems, and accounting, as well as elective courses that focus on the sports industry, such as negotiation and conflict resolution, sports communication, and marketing strategy. The full-time program includes two residency experiences designed to give graduate students on-the-job opportu-



industry, he was excited," recalls the younger Grant, who works in community relations with the Atlanta Hawks and Philips Arena in Atlanta. I awoke to a one-word text from him that simply said 'apply'," she laughs. She will soon be the first student to enroll in classes in the new MBA program, which launches in the fall.



nities that help them experience how those lessons taught in the classroom

encouraged her to apply.

play out in the industry.

USF President Judy Genshaft joined Tampa Bay Lightning owner and Chairman Jeff Vinik to announce the program prior to a recent Lightning game. She envisions a program unlike any other in the nation.

"USF brings the brightest minds of our business school, our reputation as a top-tier global research university, and our unwavering commitment to student success to this partnership," Genshaft says. "Our metropolitan location is rich with sports and family entertainment businesses and our region has been the host to the Super Bowl, the Stanley Cup, the World Series, and NCAA tournaments and championships. Our partnerships will help prepare students for careers in sport and entertainment management all over the world."

William A. Sutton, formerly of the DeVos Sport Business Management Graduate Program at the University of Central Florida, will spearhead the business degree program. A distinguished academic, industry columnist, and proven sports-marketing practitioner, Sutton's work includes notable

academic appointments and 30 years of sports industry experience. When Grant learned that Sutton was leading USF's new program, she immediately decided to learn more.

"Once I learned that Dr. Sutton was going to lead the program, I knew it was a program I needed to investigate," she says. "Few people in the industry are as widely known and respected as Dr. Sutton," Grant explains, adding that she earned an undergraduate degree from his former university. "He is an engaging educator with NBA experience. He knows how to connect with students—and how to connect students to the industry."

LORIE BRIGGS | College of Business



Tweeting Tavros

The latest bright yellow underwater robot patrolling the Gulf of Mexico and reporting information to USF marine scientists has taken to Twitter.

@Tavros02 joined the university's fleet of space-age vehicles in March and immediately began tweeting its coordinates, temperature and depth of the waters and other important information to followers.



USF marine science engineer David Fries worked with a team at the College of Marine Science to develop the unique marine observing and reporting system.

Unlike other un-

derwater robots which wirelessly report ocean conditions back to researchers on land, the solar-powered Tavros vehicle can independently analyze water samples, compile the data and convert that information into a Twitter message. Fries and his team have built a series of the vehicles, but for now, only @Tavros02 tweets.

"This is a really exciting area of machine intelligence," Fries says. "We were interested in getting machines taking in data and, like humans have processed that data in the past, tweeting it back to us intelligently. We wanted to figure out how we could have them objectively communicate data without human input. Using Twitter linked to artificial intelligent programs allows us to do that and distribute to a large user group."

Fries has spent more than a decade working on the underwater sensing technology. Following the 2010 Deepwater Horizon oil spill, he was awarded a National Science Foundation grant to take the technology further.

Three things make the Tavros (Greek for "bull" and an acronym for The Autonomous Vehicle and Remotely-Operated Sensing) robots special. First, they are powered by solar cells instead of batteries which need to be recharged regularly. Second, the robots can analyze water on the spot—without a lab—and wirelessly transmit that data back to scientists. And third, they can report the data in a 140-character Tweet allowing scientists to interpret what is happening in real time.

Autonomous underwater vehicles can be programmed to follow a specific route and dive thousands of feet under water to test conditions such as temperature, currents, salinity, microscopic algae and droplets of oil at various depths. The robots can be used for routine surveillance, specific environmental challenges and to monitor ports for security.

Gary Hendrick, a mechanical engineer who has been part of the Tavros project, says the key to taking the robot communications to the social media level was

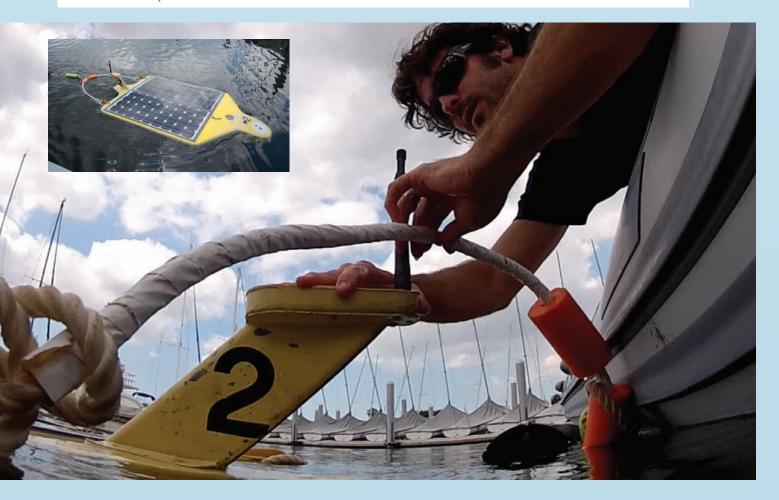




USF SAUV Tavros #2 @tavros02

#MyHumanSays "Just passed 300 followers! Thanks for your interest, fellow #SeaTweeters!" #ff #usf

Expand



to build in a programming bridge which converts key data, such as water temperature and salinity, to written language.

For now, the robots report on data they collect, but the team is working on processing the data within the vehicle and translating that data into phrases that address what people really want to know:

Are the conditions good for fishing? Is there a red tide bloom developing? Is there oil in the water?

That capability, researchers say, is not far off.

VICKIE CHACHERE | USF News

Brian Gregson, a biotechnologist at the College of Marine Science, demonstrates Tavros.



Scan the QR code to view a video of Tavros in action.

Photo: AIMEE BLODGETT | USF News

Young Researchers

By ANN CARNEY | USF News

hen it came time to choose a college, Sinhye Lee knew she wanted to be at a place where she could conduct research early in her university experience.

That led her to USF and the Office for Undergraduate Research (OUR).

"The biggest reason I chose USF," says the second-semester biomedical science major, "was to be involved in undergraduate research. A lot of universities don't offer that."

Today, the Korean-born Lee is part of a research team working in chemistry professor Shengqian Ma's lab to prepare metal organic frameworks for energy-related applications.

Each week she spends about six hours in the lab making crystals from metals that, when connected with molecules, can produce porous structures capable of storing gases like hydrogen and carbon dioxide.

"At first I had no idea what was going on, then I started understanding the

things I was doing," Lee says. "The people I work with are really passionate. That motivates me to do better."

Lee is one of a growing number of undergraduate students at USF engaging with faculty to enrich their academic experience through research. They're learning even before classes begin about the multitude of resources available to students to support undergraduate research.

Resources like OUR's "Getting Started" workshops which teach students about the types of undergraduate research opportunities available at USF; the importance of interdisciplinary research; how to engage with faculty and staff; and the responsibilities that come with an undergraduate research position.

"I learned about the workshop through my orientation packet," Lee recalls. "I went because I wanted to find out the first steps to getting involved."

Focus on undergraduate research

Why the emphasis on undergraduate research?

Studies show, time and again, that students engaged in undergraduate

research are more likely to stay in school, perform better academically, are quicker to graduate, and are more competitive for jobs and graduate school admissions. Oftentimes, they develop lasting associations with research mentors beyond their undergraduate experience.

Helping students get involved in undergraduate research and understand the expectations of working with mentors is the job of the undergraduate research office. Building on more than 15 years of commitment to undergraduate research by Honors College Dean Stuart Silverman and his staff, the office offers a variety of services, instruction and education tools, such as workshops, a computer lab, sponsored research projects, and funding in strategic areas to help students in all disciplines and at any level engage in undergraduate research.

"We're here to demystify the process," says Richard Pollenz, associate dean and director of OUR who was appointed to the position in August.

"My job is to give everyone the keys to the store—to give them the information and tools they need to make informed decisions and choices about research."







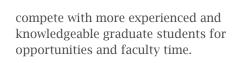
In the fall, the undergraduate research office became a unit within the Office of Undergraduate Studies and moved to a new central location on the main library's second floor. It is now part of the Learning Commons which includes the Writing Center, Tutoring and Learning Services, and the library IT help desk. The move, Pollenz says, was intended to make the office more visible and accessible to all students and to enhance interaction with library faculty. The collaboration has resulted in the development of a library resources competency survey and the creation of undergraduate research opportunities within the Special Collections Department.

Since he was appointed to his current post, Pollenz and his team have been working overtime to promote and sup-

- Richard Pollenz, director of the Office for Undergraduate Research, speaks with a presenter at the Undergraduate Research and Arts Colloquium.
- Students learn about undergraduate research opportunites at a Getting Started workshop.
- Rebecca Stoll conducts research in the library's Special Collections Department.

port undergraduate research at USF. Their goal is to facilitate processes that will pave the way for all undergraduate students to engage in at least one research experience during their four vears at USF.

It's an ambitious undertaking for a major metropolitan research university where undergraduates typically



But it's an undertaking that is proving hugely successful.

In just five months, between November and April, the office put on 19 "Getting Started in Undergraduate Research" workshops attended by 329 students, as well as two Getting Started workshops tailored to specific student organizations and four professional development workshops. Students who complete the workshops are added to the Undergraduate Research Interest Group Blackboard organization that provides information about OUR events and services as well as new undergraduate research opportunities. In April,





the office hosted the Undergraduate Research and Arts Colloquium (see sidebar pg. 29), an event that gives students the opportunity to present their research and creative activities.

Interdisciplinary research

Even though Rebecca Stoll, 19, is on track for a career in geriatric medicine, she didn't think she was ready for laboratory research. So, she was thrilled to learn in a recent Getting Started workshop that research often takes place outside the laboratory and outside a student's major.

This summer, Stoll is collaborating with Andy Huse, assistant librarian in the library's Special Collections Department, to curate an online exhibit

and tour focused on USF's history.

"When I heard USF I thought 'I am definitely doing this,'" Stoll says, barely able to contain her Bull pride. "I'm not comfortable enough in the lab setting and I knew this would be a great entry point into research."

The office, she adds, was a great help. "I just happened to walk into a workshop and I walked out with a position."

The position is one of many undergraduate research positions developed in concert with OUR university partners—non-academic departments and units such as the USF Library, Office of Community Engagement, Office of Sustainability, Career Center and USF Wellness. The collaborative partnerships foster

the creation of novel research opportunities and creative initiatives that promote undergraduate research.

Supporting students and faculty

Those initiatives, Pollenz says, aren't limited to students. The office works closely with faculty to provide resources and training and to gain further understanding to effectively engage students in undergraduate research.

"There has been an altruistic outpouring of support from faculty," he says. "There is a cohort of faculty I can readily call on to help our students succeed."

Pollenz understands the value of research and what it takes to succeed.



"Labs are a good foundation, but this experience is priceless."

— CEDRIC SYMONETTE

Since joining the university in 2000, Pollenz, a tenured professor in the Department of Cell Biology, Microbiology and Molecular Biology, has trained more than 25 undergraduate researchers, many who have continued on to MD and PhD programs. "I know the value of undergraduate research firsthand," he says.

Pollenz was instrumental in helping Cedric Symonette obtain an undergraduate research position in the College of Marine Science. Already familiar with OUR and convinced of the value of undergraduate research, Symonette stumbled upon a workshop schedule while exploring the OUR site online and signed up on the spot. Despite a rigorous class schedule, he quickly transitioned into the added responsibilities of an undergraduate lab assistantship.

Since February, Symonette has been working with graduate research assistant Monica Mion in chemical oceanography professor Edward Van Vleet's laboratory on a project to help eradicate dangerous estrogenic compounds in the municipal waste waters

of Tampa Bay—compounds that can contaminate groundwater and affect human health.

"Labs are a good foundation, but this experience is priceless," he says. "This makes my experience richer. It gives me a better idea of the people I could be working with later on. I like the conversation you can have—the perspective and professional attitudes. I like being surrounded by people who have something meaningful to say all of the time."

Symonette devotes about 10 hours each week to the project. The extra hours, he says, actually help him keep up with his classes—microbiology, cellular biology and biochemistry. And, he says, they've opened his eyes to what



his future may hold.

That's exactly the kind of experience Pollenz and university administrators are working to make available to all undergraduates.

"We have elevated and expanded our services," he says. "We are working to inspire and engage undergraduates to let them know there is a dedicated place for them—a place where we can answer their questions—a place where they can get started."

For Lee, who plans to be a pediatrician one day, the experience has been life-changing.

"It has been a fascinating, out-of-classroom experience," she says. "When you do research, you are learning for a lifetime, not just a semester."

Research Showcase

or senior William Carraher-Stross, the 2012 Undergraduate Research and Arts Colloquium was an opportunity to present his research on the microbial communities surrounding karst coastal regions and receive feedback from mentors, peers and the greater USF community.

Carraher-Stross was one of about 175 USF undergrads who put their research, artistic and technical abilities on display at the annual event in April.

Sponsored by the Office for Undergraduate Research (OUR), the colloquium is regarded as one of USF's top academic traditions. It serves as both a learning experience and an opportunity for students in all disciplines to demonstrate how they have incorporated research into their learning experience, says Richard Pollenz, director of the OUR.

Jackalynne DeLong, a psychology major with an interest in art history, presented her wetland computer constructed using real plants and a central processing unit to bring attention to the impact of human activities on the region's wetlands.

"A critical aspect of all research projects is presentation," says Pollenz. "The Undergraduate Research and Arts Colloquium provides a venue for students across all disciplines to obtain critical feedback on their work and develop their presentation skills that will give them a competitive advantage for jobs and graduate school admission."

And, an opportunity to transform their future.



Start

April 2008

USF President Judy Genshaft signs the American College & University Presidents' Climate Commitment.



American College & University Presidents' Climate Commitment

xtracting energy from human waste. Composting with elementary school children. Establishing a Student Green Energy Fund. Launching the world's first School of Global Sustainability.

They're just a few of the innovative strategies in place at USF to help transition the university and society at large to a clean and sustainable future—strategies that have earned USF the title "Most Innovative Climate Leader" in the third annual Second Nature Climate Leadership Awards.

In June, USF Provost Ralph Wilcox will accept the award at the American College & University Presidents' Climate Commitment (ACUPCC) Climate Leadership Summit. USF took the top prize among doctorategranting universities in the national competition among 674 eligible



Jan. 2010

USF joins the AASHE sustainability tracking, assessment and rating system as a charter member.

Feb. 2010

School of Global Sustainability established with an M.A. degree program.

August 2009

Christian Wells establishes the USF Office of Sustainability and serves as its founding director.



colleges and universities.

"This is a huge moment for USF and a huge step forward in earning national recognition for our sustainability efforts," says Christian Wells, director of USF's Office of Sustainability. "I am deeply proud of our students, faculty and staff for all their hard work and dedication, which led to this major national recognition. This is truly a landmark in USF's history."

Ever since USF President Judy Genshaft signed the ACUPCC in 2008, students, faculty and administrators have made an all-out effort to incorporate sustainability into campus operations, teaching, research, community outreach and campus life.

April 2010

USF featured as a "Green School" by the Princeton Review.

August 2010

Kala Vairavamoorthy hired as inaugural director of the School of Global Sustainability.





Jan. 2011

USF's first LEED Gold building, the Patel Center for Global Solutions. opens.



Those efforts are numerous and include:

- Incorporating sustainability in the university's Strategic Plan.
- Revamping the campus Master Plan to focus on smart growth.
- Convening a sustainability steering committee that prepared the university's first greenhouse gas inventory and Climate Action Plan.
- Establishing an Office of Sustainability.
- Implementing a university-wide policy on institutional sustainability.
- Erecting the first eco-friendly (LEED Gold) building on campus.
- Creating a million-dollar Student Green Energy Fund to steer USF toward a carbon-free economy fueled by renewable energy.

It's not the first time USF has been singled out as a leader in sustainability.

The university has been recognized as an AASHE STARS Gold institution, a "Green College" by the Princeton Review, a "Tree Campus USA" school by the Arbor Day Foundation, and one of the top 50 "Coolest Schools" by Sierra Magazine.

Refillable water bottle stations? Check. Styrofoam-free campus? Check. Solar golf carts? Check. Solar panels? Check. Electric vehicle charging stations?

How cool?

It's what Genshaft calls "leading by example."

"We're doing our part to lessen the university's impact on the environment," she says.

And students are playing a huge role in the initiative.

Last year, the Florida Board of Governors approved a Student Green Energy Fee, a dollar per credit hour fee to fund renewable energy projects on campus that reduce the university's greenhouse gas emissions, waste or energy costs. More than 70 percent of students voted to approve the fee. Projects supported by the fund, such as solar umbrella stations that use the power of the sun to charge cell phones and laptops, are approved and implemented by students.

But it's not just what's happening on campus. It's climate change research that extends into the community and could, one day, have

November 2011

USF announces its first Student Green Energy Fund awards, awarding nearly \$300K to several solar projects on campus.





USF begins to convert electric golf cart fleet to solar power.

March 2011

Florida Board of Governors approves the Student Green Energy Fee for USF—the first school in Florida.

June 2011

USF turns water fountains on campus into hydration stations to promote local water.





April 2012

USF plants 300 trees to celebrate Arbor Day.



impact across the globe.

Yogi Goswami, co-director of the Clean Energy Research Center, is working to develop new technologies that utilize sunlight, biomass and other renewable energies.

Associate Professor of Civil and Environmental Engineering Daniel Yeh is investigating energy-efficient ways to treat waste water.

And in the university's Botanical Gardens, students and faculty are conducting research and experiments focused on sustainability issues, such as the positive effects of bees on the environment.

Kala Vairavamoorthy, executive director of the Patel School of Global Sustainability, and an internationally-recognized expert on urban water issues, says climate change research is taking place in many colleges and departments across the university.

The main goal of the Patel School, he says, is to bring together and integrate the research being done to allow for a more systematic approach to studying issues of resource management.

It's about leadership, he says. And USF is at the forefront.

"We are preparing the next generation of sustainability leaders." ■



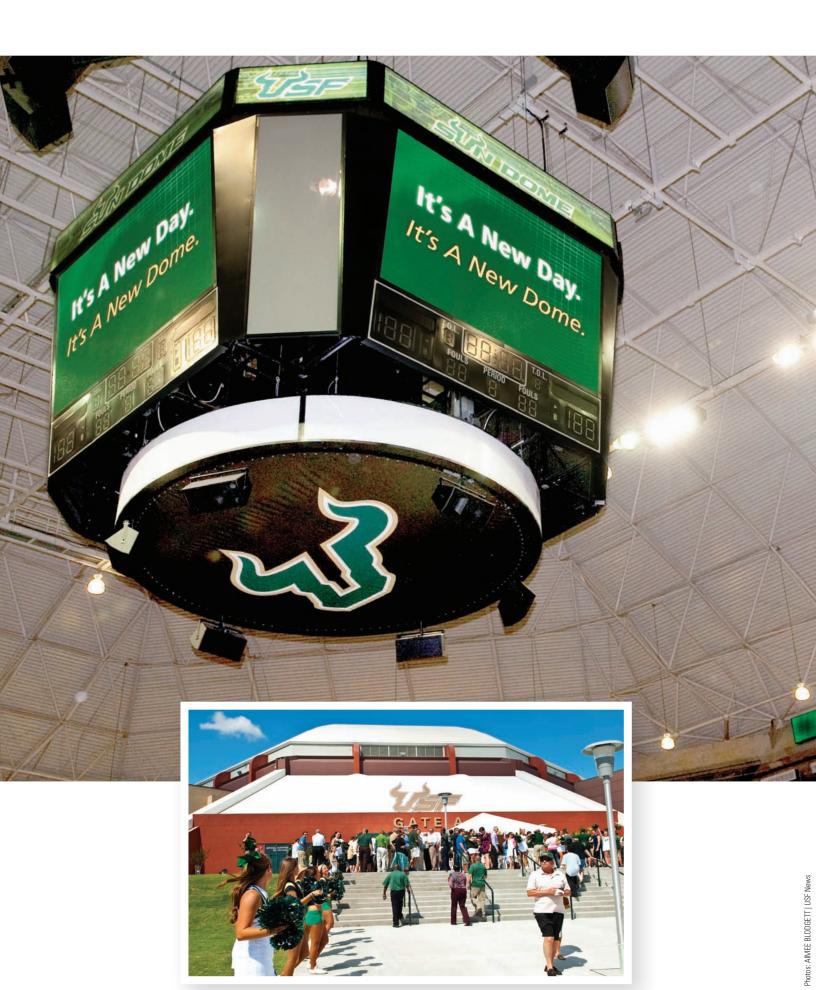
Scan the QR code for more stories and videos about USF's comittment to sustainability.



June 2012

Provost Ralph Wilcox will accept the 2012 Second Nature Climate Leadership Award on behalf of USF.







- A four-sided LED video board allows fans to easily see the score of a game or an up-close shot of an athlete or entertainer.
- The newly renovated arena officially opened May 1 with a ribbon-cutting ceremony including performances by the Herd of Thunder and USF Sun Dolls.

GAME CHANGER



By ANN CARNEY | USF News

t's a new day for the Dome.

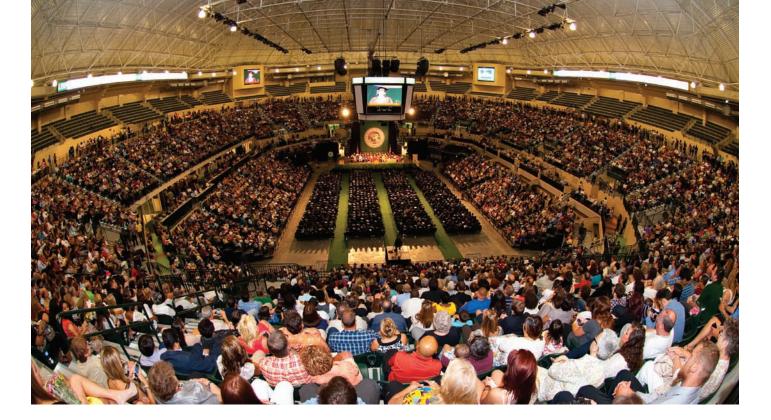
Less than 12 months after the start of an ambitious renovation, the USF Sun Dome is back—and better than ever.

"We have waited a long time for this day to arrive," said USF President Judy Genshaft at a ribbon-cutting ceremony in May. But the wait was well worth it.

The newly renovated, 10,000-seat stadium features a four-sided, center-hung LED video scoreboard, the first student club in the nation, luxury loge suites, a new retail store, wider concourses, new concessions, a media room, new lighting, a new sound system and retractable seats in the lower bowl.

It's a whole new arena for USF Athletics.

"The renovations to the Sun Dome are second to none. This facility brings us up to par with the rest of the Big East and has already played



AT A GLANCE

10,000 Number of seats

\$35.64 Million Total project cost

21 to 22 inches Seat width in levels 100 and 200

30

Writing press seats with TV monitors

> 10 Loge suites

22 feet Average width of main concourse

Auxiliary locker rooms for sporting events

Dressing rooms for concert talent

a huge role in recruiting even without being completely finished," says Stan Heath, head men's basketball coach. "Five years ago, none of this existed. So to see it come to fruition is something special. The USF administration has done an amazing job at putting us in a place where we can really accomplish some great things. It's an exciting time to be a USF Bull."

- The first public event held in the newly renovated Sun Dome was commencement on May 4.
- The renovated dome's concourse level features a new team retail store filled with Bulls gear, plus new concessions and restrooms.

And it's not just for sporting events. The newly renovated Sun Dome, with four dressing rooms for concert talent, is a first-rate venue for concerts and conventions. Grammy-nominated British pop-rock band Florence and The Machine is set to take the stage in September. But the stage won't look anything like it did in the 80s and 90s, when the dome played host to headliners like Frank Sinatra, U2, Stevie Nicks, Madonna and the White Stripes.

The \$35 million renovation, which is expected to add 30 years to the arena's life, logged nearly 113,000 man hours, providing about 288 jobs per day in the region. About three-fourths of the work was done by businesses located or headquartered in the Tampa Bay region.

The environment came out a winner as well.

More than 91 percent of all debris removed in the renovation about 10 million pounds—was recycled. And, due to energy-saving measures, the arena is projected to reduce overall energy costs by 20 percent, and overall building water usage by 40 percent.

At the ribbon-cutting, USF Athletic Director Doug Woolard called the re-opening "a game-changing moment in USF history."

A moment that marks the beginning of a new season for the Sun Dome.



Campaign

Paying it Forward

By ANN CARNEY | USF News

George Morgan, the retired COO of US Oncology, was at the Bulls Big East basketball tournament in New York City in March when a business lunch put the wheels in motion for a move from retirement back to active corporate leadership. Less than eight weeks later, the USF alumnus (BA '76) was named president and CEO of Minnesota-based Virtual Radiologic (vRad), a national radiology practice and the largest telemedicine company in the world.

"This feels so energizing," says Morgan, from his new office near Minneapolis, Minn. "I am very excited about our company and what we can do to improve healthcare delivery."

Just five years earlier, after a successful career serving the healthcare industry, Morgan and his wife,

Jane, had returned to their dream home on Sarasota's Siesta Key, looking forward to a busy and fulfilling retirement. "I was very happy golfing, fishing and supporting USF as my main activities," Morgan says. "It was not an empty life."

Ouite the contrary. As he reconnected with his alma mater, and in particular, the College of Business, Morgan remained committed to giving back to the institution he credits with enabling him to be successful. Today, he sits on the advisory board of the USF Center for Entrepreneurship, is a member of the boards of the USF Foundation and the USF Research Foundation, and chairs the executive advisory council for the dean of the College of Business.

"Being involved at the various levels allows you to get better insight into the university—the issues challenging it, and where USF wants to go," he says. "Foundation fundraising is essential to USF's future."

It was that insight that helped steer the couple's decision to pledge a \$2 million gift in the early phase of the USF: Unstoppable campaign. Half of the planned gift is earmarked for scholarships in the College of Business, and half for USF Athletics.

Being involved at the various levels allows you to get better insight into the university—the issues challenging it, and where USF **Wants to go.** – George Morgan '76



It wasn't their first major gift to the university. In 2002, during a football game in Houston, George and Jane learned about the program's greatest needs from former USF athletic director Lee Roy Selmon and development officer Joe Tomaino. While giving Tomaino a lift back to the airport, they pledged \$50,000 to establish the university's first endowed football scholarship.

Jane, an active Florida State University alumna (BS '82), says it was paying for her own college education that helped foster her belief in the concept of paying it forward—a belief she shares with George.

"We strive to repay the many blessings we received from our respective alma maters by helping others achieve success through a college education and lifelong friendships," she says. "Our time as students was just the beginning of our relationships with both institutions—the sense of family among faculty, students, alumni, administration and other professionals, as well as within the donor community, is a very rewarding part of our daily lives."

As they relocate to the Twin Cities, making Florida their second home once again, George looks forward to the opportunity to reach out to and re-energize some transplanted Bulls.

"We all have priorities in our lives, and first is family. But we should also step back and see what and who influenced us to be able to give back to the place that helped us succeed," he says. "While it may not be time now to do something financially, there's always a way to get involved and contribute."

"Campaign Chair Les Muma often says 'Life is about learning, earning and returning.' I think it's time we get back to that."

USF: UNSTOPPABLE

To date, the *USF: Unstoppable* campaign has raised more than \$544 million of its \$600 million goal. To learn more about the campaign and opportunities for giving, visit www.unstoppable.usf.edu



▲ Women's Golf

USF newcomer Christina Miller (pictured above) was named Big East Player of the Year while senior Kelli Pry and junior Shena Yang joined her on the All-Big East team. Big East Coach of the Year honors went to USF women's golf coach Marci Kornegay after her squad captured the program's first-ever Big East tournament title. "It's not about what I do or say anymore, it's about the structure and the culture that we're building at USF with our golf programs," Kornegay says.



Softball

Ace left-hander Sara Nevins became one of 11 finalists for the 2012 USA Softball Collegiate Player of the Year award after going 26-4 with a 1.05 earned run average in the regular season. Aside from her win total. the sophomore also was in the nation's top 15 in saves (4), total strikeouts (268) and strikeouts per seven innings (9.1). USF finished the regular season ranked No. 19 with a 45-10 record.



Both USF teams posted their highest-ever finishes at the Big East Outdoor Championship with the men placing second and the women taking third in Tampa. Junior Neamen Wise's personal-best leap of 26' in the long jump won him the event and made USF program history.

The mark ranked fifth in the NCAA at the time.

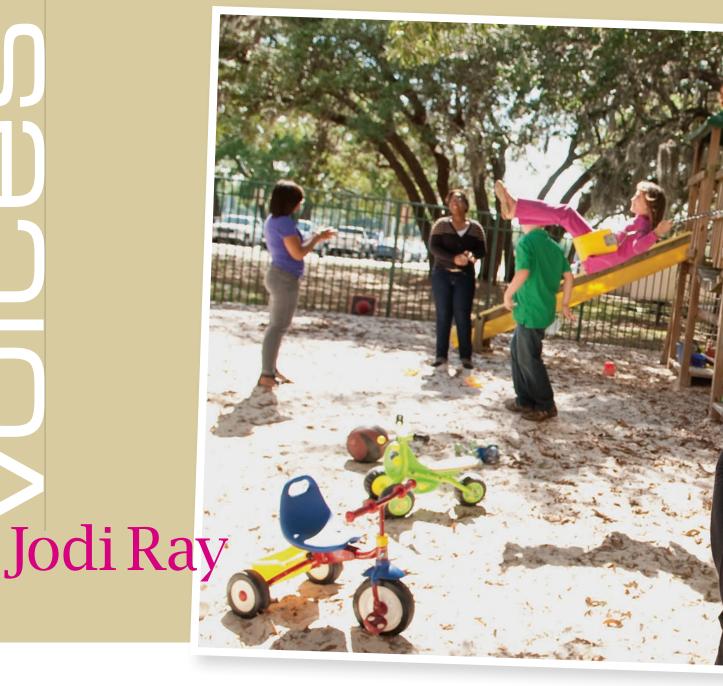




▲ Men's Basketball

USF's historic season included finishing one game shy of the Sweet 16 in the program's first NCAA Tournament trip in 20 years. Stan Heath was named Big East Coach of the Year after leading the Bulls to single-season records in total victories (22) and Big East regular-season wins (12). "We're continuing to move the bar in the right direction," Heath says.

Stories by TOM ZEBOLD | USF Athletics



By ANN CARNEY | USF News

Since joining the College of Public Health in 1998, Jodi Ray has made it her mission to ensure that children have access to healthcare. Ray is project director of Florida Covering Kids and Families, part of the Lawton & Rhea Chiles Center for Healthy Mothers and Babies at USF.

Over the years, Ray has managed a network of collaborative partnerships and served as principal investigator on several federal, state and private grants aimed at increasing enrollment in Florida

KidCare, the state's Children's Health Coverage Program (CHIP) and Medicaid. In January, her efforts earned national recognition. Ray was one of 10 individuals and organizations honored by the Centers for Medicare and Medicaid Services with the esteemed ECHOE (Excellence in Children's Health Outreach and Enrollment) award.

"I was really proud," says Ray, whose children often get involved in local efforts to help sign up families. "The award was recognition from my peers, nationally, for what I do."

USF: Why are uninsured children such a big problem?

Uninsured children have less access to healthcare; it's difficult to get the services they need. It can affect how well they do in school and impact the health in the community. It's such a domino effect.

Why are so many children uninsured?

We have high rates of unemployment. The average yearly cost for private health insurance for a family is \$15,000. For a lot of families, affordability of coverage does not exist.



QUICK TAKES

You in a word: Persistent Parents or policy makers: Parents

Greatest accomplishment:
My kids, Noah and Hannah

Hobby: I wish I had one Favorite place: The beach

Why is the problem so much worse in Florida?

It's a combination of things. We have not taken advantage of some of the available opportunities that make it easier for families to get coverage or retain coverage. There are language and literacy issues, cultural issues and people coming in from other countries with eligibility issues.

Are we making progress?

We are! I had a meeting with the CHIP director today and learned that we just hit the 2 million

enrollment mark for Florida Kid-Care—that's huge! Our enrollment is going up, but we still have more than 500,000 eligible kids who are uninsured.

How did you become so passionate about this issue?

It's easy, especially if you have kids. We all get overwhelmed, but imagine what it must be like to not have insurance—to not know what you'll do when your kids get sick.

What is the most important thing we can do to get children insured?

We need to make sure parents know that programs like Florida KidCare are there and are affordable. The program covers everything from checkups to transplants. It covers dental care, vision, hearing, mental health, prescriptions—everything.

What's next?

It would be nice to think that at some point we've done the job and there won't be a need anymore. I'm always looking for the next way to make this bigger and better.



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