

WINTER 2011  
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# USF Magazine

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## Pure

**Ice:** USF scientists study disappearing link in Antarctic food chain, Pg 22

**Nature:** Botanical Gardens a rich resource, Pg 28

**Heroes:** Nursing grant focuses on veterans of Iraq and Afghanistan, Pg 32





Page 20

## Pure Design

Everything about the new Kiran C. Patel Center for Global Solutions is designed to be efficient and respectful of strained natural resources.



Page 22

## Pure Ice | cover

USF doctoral student Paul Suprenand captures scenes of a fading landscape during an 8-week expedition to the Antarctic led by biological oceanographer Joseph Torres. Scientists on the mission are searching for silverfish, a disappearing link in the Antarctic food chain.



Page 32

## Pure Heroes

A \$2.1 million federal grant awarded to the College of Nursing will focus on helping veterans of Iraq and Afghanistan overcome psychological trauma and other emotional health problems.



Page 28

## Pure Nature

From its medicinal garden and community workshops to its special events and living collections, the USF Botanical Gardens is a rich resource for students, faculty and the Tampa Bay region.

## Featured

**14 Pure Service** About 3,000 came out to serve in the 2011 Stampede of Service.

**16 Pure Sun** USF Professor Yogi Goswami's solar energy storage system could be a game-changer for the energy industry.



## High Impact

4 President's Letter

5 New Surgical  
Training Center

## Spotlight

6 Academics

8 Front Line

10 Health Care

12 USF System

## Unstoppable

36 College of The Arts

## Sports

38 Highlights of the Season

## Voices

40 Eric Shepherd

## Tribute

42 John Lott Brown

## From the President

It's a new year at USF and a new day for *USF Magazine*! I am thrilled to share this issue of *USF Magazine* with you. As you will see, we've created a new, more engaging, informative publication with impactful images that showcase our people and the great things going on at USF.

In our Pure Ice feature, you'll join USF marine biologist Joseph Torres on a pictorial journey to Antarctica to study the effects of global warming on the region's animals.

You will find more spectacular images in our feature on the USF Botanical Gardens, a natural oasis situated on the southwest corner of campus. With more than 3,000 species of plants, the gardens provide a rich resource for research, teaching and community outreach.



Have you ever wondered about the power of the sun? If so, you're not alone. USF Professor Yogi Goswami has devoted his entire career to the limitless energy that the sun provides. Read about his groundbreaking research in our Pure Sun feature.

Of course you won't want to miss our story on the new Kiran C. Patel Center for Global Solutions. Opened in December, the LEED-certified

*Judy Genshaft*

Reaching out to veterans of the wars in Iraq and Afghanistan is the focus of a \$2.1 million federal grant recently awarded to the USF College of Nursing. The project is part of the university's overall strategy to help reintegrate our nation's heroes into the community.

building has many features focused on sustainability, one of the very issues that drive the center's work.

Thank you for reading this issue of *USF Magazine*. I hope you enjoy our new look.

# High Im



[More About CAMLS](#)





## USF's New Surgical Training Center Set to Transform Medical Education

A new 90,000 square-foot building under construction in downtown Tampa will help change the way health care professionals learn, making cutting-edge surgical procedures safer for patients.

USF Health's new \$30 million Center for Advanced Medical Learning and Simulation (CAMLs) will offer high-tech training for surgeons and other health care professionals. It will be home to surgical robots, a state-of-the art simulation center, classrooms and a 6,000 square-foot laboratory for interdisciplinary research.



The center is expected to draw some 60,000 health care professionals to Tampa each year.

"We're going to train surgeons so they know how to do the hardest procedures. What's more, we'll make sure they know, because we'll test them on it," said Dr. Stephen Klasko, dean of the USF College of Medicine and CEO of USF Health, at the center's January groundbreaking. "We'll ensure that doctors have the opportunity to

practice a procedure before they do it on you. We'll recognize that doctors, nurses and other health care professionals work better as a team, and we'll make sure they're trained to do that."

Leading USF faculty surgeons will train surgeons from around the country on how to perform robotic, computer-assisted and image-guided surgeries. Doctors, nurses and



other health care providers will train side-by-side in the center's Virtual Hospital, perfecting the teamwork and communication skills vital to top-quality medicine.

"CAMLs marks an important new chapter not just for USF Health, but also for how health education and evaluation is practiced across America," Dr. Klasko said.

Tampa Mayor Pam Iorio called it "another step toward increasing the university's positive impact on our city."

- Lisa Greene | USF Health

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## A Degree in Three

Every year, students come to USF determined to complete their bachelor's degree in three years.

And thanks to a new initiative called the Provost's Scholars Program, USF is committed to helping them do that – with one unwavering caveat.

"We're going to insist that these students get much more than just a degree in three years. We're going to make absolutely sure that they receive an education that prepares them for life," says Stuart Silverman, dean of USF's Honors College, who will administer the program.

That means integrating life-shaping, outside-of-the-classroom experiences into a three-year baccalaureate program. Residing on campus in a living-learning community. Study abroad. Undergraduate research. Community engagement. Internships.

Conceived by USF Provost Ralph Wilcox, the program provides the opportunity for certain students to complete their degree work in three years, including summers. "It also includes opportunities for the types of experiences that are critical to the full development of college-age students," says Bob Sullins, dean for Undergraduate Studies.

Set to launch Fall 2011, the program will be highly selective. Qualifying students will enter USF directly from high school with 18 or more college credits earned through Advanced Placement, International Baccalaureate, dual credit or other acceleration methods. A 3.8 GPA in rigorous coursework,

1200 SAT or 27 ACT score, and personal interview also will be required.

Robert Spatig, USF admissions director, says that while some students will be drawn by the opportunity to enter the work force or graduate school a full year ahead of their peers, "Others will jump on the fact that, between the savings in tuition and college expenses and the ability to enter the work force early, they will be able to add about \$50,000 to their bottom line."



# Traveling Scholars

Two of USF's brightest are having the adventure of a lifetime in Senegal and Italy, thanks to the Benjamin A. Gilman International Scholarship program.

Due to their outstanding academic achievements and interest in global studies, USF juniors Hannah Feig and Gianexis Lopez earned the scholarships for the Spring 2011 semester. The highly competitive scholarships allow U.S. citizen undergraduate students of limited financial means to pursue academic studies abroad.

The trips combine college coursework at local universities with field experiences in neighboring communities.

Feig, a chemical engineering major, is in Senegal, a French-speaking country on the western coast of Africa. She is taking language, culture and art courses in the capital city of Dakar, learning African dancing and batik printing from local artisans. She also plans to visit the region's villages and work with professors to conduct a research project on the connection between health and the environment, particularly water.

Lopez, a criminology and Italian major, is spending the semester in Florence, Italy, taking courses on Italian language and culture to sup-

port her dual major. She plans to explore different areas of the country and volunteer in local communities.

Both students will also complete a project to share information about the program with the university community. Feig plans to write a blog about her experiences and submit a series of articles to *The Oracle*, the university's student-run newspaper.

Lopez will conduct information sessions with students enrolled in USF's Freshman Summer Institute (FSI), where Lopez began her USF experience. The program provides access to a university education for promising students from first generation and/or limited income families.

Interest in international education opportunities has surged on campus in recent years. Since 2008, nine USF students have been awarded Gilman Scholarships to support travels to the Dominican Republic, Ghana, Greece, Japan, and Sweden, and more than 800 students participated in study abroad programs in the 2009-2010 academic year alone.



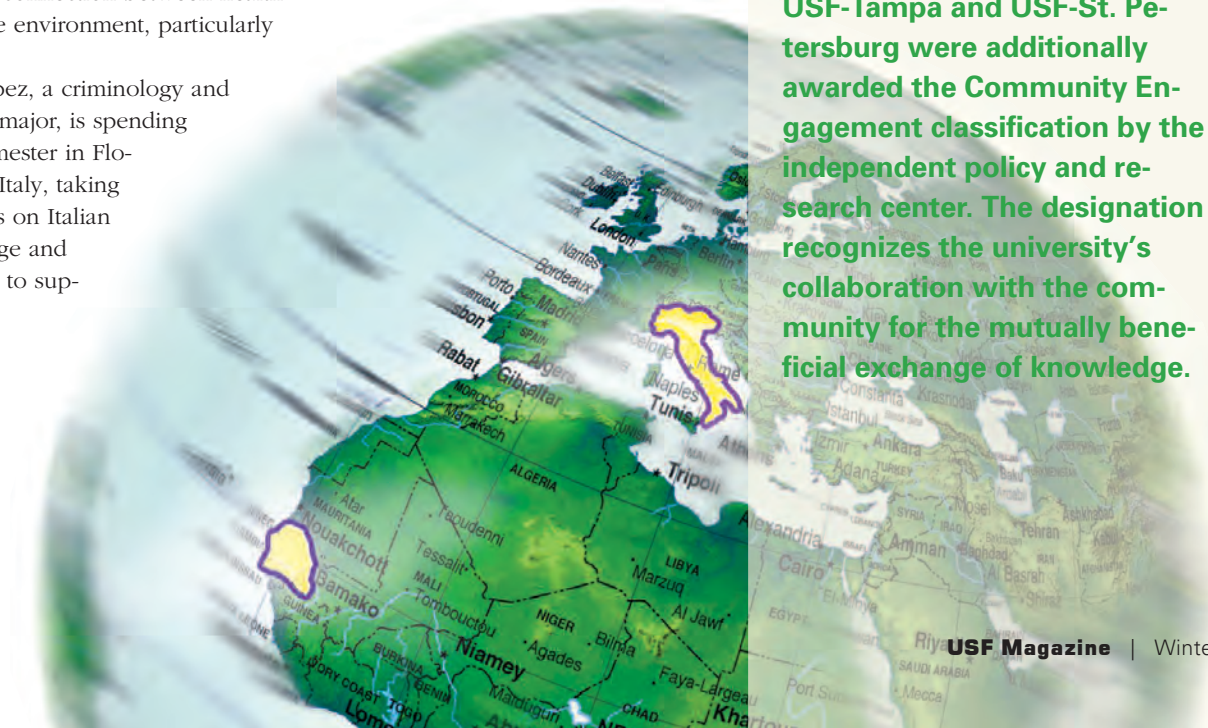
## Carnegie Designations

**USF is again garnering the attention of the Carnegie Foundation for the Advancement of Teaching.**

**Just days into the new year, the foundation classified USF a top research university. And, for the first time, the system's St. Petersburg, Sarasota-Manatee and Lakeland campuses were cited as well.**

**The official classification, RU/VH: Research Universities (very high research activity), goes to institutions that award at least 20 research doctorates during the year while maintaining an advanced and active research portfolio.**

**USF-Tampa and USF-St. Petersburg were additionally awarded the Community Engagement classification by the independent policy and research center. The designation recognizes the university's collaboration with the community for the mutually beneficial exchange of knowledge.**





## First Responders

### USF to Train Florida's Public Health Work Force

**Two federal grants** awarded to the College of Public Health will help prepare the state's public health workers to respond to public health disasters, create more effective public health systems, and improve their public health knowledge and skills.

The grants, totaling \$8 million, come at a critical time says Danielle Landis, director of USF's Center for Leadership in Public Health Practice. "With the current economic situation, we are forced to create even more value and productivity with our existing work force. Quality public health training is critical to ensure we can serve the public in the most effective ways possible."

USF was the only Florida institution to be awarded either of the two five-year grants, a fact Landis attributes to the university's extensive experience in preparedness work force development, prevention and response.

**USF was the only Florida institution to be awarded two five-year training grants totaling \$8 million.**

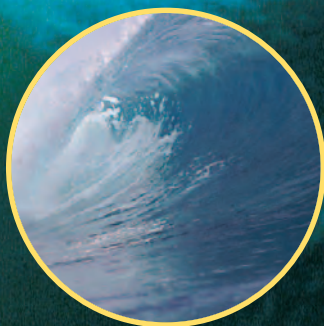
A \$4.75 million grant from the Centers for Disease Control and Prevention will allow USF to establish a Preparedness and Emergency Response Learning Center at the college. Among the main projects will be a collaboration between the college and the Sarasota County Health Department to develop a statewide training program to better equip communities to respond to disasters. Landis calls the partnerships key.

"Partnerships are not only important to training the state's public health work force, they are the most critical element," she says. "They lead to stronger and more effective programs, less duplication of efforts and better outcomes for Florida's citizens and visitors."

A second grant for \$3.25 million from the Health and Human Resources Administration will support a Public Health Training Center to assess the learning needs of the state's public health work force and further develop the knowledge and skills of its public health professionals.

- Ann Carney | USF News





## When Disaster Strikes

USF was one of the first responders to the Deepwater Horizon oil spill in the Gulf last year. It wasn't the first time the university responded to a major disaster. In 2001, USF students and faculty orchestrated a rapid and intelligent response to the September 11 attacks on our nation. Over the years, members of the university community have stepped in, providing relief in countless ways for disasters including:

- September 11, 2001 Terror Attacks
- Hurricane Charley
- Asian Tsunami
- Hurricane Katrina
- Global Swine Flu
- Haiti Earthquake
- Deepwater Horizon Gulf Oil Spill





## Region's First Major ALS Clinic Opens at USF

A new clinic focused solely on patients with amyotrophic lateral sclerosis (ALS), also known as Lou Gehrig's disease, opened at USF in the fall. The USF Health ALS Clinic brings together specially trained health care professionals, including neurologists; physical, occupational and respiratory therapists; a psychologist; a social worker and others, to treat the multiple and diverse needs of ALS patients.

Dr. Stephen Klasko, Senior Vice President for USF Health, calls the opening of the new clinic "the beginning of the end for this horrible disease."

ALS is a neuromuscular disease that progressively paralyzes its victims, attacking nerve cells and pathways in the brain or spinal cord. Lou Gehrig first brought attention to the disease in 1939 when he abruptly retired from baseball after being diagnosed with ALS. Patients with the disease are robbed of the ability to walk, eat, speak, and eventually breathe.

The USF Health ALS Clinic, made possible by a partnership between USF Health and the ALS Association Florida Chapter, will also conduct research into the disease. Currently there is no known cause or cure for the disease.

- Sarah Worth | USF Health



## MEDical Internet Revolution

The creative minds behind *Wikipedia* and *eMedicine* were the keynote speakers at a January discussion on the use of technology in health care.

Wikipedia founder Jimmy D. Wales, and eMedicine founder Dr. Scott H. Plantz, spoke to a standing-room-only crowd at the USF Alumni Center as part of the Dean's Lecture Series. Following their presentations, Wales and Plantz were joined by Glen E. Tullman, CEO of electronic medical records provider Allscripts. Tullman also co-chairs the National ePrescribing Patient Safety Initiative, a \$100 million campaign to deliver fee electronic prescribing to physicians across America.

The event was sponsored by USF Health, Tampa General Hospital and Allscripts.





## New Home for the Tiniest Babies

**A \$35 million neonatal intensive care unit that's been four years in the making is now caring for the state's tiniest babies at Tampa General Hospital.**

**The Jennifer Leigh Muma Neonatal Intensive Care Unit, a partnership between USF Health and Tampa General, opened in November.**

**The high-tech, high-touch facility was funded in part by a \$6 million gift from Tampa philanthropists Pamela S. and Leslie M. Muma, whose daughter, Jennifer Leigh Muma, died in a neonatal nursery. The gift allowed USF to bring in prominent neonatologist Dr. Lewis Rubin, formerly co-director of the Cleveland Clinic's Fetal Care Center, to fill the Pamela S. and Leslie M. Muma Endowed Chair in Neonatology.**

- Lisa Greene | USF Health



USF Health's Dr. Lewis Rubin holds one of his former patients in the new NICU.

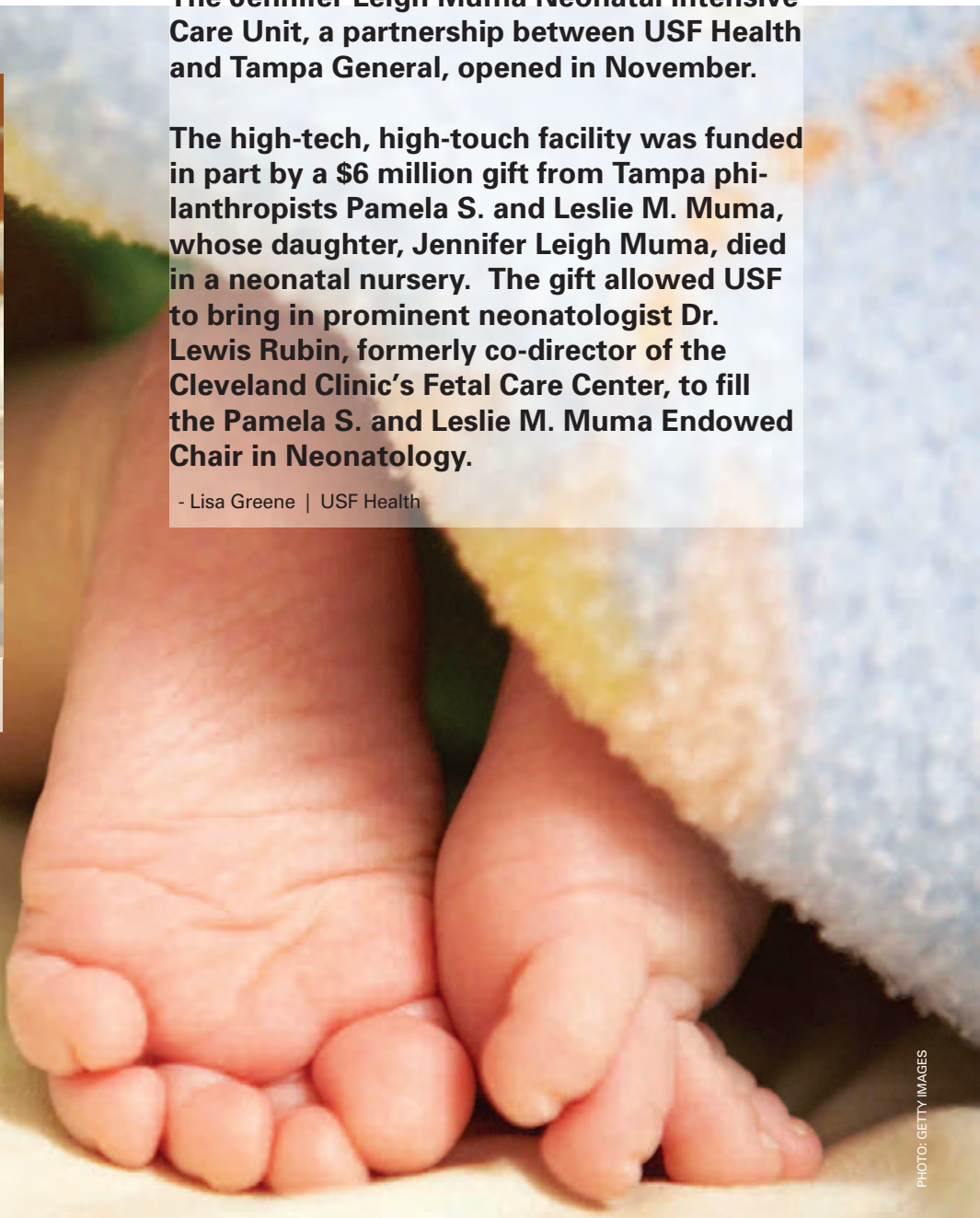


PHOTO: ERIC YOUNGHANS | USF HEALTH

PHOTO: GETTY IMAGES

## New USF Trustees Named

Two USF alumni, **Stephanie Goforth** and **Dr. Louis Saco**, have been named to the USF Board of Trustees.



**Goforth**, a senior vice president and wealth strategists manager for Northern Trust, is a member of the USF St. Petersburg Regional Campus Board.

A 24-year veteran of the trust, investment and banking industries, she joined Northern Trust in 2005, and today manages all aspects of trust sales activities for the West Coast of Florida. Goforth earned her Bachelor of Arts degree from USF with a major in business management. She is a current board member and treasurer of All Children's Hospital Foundation, the CASA Board of Trustees, the Heroes of St. Petersburg Board and the St. Petersburg YMCA.



**Dr. Saco** is CEO and chairman of Watson Clinic, a Lakeland-based physicians

group with more than 200 physicians. Board-certified in gastroenterology and internal medicine, Dr. Saco is medical director of Lakeland Surgical & Diagnostic Center and has been the team physician for the Detroit Tigers and the Lakeland Tigers baseball team since 1985. Dr. Saco earned his Master of Business Administration degree from USF, and is a member of the board of directors of numerous organizations including Volunteers in Service to the Elderly, the Learning Resource Center and Florida Southern College.

- Barbara Melendez | USF News

## Students Lead Effort to Build USFSP Student Center

When **Jon Ellington** first began lobbying on behalf of USF St. Petersburg, he wasn't sure what to expect from his meeting with state lawmakers about the prospect of a new student center.

"Everyone was really supportive," Ellington says. "And saw that this is essential to have for a college experience."

Ellington, along with fellow student leaders **James Scott**, **Sarah Henry** and **Reuben Pressman**, lobbied in Tallahassee six times before the university received approval for a student activity fee increase needed to fund the building.

"Up until a few years ago, our student government had not raised fees like most student governments would," says Pressman, former SG vice president. "So we had some catching up to do."

The 81,000-square-foot student center will have indoor and outdoor dining facilities, meeting rooms, a 196-bed residence hall and a ballroom. Construction begins in March, and the building is expected to open by the Fall 2012 semester.

Situated along the Harborwalk promenade, the building is designed to become the focal point of student culture.

"It's geographically the center of the campus," says project architect Rick Rowe. "Which is right where a student center should be."

- Rob Baynard '12 | USFSP





## Painting the Hotel of the Future

Imagine going on vacation and deciding that you don't like the color of the walls in your hotel room. What if you could change it?

Electronic paint, which can be changed based on guest preference, is just one of the hot topics Cihan Cobanoglu, associate professor at USF Sarasota-Manatee has been researching for the past few years.

Cobanoglu teaches Hospitality Technology at USF's School of Hotel and Restaurant Management. He is currently working with the Ritz Carlton Sarasota to host the "Hotel of the Future" project. Travelers who love having the latest in high-tech gizmos will stay in rooms with Nintendo Wii gaming systems, lights and air-conditioning systems that turn off when the guest leaves the room, digital peepholes with

a video camera to see who is at the door, and many other modern conveniences. At the end of their stay, guests will survey the experience and the results will be used to create more a personalized hotel experience for guests.

Cobanoglu is helping to build a Master's degree in Hospitality Management at USF Sarasota-Manatee. As part of the program, students will get the opportunity to experience the "X-Room" for themselves and be a part of the research.

"The students will get to experience the latest and greatest ideas in technology for the hospitality industry," says Cobanoglu. "The hands-on research aspect of the project should be very interesting and a lot of fun for them."

- Crystal Rothhaar | USF Sarasota-Manatee

## USF Polytechnic Adds Faculty

As it continues to expand its programs and curriculum, USF Polytechnic is adding faculty and staff. Twenty-two new faculty members joined the campus over the last academic year, along with about six staff members. Fifty-five faculty seats are scheduled to be added this year, as well as accompanying support positions.

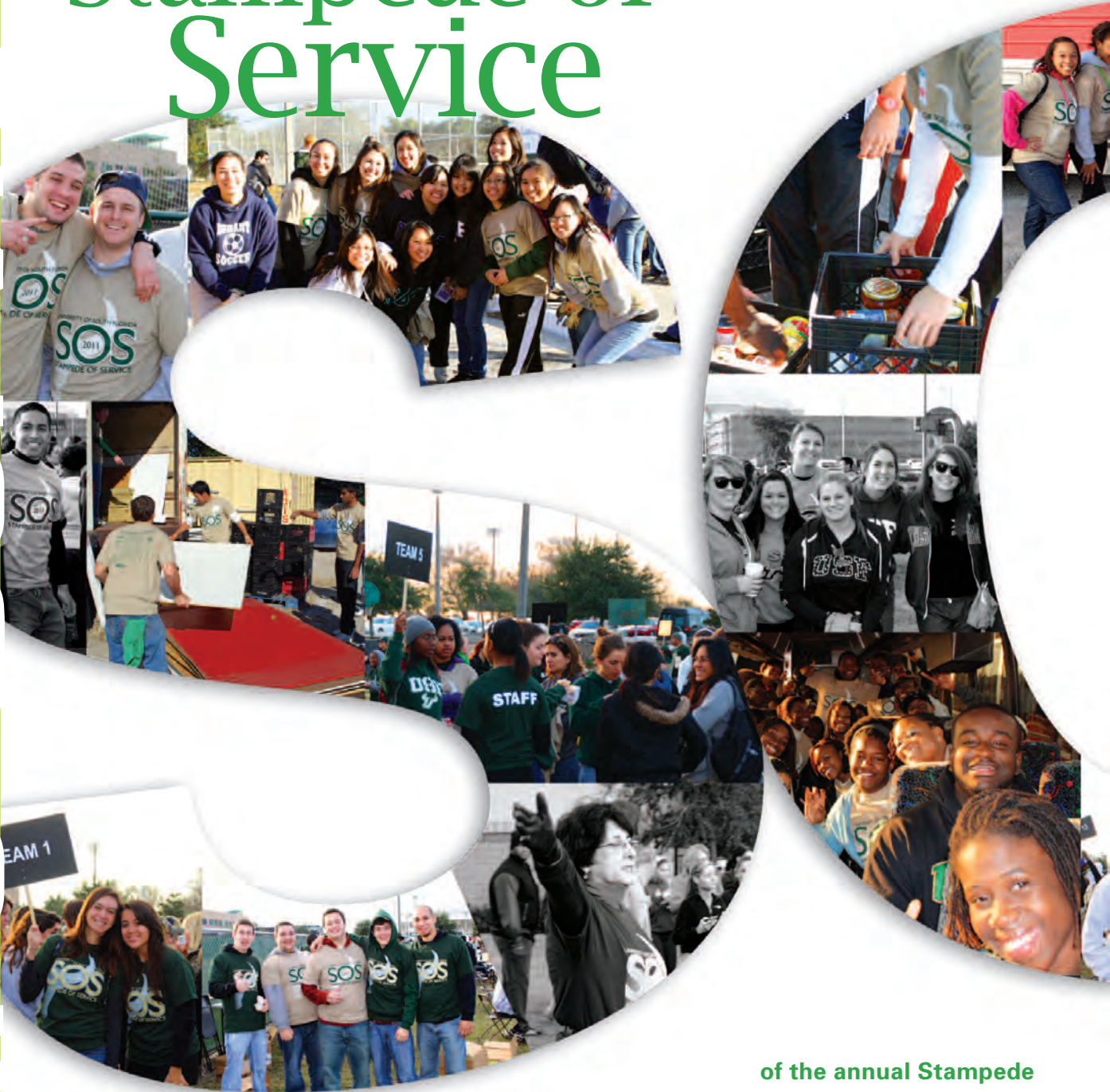
In addition to working to create a new campus on I-4, USF Poly is preparing to add freshmen and sophomores to its enrollment at its current campus in Lakeland. A small contingent is expected in Fall 2012.

USF Polytechnic is Florida's first and only public polytechnic university. It focuses on multidisciplinary, applied teaching and research – with a particular emphasis on science and technology – while also maintaining strengths in traditional fields such as business and education.

- Tom Hagerty | USF Polytechnic



# Stampede of Service



**More than 3,000** USF students fanned out around the Tampa Bay community in January, picking up trash, feeding the homeless, and visiting nursing home residents as part

of the annual Stampede of Service.

The student-led event, sponsored by the USF Center for Leadership & Civic Engagement, is a one-day community service celebration designed to get the word out about volunteering.





Participants in this year's event donated their time at 37 community sites.

Stampede of Service was the brainchild of Maxon Victor, a former USF student and student body president. Victor created the event

in 2006 to celebrate the Martin Luther King Jr. holiday and get students engaged in the community.

- Ann Carney | USF News

# More than 200 student organizations participated in the 2011 Stampede of Service.

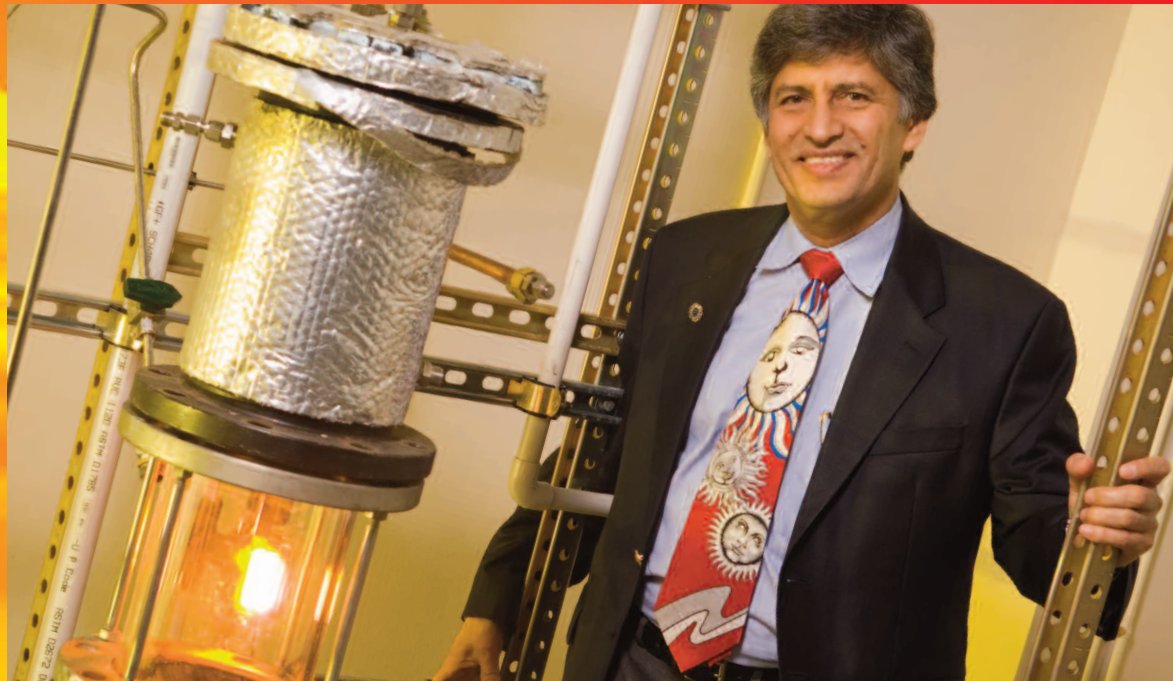
PHOTO ILLUSTRATION:  
NICHOLAS TROBIANO '12 | USF NEWS

PHOTOS COURTESY OF:  
USF STUDENT AFFAIRS

[More About SOS](#)



## Harnessing the Power of the Sun



Using \$ 4 million in state and federal grants, Yogi Goswami will build a solar field and storage system adjacent to the USF Research Park.

Goswami hopes to be able to show that energy can be captured from the sun, stored and released into the grid in a manner that will not cost consumers more. The key are specially designed pellets that will store heat as energy and then release it into a turbine which will create electricity.

For 30 years, Goswami's work on developing solar en-

ergy as a widespread source of power has been on the cutting edge of science.

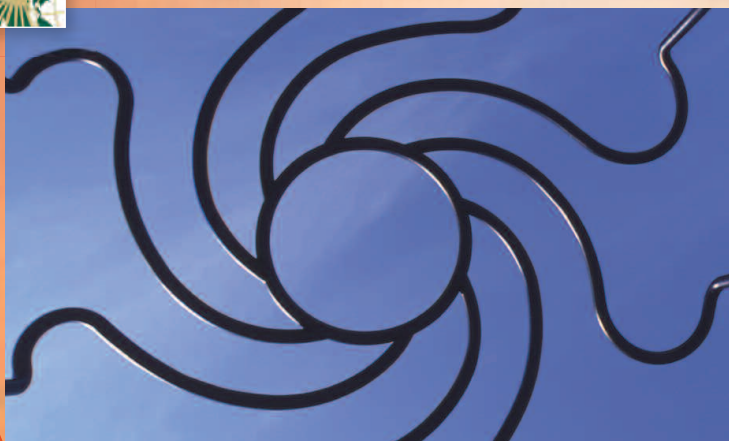
The energy storage system will allow the sun's power to be stored on sunny days and used when it is nighttime or cloudy. Construction on the demonstration project is planned to start later this year.

"What we are doing has never been done," says Goswami, the John and Naida Ramil Professor and co-director of the USF Clean Energy Research Center. "If we are successful, it will move the whole industry forward."





## Pure Sun: Public Art



Built in 1995, “Solar Rotary” is the creation of artist Nancy Holt, working with retired archaeo-astronomer and USF professor emeritus Jack Robinson. The sculpture was designed to mark the summer solstice, the longest day of the year. Not only does Solar Rotary cast a circle of light on summer solstice, but on five specific days of the year, at a specific time each day, the sculpture casts its circle of light around plaques in the ground that mark historic events in Florida and Tampa.

- Daylina Miller '12 | USF News

Solar Rotary



## Pure Sun: Solar Decathlon



“There is lots of work going on in solar energy, but the one thing that is absolutely necessary for solar energy to make a big impact is we must be able to produce it 24-hours-a-day. From that point of view, storage has become very important. This project becomes a key enabler for solar energy becoming a key part of our energy future.”

- Vickie Chachere | USF News

[View Video](#)

An interdisciplinary group is in the final stretch of a competition to build the world’s best solar-powered house. The group is led by USF’s School of Architecture and Community Design, and includes students and faculty from Florida State University, the University of Florida and the University of Central Florida.

The group will present its house in Washington, D.C. this fall at the U.S. Department of Energy Solar Decathlon. The competition challenges 20 collegiate teams from around the world to build a highly efficient solar-powered house showcasing energy-efficient amenities and smart home systems that reduce carbon emissions without sacrificing the comfort of modern conveniences.

- Barbara Melendez | USF News





# Design

# 30





USF Patel Center “LEEDS” the way to a sustainable future.



By VICKIE CHACHERE | USF News

## USF Unveils New Kiran C. Patel Center for Global Solutions

The countertops are made of recycled steel shavings, glass and resin; the toilets flush with captured rainwater; and the landscaping is native to Florida with drought-tolerant plants. Some of the new carpet used to be old carpets.

From the 30,000-gallon recycled water tank below ground to lighting systems that turn off automatically as an occupant leaves the room, USF's Patel Center for Global Solutions is designed and built to be efficient, respectful of strained natural resources.

The 75,000-square-foot center, USF's first fully-constructed sustainable building, houses the Kiran C. Patel Center for Global Solutions, the School of Global Sustainability, classrooms, programs for international students and large public meeting spaces. It is home to USF President Judy Genshaft and Provost Ralph Wilcox.

**The center was designed to represent the university's global role in solving difficult issues.**

"Everything about the building tangibly expresses the concept of sustainability," Holbrook says. Everything including:

- The use of natural light to lower the need for electric lighting
- Rooftop solar panels that heat water for use in the building
- Recycled and composite materials, such as doors made from bamboo
- Low or no-emitting paints and adhesives for improved indoor air quality
- Special parking spaces for energy-efficient vehicles and bikes

And of course, plenty of recycling bins throughout the building.



EXTERIOR PHOTOS COURTESY OF:  
CHARLES PERRY CONSTRUCTION, INC.







## UPDATE: Interdisciplinary Science Building will open for discovery in August.

The LEED-certified building  
features a seven-story atrium.



## UPDATE: Music Building is **State of the ART**

One of the most acoustically  
significant buildings in higher  
learning, the new Music Building  
features a 30-ton acoustical cloud  
in its 485-seat concert hall.



PHOTO COURTESY OF THE COLLEGE OF THE ARTS


PHOTO: AIMEE BLODGETT | USF NEWS





# Ice 30





A Aboard the research vessel Nathaniel B. Palmer, the scientists have endured the pitching and rolling of the ship in storms, dodged icebergs and ventured almost to the end of the Earth.

Photos by Paul Suprenand




Photo: Adélie penguins march across the Antarctic ice.





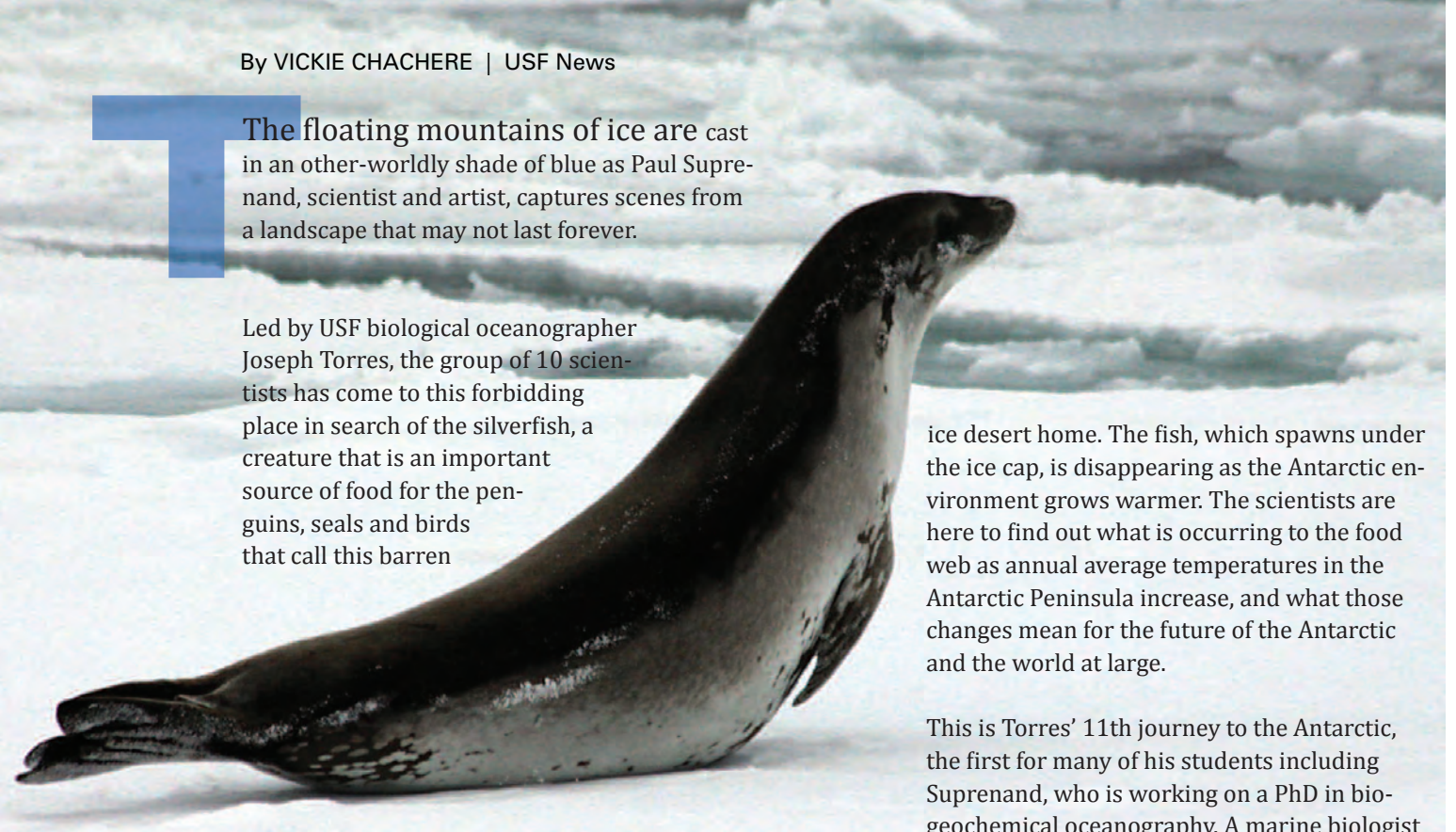
By VICKIE CHACHERE | USF News

**T**he floating mountains of ice are cast in an other-worldly shade of blue as Paul Suprenand, scientist and artist, captures scenes from a landscape that may not last forever.

Led by USF biological oceanographer Joseph Torres, the group of 10 scientists has come to this forbidding place in search of the silverfish, a creature that is an important source of food for the penguins, seals and birds that call this barren

ice desert home. The fish, which spawns under the ice cap, is disappearing as the Antarctic environment grows warmer. The scientists are here to find out what is occurring to the food web as annual average temperatures in the Antarctic Peninsula increase, and what those changes mean for the future of the Antarctic and the world at large.

This is Torres' 11th journey to the Antarctic, the first for many of his students including Suprenand, who is working on a PhD in biogeochemical oceanography. A marine biologist





## Seeking Answers

Scientists in Antarctica are working to search out clues on the Earth's changing temperatures. The National Science Foundation reports that research is pointing to warming temperatures already affecting the Antarctic ice sheets. The Antarctic Peninsula, which extends northward toward Chile, has warmed rapidly in recent years and in 2002, a massive ice shelf known as the Larsen B, collapsed into the sea. A preliminary study of sediment cores from the area suggests the ice shelf's collapse may be unprecedented in the roughly 12,000 years since the last Ice Age.

In addition to studying the changes in the food web of Antarctic organisms, scientists from around the world are looking deep within the ice through long cores extracted from deep in the ice sheet to reveal the chemistry of the atmosphere from hundreds of thousands of years ago. The National Science Foundation says a comparison of the chemical composition of the ice with the composition of the current atmosphere can demonstrate for researchers how the atmosphere has changed over time.

Nonetheless, Antarctica also shows contradictions: although there has been well-documented warming on the Antarctic Peninsula, NSF-supported researchers also have shown that the continent has actually cooled in the past 35 years. That presents new mysteries for understanding the animal inhabitants of Antarctica, like the Adélie penguin who have been shown to have abandoned nests when an area of Antarctica cools and ice build-up blocks their access to water and, thus, their food sources. The current population of penguins is believed to date back more than 500 years based on radiocarbon analyses of abandoned nests.

Using radiocarbon analyses of nests from abandoned colonies on Ross Island, scientists believe the modern, warmer, ice-free conditions that once again allow the birds to come and go developed in the region within the past 1,000 years. Because thick sea ice prevented them from reaching the area sooner, the Adélie colonies now living on Ross Island are likely no more than 500 years old.

## One Cool Project

[Read More](#)

USF College of Marine Science engineer Graham Tilbury plants the USF flag at IceCube Camp in the South Pole. Tilbury is part of a \$271 million effort to build a telescope – the world's largest – that will explore the cosmos by peering into the polar ice cap.





## Joseph Torres

**"I** would be lying to you if I didn't say that going to **th**e Antarctic isn't really compelling. It's one of **th**e most beautiful places on Earth. You are able to **se**e things that very few people have seen, you **ge**t to go places that almost nobody in the world **ge**ts to go.

"Originally, it was a real fertile field for new in-**fo**rmation – there was almost nothing known **ab**out it. For my guys (the silverfish), they (the sci-**en**tists) didn't know where they hung out, the en-**ti**re suite of species or what they ate. It's (the Antarctic sea) almost at the same temperature from top to bottom; there are only a couple of de-**g**rees of change. To me as somebody who studies deep-sea animals, there aren't many places in the world you can say that about. ... You have extreme seasonability, big changes in day length. A lot of what happens in the ocean is motivated by light that changes drastically. There are no herbs for the herbivores for a lot of the year that is the dark season, they have to cope with that – how do they do that? It's not just really one thing; it's a whole bunch of things that keep taking me back."



Photo: From right, Joseph Torres, Paul Suprenand and USF scientists aboard the Nathaniel B. Palmer.



prone to referring to his fishy study subjects as his “little friends,” Torres has made this end of the Earth familiar terrain even as it undergoes radical change.

For eight weeks, they toil around the clock dragging massive nets through freezing waters and enduring the rough ride across the Antarctic Circle. Their nets come up largely empty in places where silverfish could once be found in abundance and smaller, young silverfish are even more rare. Scientists with expertise in genetics and ones who can track a fish’s environment through chemicals recorded in the fishes’ ear bone are investigating alongside the USF scientific crew.

Up the food chain, the Adélie Penguin – a short, squat and snappish seabird – is disappearing along with it. Over the last 25 years, the numbers of Adélies have declined by an astonishing 70 percent.

“There have been big changes over the last 25 years,” Torres says. “There’s weather and there’s climate – but here you have a regional warming that’s been the same trend for the last 25 years. It’s a long-term trend and not a spike in the weather.”

The Antarctic as scientists have known it is vanishing, but Suprenand is capturing its stark and startling beauty with his camera for posterity. A native of Colorado who hiked and skied the mountains before falling in love with the ocean and its creatures, he is a scientist who has explored six of the world’s seven continents, always with camera in hand. The pictures he brings back are his own way of communicating the science and engaging people who might otherwise not think twice about what is being lost amid such rapid environmental change.

“There is so much science going on – but if I put it together with the images and a story, it engages the public,” Suprenand explains. “It’s a way to capture or memorialize what is true to the eye.

“In Antarctica, those ice flows exist because of warming – they are suddenly broken up and then gone. Not only am I documenting something that is abnormal and concerning to the Antarctic ecosystem, but I’m motivated to capture the wonderful beauty and preserve it.”





# On Nature

Situated on 10 acres of land at the intersection of Pine and Alumni Drive on the southwest corner of campus sits a quiet oasis – a rich resource for research, teaching and community outreach. An unexpected landscape.





me



PHOTOS COURTESY OF  
MATT CLARK | [BloomingDaily.com](http://BloomingDaily.com)



# Pure

# Nature



## Flowers:

Front pages | Begonia, Strawflower (Bracteantha bracteata)

Above | Japanese lantern, (Abutilon x hybrida), Cassia (Senna)

Cup and Saucer (Cobaea scadens)

PHOTOS ABOVE COURTESY OF:  
MATT CLARK | BloomingDaily.com

Pg. 31: SANDRA FRIEND | SandraFriend.com

By ANN CARNEY | USF News

Opened in 1969 as a teaching and research facility for the biology department, the USF Botanical Gardens is today home to more than 3,000 species of plants and natural habitats. With its open vistas, shady walkways, tropical backdrops and flowering trees, the gardens provide an unmatched setting for artistic inspiration, envi-

ronmental testing, field classes, community workshops, plant sales, special events and more.

“Both formally and informally, the gardens connect people to plants in so many ways,” says Laurie Walker, the gardens’ director. And offer an escape to pure and natural beauty.



AIIMEE BLODGETT | USF NEWS



## Living Laboratory

On a 160-foot square patch of land in the southeast corner of the gardens, a medicinal plant garden is taking root. The small plants and seeds that will be carefully cultivated there could lead to innovative discoveries such as new treatments for cancer, malaria and other diseases.

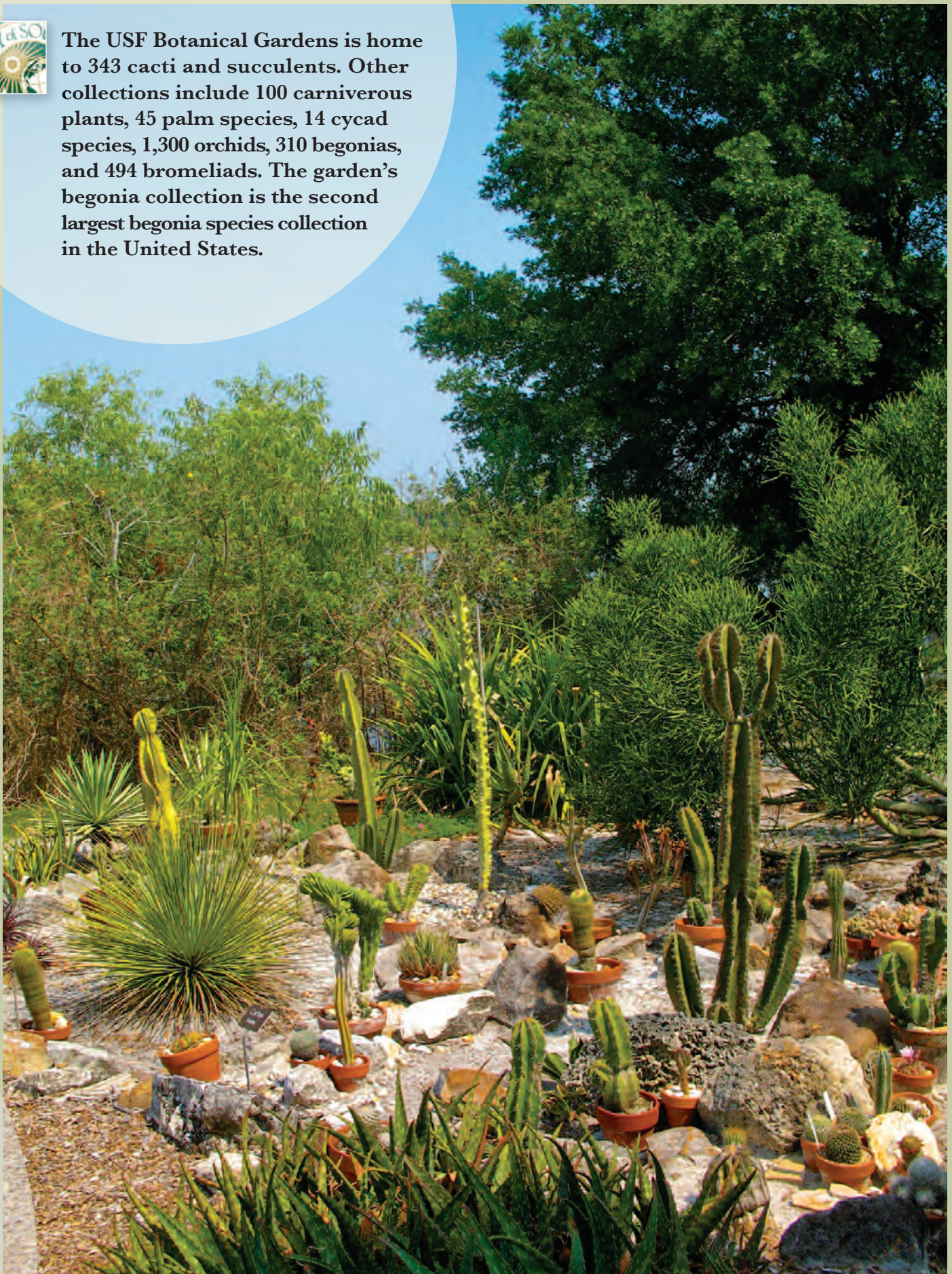
USF senior Tony Kurian, a biology major and president of the USF Botanical Gardens Club, was the driving force behind the new garden. His interest in medicinal plants originated with his honors thesis on the anti-malarial qualities of the Caribbean Princewood tree.

[See Slideshow](#)





The USF Botanical Gardens is home to 343 cacti and succulents. Other collections include 100 carnivorous plants, 45 palm species, 14 cycad species, 1,300 orchids, 310 begonias, and 494 bromeliads. The garden's begonia collection is the second largest begonia species collection in the United States.





# Heroes

# Reborn

## Restoring Lives

By ANN CARNEY | USF News

He chooses to remain anonymous, telling his story so others might understand. He was traveling in a convoy in Southern Afghanistan when the suicide bomber struck. When, in an instant, his life was forever changed.

Nearly two months in a military hospital in Germany. Alone. Email, his lifeline to his wife in the States.

“This will test us,” he wrote.

Surgeons repaired his broken body and sent him home. But he knew he wasn’t right.

“I was getting angry at the most miniscule things,” he recalls. “I’d go

PHOTO: THINKSTOCK





from zero to 60 in about point-five seconds.”

He wouldn’t talk to anyone. Civilians made him angry. Sometimes, his parents later said, he’d just stare. Once, driving on the highway, he pushed on the gas pedal until the speedometer hit 150. His wife suggested he was suffering from post-traumatic stress disorder. Suggested he get help.

“I didn’t want to believe it; I didn’t want to be labeled with that,” he says. “But I saw what it was doing to my family and I decided to get help.”



# Pure Heroes

He is one of the more than 2 million U.S. troops, the heroes among us, who have deployed to Iraq and Afghanistan since Oct. 2001. Just one of the many combat veterans struggling to heal from their experiences.

And he is the focus of a \$ 2.1 million federal grant recently awarded to the USF College of Nursing to assist service members and veterans of the wars in Iraq and Afghanistan with symptoms of combat exposure including post-traumatic stress disorder (PTSD) and mild traumatic brain injury (TBI). The project is part of the RESTORE LIVES (Research to Improve Emotional Health and Quality of Life among Service Members with Disabilities) Center, based at USF and established to develop and evaluate treatments to complement services provided by the VA Healthcare System, TRICARE, and the conventional health care system.

combat veterans. Before joining the RESTORE LIVES Center, she was a clinical service delivery manager for Military One Source, a free and confidential 24/7 resource and referral center for all active duty, guard and military reservists and their immediate families (MilitaryOneSource.com).

"I'm a voice for the service members and their families. I'm with them," she says. "I've heard their voices. I know their struggles. I feel that I'm a liaison between research and practice."

The two-year grant was awarded to the college by the U.S. Army Medical Research & Materiel Command and the Telemedicine & Advanced Technology Research Center. It will support five studies designed to help soldiers of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) overcome psychological trauma and other health problems that come from serving in combat operations.

**“If all the trained therapists worked 24 hours a day, seven days a week, they couldn’t begin to meet the needs of these courageous service members and veterans.”**

– Kevin Kip

## An overwhelming need

Kevin Kip, associate professor and executive director of the College of Nursing Research Center, is principal investigator for the grant. An epidemiologist by training, Kip first proposed the idea for a study focused on the specialized needs of service members and veterans with psychological problems in 2008.

"The need is overwhelming," he says. "If all the trained therapists worked 24 hours a day, seven days a week, they couldn't begin to meet the needs of these courageous service members and veterans."

Longer and more frequent deployments to combat, infrequent breaks between deployments, and advances in medical technology and body armor mean more and more service members are surviving experiences that would have previously resulted in death – and struggling to restore the lives they once knew.

Carrie Elk, a psychotherapist and assistant professor in the College of Nursing, understands the unique challenges of

■ One study, a PTSD treatment study, will test the effectiveness of Accelerated Resolution Therapy (ART) among veterans. The therapy integrates back-and-forth eye movements with activities in the brain, while the subject's thoughts are focused by a trained therapist. The intervention allows the subject to remember the narrative story, but lose the negative images and replace them with something positive.

■ A second PTSD treatment study will examine the results of an online intervention called Acceptance Commitment Therapy (ACT). The Web-based therapy offers veterans the anonymity that can mean the difference between seeking treatment and suffering alone.

■ A third study will collect data to gain information about the true extent of PTSD as well as high-risk behaviors and mental health concerns associated with PTSD.

■ A fourth study will focus on female veterans. Led by Maureen Groer, a nurse physiologist and director of the Center for



Women's Health Research at USF, the study will explore the prevalence of reports of sexual assaults and extreme traumatic experiences among female veterans, and investigate how female veterans cope with stress and symptoms of PTSD, depression and anxiety. "I think we will see women who are not getting the kind of health care they need," Groer says.

■ A fifth study will investigate a Web-based intervention to help veterans with mild TBI.

### Collaboration focused on improving veterans' lives

Two of the five studies are being conducted in collaboration with researchers at the University at Albany, State University of New York (UAlbany). The researchers are part of a team of about 50 scientists, epidemiologists and other specialists who form the infrastructure for the project.

That the project is based at USF is no surprise to Kip. The university is uniquely focused on improving the lives of veterans.

"The RESTORE LIVES Center is entirely consistent with the university's overall veteran's reintegration strategy," he says, adding that Tampa is the best place for veterans transitioning back to society. "No matter what physical and psychological problems they are dealing with, they can be treated here. The weather is good for getting around and the university's Office of Veterans Services is focused on helping veterans achieve their educational goals."

The virtual center is a collaborative effort between the USF College of Nursing, the James A. Haley Veterans' Affairs Medical Center and UAlbany. It is funded by the U.S. Department of Defense with assistance from U.S. Rep. Kathy Castor and former U.S. Sen. Mel Martinez.

"The research conducted through the RESTORE LIVES Center is unique in the nation and is critical as we now have the largest number of combat veterans re-entering mainstream America since the Vietnam era," says Dianne Morrison-Beedy, dean of the USF College of Nursing and senior associate vice president of USF Health. "The cutting-edge therapies being tested are designed to literally restore the lives of our honored soldiers and veterans."

The heroes among us.



PHOTO: GETTY IMAGES



By ANN CARNEY | USF News

## College of The Arts Hits a High Note

“This is the moment an entire college dreamed for, hoped for, planned for, and desperately needed for more than 40 years,” says USF College of The Arts Dean Ron Jones.

A new Music Building. An All-Steinway initiative. Impending renovations and expansion.

USF’s College of The Arts is on a meteoric rise. In March, the college will open its new, state-of-the-art Music Building, one of the most acoustically significant buildings in higher learning.

“With one bold stroke we will move into the rarified atmosphere of the most elite music institutions around the world,” Jones says. “Everyone from our students and faculty to our Tampa and Florida community will benefit in a dramatic and tangible way.”

Nearly \$50 million in state funding allowed for the construction of the new Music Building, but it was the generous support of private donors that transformed the dream of a good facility into the reality of one of the best in the nation.

Drs. Enid and Lewis Barness gifted \$600,000 to the project. One of the founding fathers of the USF College of Medicine, Lewis Barness dreamed of

being a violinist as a child. He hopes the new building will help aspiring musicians realize their future in music.

“Good music is like good medicine that benefits all mankind,” he says. “When music comes into our lives it leaves footprints in our hearts and souls.”

Just last year, USF President Judy Genshaft announced the university’s commitment to becoming an All-Steinway School, joining the elite roster of colleges and universities whose students and faculty practice, compose and perform exclusively on Steinway pianos. The initiative got a huge boost in the fall with a \$100,000 anonymous gift through the USF: Unstoppable campaign – a gift that adds a Steinway Concert Grand piano to the collection.

“This is a transformational year for the college,” says Jones, detailing other plans, including new space for the Art program and renovations to the Contemporary Art Museum. The college is also home to the schools of Architecture & Community Design, Art & Art History, Music, Theatre & Dance, and the Institute for Research in Art, including Graphicstudio and the Contemporary Art Museum.

“None of this would be possible with-



“This is a transformational year for the college.”  
– Dean Ron Jones

### The Sounds of Steinway

- Each Steinway piano is handcrafted of 12,000 individual parts and takes about one year to create.
- No two Steinways are exactly alike.
- About 120 schools and conservatories worldwide claim the All-Steinway School designation.





STEINWAY & SONS

out the support of many, many people, including Lee and Victor Leavengood, who have generously supported the college over the years with more than \$700,000 in gifts, and Jane Bangert McNeil and her husband, Rory, who recently gave \$200,000 to the college." Their gift, made in memory of Jane's mother, a former USF theatre student, establishes an endowment that will help senior theatre students launch their own professional careers.

"These plans are a promise of what the future will hold for the College of The Arts. They are a commitment to passion and excellence in every aspect of the student experience," Jones says. "They will help us redefine who we are as a School of Music and as a College of The Arts, and to reach unprecedented levels of national and international recognition."

PHOTO COURTESY OF:  
STEINWAY & SONS

[View Video](#)

### **USF: UNSTOPPABLE**

To date, the USF: Unstoppable campaign has raised more than \$394 million of its \$600 million goal. To learn more about the campaign and opportunities for giving, visit [www.unstoppable.usf.edu](http://www.unstoppable.usf.edu)



# Season Highlights



November 27, 2010



## Football

**BULLS DEFEAT MIAMI** (above) – USF defeated Miami in a thrilling, 23-20, overtime contest. The win marked the Bulls' first-ever victory over the Hurricanes and propelled them to a berth in the 2010 Meineke Car Care Bowl.

**MEINEKE CAR CARE BOWL** (right) – USF played in its sixth consecutive bowl game and won its third consecutive postseason game when it defeated Clemson, 31-26, in the 2010 Meineke Car Care Bowl in Charlotte, NC. The Bulls are one of only four programs nationally that have won three straight bowl games.

December 31, 2010





## Women's Soccer

### WOMEN NATIONALLY RANKED FOR FIRST TIME

USF Women's Soccer, led by head coach Denise Schilte-Brown, made its first-ever BIG EAST Conference championship appearance in 2010, and its first-ever NCAA Tournament appearance, advancing to the

second round. It was the Bulls' best season in program history – a season that additionally earned the team a first-time ranking in the national polls.

PHOTOS AND STORIES:  
USF ATHLETICS

[WWW.GOUSFBULLS.COM](http://WWW.GOUSFBULLS.COM)





# Eric Shepherd

By ANN CARNEY | USF News

As an undergraduate political science major at Ohio State University, Eric Shepherd took Chinese solely to meet the undergraduate language requirement. Little did he know, the class would change his life.

Today, Shepherd leads the Chinese language program within the Department of World Languages at USF. He is a master in Shandong kuaishu, the traditional art of Chinese storytelling. Audiences marvel at his skill.

Students in Shepherd's program spend three semesters abroad – eating, drinking, conversing, performing and working in China-based companies. Shepherd wouldn't have it any other way.

**USF:** Why is culture such an important part of learning Chinese?

Because language and culture are inseparable. There are cultural differences across every language, but the culture adjustments students have to make in Chinese are so much greater. So, from the first day we involve them in culture.

**USF:** What's the most important thing you teach your students?

We put significant emphasis on autonomous learning. Their time at USF is really short. We train them how to learn on their own and how to learn from and though Chinese people in

an effective way. If you have one friend in China, you have one friend and one professor. If you have 100 friends in China, you have 100 friends and 100 professors.

**USF:** What do you think is behind the dramatic increase in the number of Chinese language students at USF?

I think I've had an impact on that. We've created a coherent program with an articulation plan. And we've connected learning Chinese with their career path. We set up classes so students get the feeling of having success every day and that builds on itself. It also has to do with the success of our students.

**USF:** What path do you see for your students?

I am expecting double majors from our students. An American who speaks Chinese but has no skills doesn't really offer anything. An American who speaks Chinese at a sophisticated level and has a finance degree, for example, is gold. The goal is for students to immediately go into an American organization and contribute using their skills.

**USF:** What would most people be surprised to know about you?





< Eric Shepherd and USF Chinese language students, joined by their hosts and local school representatives, visit a cherry orchard in Laoshan.

If you have 100 friends in China, you have 100 friends and 100 professors.



My life has been so public, at least in China, I don't think there's anything about me that hasn't been out there.

**USF:** What's next?

Continuing to develop the program here and finishing the process to make it a major. I love teaching the language, but where I can contribute most is teacher training - working with native speakers of Chinese to be effective in the classroom. Chinese teachers don't understand what an American student is going through. If you understand that, you can be a much more effective teacher.

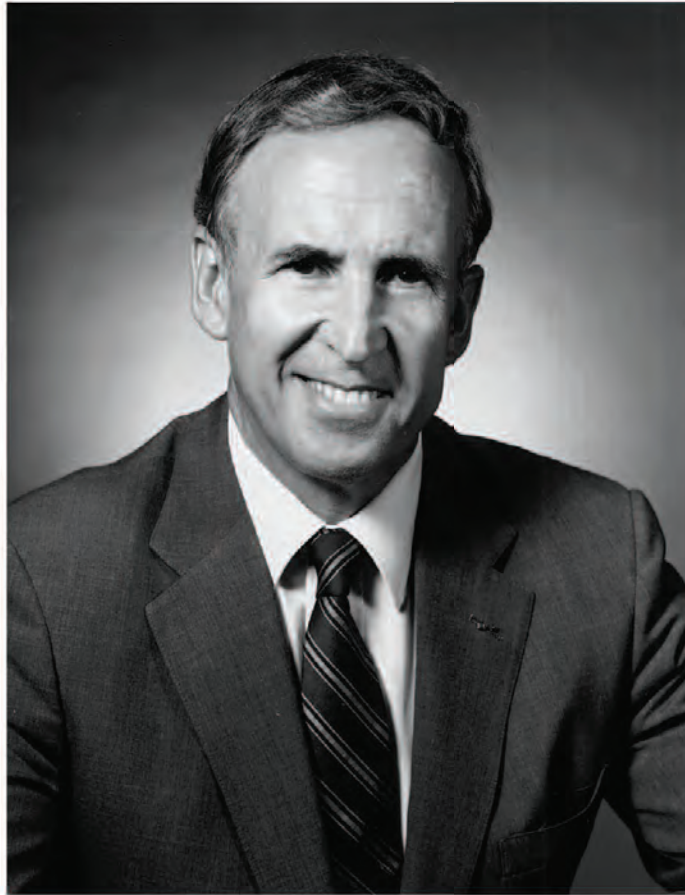
< Using two flat, brass plates called yuanyang ban, Shepherd creates drama and suspense, spinning a tale in rapid rhythms with skill that some say rival that of Chinese storytellers.

[View Video](#)

PHOTOS: AIMEE BLODGETT | USF NEWS



# John Lott Brown



Dec. 3, 1924 – Jan. 16, 2011

## Former USF President Remembered

USF's third president, John Lott Brown, died in January at the age of 86. His decade of service, from 1978 to 1988, saw the transformation of USF from a small liberal arts college into an emerging research university.

Some of the programs and initiatives that blossomed during his tenure included research grants increasing to \$23 million from \$14.7 million; adding 38 degree programs; the USF libraries topping more than 1 million books and publications; and enrollment swelling to 30,000 students making USF Florida's second largest public university. At that time the university also showcased a medical school, an engineering college, the Moffitt Cancer Center, and campuses in St.



Petersburg, Lakeland and Fort Myers.

"I believe I share in an understanding of how gratifying it is to be part of USF's extraordinary growth. The USF community owes a debt of gratitude to John Lott Brown's hard work and dedication," said USF President Judy Genshaft. "His contribution to making USF what it is today will always be remembered."

Michael Hoad, vice president of communications for USF, covered the university for the *Tampa Tribune* during Brown's tenure and got to know him well.

"He paid close attention to ideas and brought an engineer's mind to analyzing the pros and cons," Hoad said. "That was one of his greatest strengths in building the professional colleges and recruiting researchers. He clearly set the stage for USF's growth in becoming a major research university."

Before coming to USF, Brown was director of the University of Rochester's Center for Visual Science. A veteran of the Navy and the Naval Reserve, he was involved in research on the body's ability to endure flights in space.

Brown and his wife, Catherine, who lived in Ohio at the time of his death, had four children.

John Lott Brown is credited with overseeing USF's transformation into an emerging research university.



### A Legacy of Giving

An endowed scholarship in the name of Catherine and John Lott Brown was established at the USF Foundation 1988. The scholarship provides opportunities for academically talented students from diverse backgrounds. To learn more, contact the USF Foundation at <http://giving.usf.edu/> or call 813-974-9583.







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NICHOLAS TROBIANO '12 | USF NEWS

## Pure Spirit

USF alumni, fans and friends shared their memories from the Meineke Car Care Bowl in December. More than 200 fan-generated images were uploaded to the USF news site, [www.usf.edu/news](http://www.usf.edu/news). We'll be looking for more of your photos from special events, so keep your cameras handy and keep those "Bulls in Focus."