

### FALL 2011

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# Welcome to a new fall semester at USF! traordinary pace throughout the summer as yell in this issue you will read about

Welcome to a new fall semester at USF! As classes get into full swing and our campus comes alive with activity, I am filled with pride and enthusiasm about the future.

In August, we rolled out the welcome mat for our largest-ever incoming freshman class – a diverse class with outstanding academic credentials representing nearly every corner of the globe. These exceptional students are a testament to our outstanding faculty and the extraordinary programs we are building at USF.

While the summer is traditionally a time for rest and relaxation, things never slowed here at USF. Thousands of students continued their studies on campus while others embarked on international education experiences. Take a look at our World feature on page 16. More than 550 students traveled to nearly 30 countries to learn in the truest sense through study abroad and service learning opportunities.

The spirit of discovery maintained its ex-

traordinary pace throughout the summer as well. In this issue you will read about the life-changing work going on at Draper Laboratory, geological research that could rewrite human history and a laser scanning system that is revolutionizing archaeological and historical exploration.

Just before the start of the fall semester, USF Health CEO Dr. Stephen Klasko welcomed the fist class of students to SELECT – a novel program aimed at developing physician leaders for the future.

Perhaps the largest statement about the future of USF came through the *USF: Unstoppable* campaign. In July, the campaign closed its fiscal year breaking records for fundraising in a single year – more than \$30 million over the previous record set in 2008.

There is so much excitement throughout the USF System. I invite you to explore this issue of *USF Magazine* and share my enthusiasm!

President Judy Genshaft

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

#### Research Powerhouse

The number 83 has proved to be an important one for USF. That's the number of patents granted to the university by the United States Patent and Trademark Office in 2010 - a number that puts USF ninth worldwide among universities granted U.S. patents last year.

It's an impressive accomplishment owing to USF's unwavering focus on ingenuity and entrepreneurism.

USF was the only university in Florida to make the list of the top 300 patenting organizations compiled by the Intellectual Property Association. The list, largely occupied by corporate entities, includes 13 American universities and university systems and one university in China.

The ranking speaks volumes about USF's growth as a global research university and a key economic driver for the region, according to USF President Judy Genshaft.

"For a public research university, each patent represents the potential of a considerable return on investment in the creation of new products, new jobs and new industries. Each patent also represents the potential to improve health care, lives and our economy."

USF has patented a wide range of new technologies, including TC5214, an anti-depressant now in clinical trials with Targacept and AstraZeneca, new stem

cell therapies, a rolling dance chair that allows people with disabilities to move more freely, and underwater laboratory equipment that can operate autonomously in the oceans' depths.

More recently, USF and its researchers have been granted U.S. patents in fuel cell technologies, air purification systems and even an amusement park ride.

VICKIE CHACHERE | USF News

th in the World among universities

granted patents

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#### STUDENT SUCCESS



#### Working to Learn

"I'm not just doing random special projects. I'm getting real-world experience that is meaningful and has an impact."

- IENNA WITHROW

For Jenna Withrow, working on campus has provided more than a paycheck. It's provided real-world experience and the opportunity to discover a passion.

Withrow, a senior mass communications major, is a social media intern in the Office of University Communications & Marketing. She's one of about 3,000 USF students who work on campus and the experience she is having is the kind of experience the Division of Human Resources is working to create campus-wide.

Why? Because research shows that students who work on campus are more engaged and more likely to be successful in their academic pursuits. Last year, as part of the USF Student Success Movement, the Division of Human Resources began working to centralize, enhance and increase oncampus student employment opportunities. In May, the division launched a series of workshops to train USF employers in recruitment and selection and making jobs meaningful and related to students' career goals.

Students like Withrow. Each day Withrow updates and monitors USF's social network sites including Facebook, Twitter and YouTube. She just helped launch the university's first Tumblr blog, LinkedIn profile and Foursquare page.

"Working in University Communications & Marketing has helped me dis-

#### **World Class**

When USF launched its School of Global Sustainability in early 2010, it was a venture aimed at rewriting the rules of academic programs, preparing students for an emerging field and confronting some of the world's great global challenges.

In August, a dozen students graduated with USF's first Master of Arts degree in Global Sustainability. They traveled the world exploring different facets of "green" and what can be done to make the most of limited resources.

"I began asking the what-do-you-want-to-look-back-on question, and I could think of nothing more 'enduring' than sustainability," says graduate Joy Ingram, who has a background in business and software development. "From an economic perspective, I think this is the right time for a career in

sustainability – kind of like getting in on the ground floor."

The class represents an important milestone for USF and for the sustainability movement, says Kala Vairavamoorthy, founding director of the Patel School of Global Sustainability.

"For the first time, we have a class of students with in-depth studies and knowledge specifically geared toward a new way of looking at creating sustainable systems and industries."

VICKIE CHACHERE | USF News



cover a passion for social marketing and technology I didn't know I had," she says. "I'm not just doing random special projects. I'm getting real-world experience that is meaningful and has an impact."

It's not just the students who benefit, according to Student Success Recruiter Cynthia Bacheller, who is helping lead the student employment initiative. "When students are used to their full potential, the department gets a lot more value."

As part of the initiative, leaders are working to centralize all on-campus job postings. By May 2012, they hope to have all temporary positions for undergraduate and graduate students, including Federal Work Study positions and on campus, non-USF jobs,

such as bookstore and dining positions, posted to a single site, employment.usf.edu. The site is a joint initiative between the USF Career Center and the Division of Human Resources. There's even a Facebook page, a job search Web page and student employee orientations.

It's an initiative, Bacheller says, that's catching on campus-wide and making a difference for students.

"I'm getting experience I can't get in the classroom," Withrow says. "Working on campus has been so beneficial to my classes. My bosses have been so flexible with my schedule. They understand we are students first and employees second."

ANN CARNEY | USF News

#### **Top Scholars**

27

USF ranks 27th among "America's Top Research Universities," a ranking of 600 universities.

110

USF ranks 110th among all of the world's universities in a ranking of faculty publications – "High Impact Universities, 2010."

LeRoy Petersohn, 11th Armored Division, US Army. Eye witness narrative of the Mauthausen and Gusen liberations. Concentration Camp Liberators Oral History Project (part of the Holocaust & Genocide Studies collections).

"Paeonia corallina" from British Phaenoga-

mous Botany by William Baxter, 1834-43. Rare Book Collection (part of the Literature

and Book Arts collections).

#### History Preserved

Tucked away on the fourth floor of the USF Tampa Library sits a rich repository of historical treasures – a 4,000-year-old cuneiform tablet, the oral testimonies of the Allied service men and women who helped liberate World War II concentration camps, photographic prints of Eadweard Muybridge, a pioneer photographer and the father of the moving image.

USF Libraries' Special & Digital Collections houses rare, fragile and unique source materials ranging from early printed books, photographs and illustrations to sheet music, ephemera and maps arranged around seven major collecting areas.

While there is much to see and touch, it's what you can learn that makes Special Collections such an important destination according to Mark I. Greenberg, director of Special & Digital Collections.



"We exist to support an honors thesis, a dissertation, to help a faculty member or researcher

Photos and Illustrations pgs. 8-9 courtesy of the USF Libraries Special Collections

Basin collections).

Gasparilla Pirate Invasion, 1938. Burgert Brothers Photograph Collection (part of the Florida and Caribbean

#### **Collecting Areas**

O Florida and Caribbean Basin - A collection relating to Florida's history and culture. especially the Tampa Bay region and its relationship with the Caribbean. Ybor City, West Tampa's immigrant experience and the Spanish Civil War make up some of the collection's major focus areas.

O Children's and Young Adult Literature - A collection including more than 25,000 volumes that support the study of historical and contemporary American young adult and children's literature.

O Science Fiction - A collection including pulp magazines, several thousand iconic works and a growing collection of Spanish language science fiction.

#### O The Holocaust & Genocide Studies Center Collection -

A new and major collecting area focusing on 20th and 21st century events in Europe and Africa.

O The Arts - A collection encompassing theater, photography and prints, cartoon art and sheet music, including the Dion **Boucicault Theatre** Collection, one of the largest Boucicault collections in the world.

O Literature and Book Arts - A collection featuring the history of the book with examples of early printing in western Europe and America, a 10,000plus volume Dobkin collection of 19th Century Americana. and a range of British and American history and literature.

O Digital Collections - A growing collection that provides online access to many Special collections materials.

"Tampa Life" cigar box label, E 1927, Preston Cigar Co., Gomez Ave., Tampa. Tampa Cigar Industry & Art Collection (part of the Florida and Caribbean Basin collections).



Orbis Terrarum. Florida

Map Collection (part of

Basin collections).

the Florida and Caribbean

TAMPA LIFE

"La Florida" by Geronimo Chaves, c1600. Originally appeared in: Theatrum

Dion Boucicault, 19th century playwright, actor, and producer, as Conn in his play "The Shaughraun." 1874. Dion Boucicault Theatre Collection (part of the Arts collections).

A virtual showcase for USF's research and creative energies is now available online.

Launched this past summer,

Commons

Scholar

Scholar Commons (scholarcommons. usf.edu) provides free access to the scholarly output of USF faculty and students.

The program is aimed at disseminating knowledge and growing the legacy of research and scholarship at USF.

To date, only a handful of universities, including MIT, Stanford and Harvard, provide open access publishing. Typically, an institu-

tion's research and scholarship are controlled by exclusive forprofit publishing agreements that strictly limit access and use. The new program makes available a wide variety of publication types and formats including peer-reviewed schol-

arly publications, journals, unique historical collections, teaching tools and ebooks. The material is available to interested readers anywhere in the world free of charge.

ANN CARNEY | USF News

#### First Class

Eager to blend the detailed science he liked in his chemistry courses and the patient interaction he wanted in a career, Mark LaBossiere had no problem deciding to apply to USF's College of Pharmacy.

"We are charting new territory in pharmacy education."

- DR. KEVIN SNEED

Little did he know that he would not only make the cut and be accepted into the inaugural class, but he would be the very first student asked to join. This fall, he joined 49 classmates as

they began classes.

"I took the call while I was at work," LaBossiere says.

"Needless to say, I was thrilled with the news. I have found that my learning is much better when it's done in a self-directed style, which is Dr. (Kevin) Sneed's approach to this program."

The USF College of Pharmacy was established in 2007. From the outset, founding Dean Kevin B. Sneed set out to build a program that will be a pacesetter in pharmacy curriculum and clinical experience. The program incorporates a 360-degree approach valuing every patient as a unique individual with distinct needs, while maintaining its emphasis on drug research and treatment as sciences.

"We are charting new territory in pharmacy education," Dr. Sneed says.

"Our student pharmacists will be trained to participate as effective and integral members of an interprofessional health care team. Students are handpicked for qualities that go beyond test scores and grades."

In keeping with the innovative aspect of the new pharmacy school, candidates face a unique interviewing process. Called multiple-minimum interview (MMI), the process is a series of seven stations, each with an interviewer who asks a specific non-academic question that elicits answers that show certain traits.

"The MMI is fairly new and aims to find softer skills, like teamwork and interpersonal aptitude, which not





#### **NEW TERRITORY**

First student Mark LaBossiere, left, and Dean Kevin Sneed, above, are part of the new pharmacy program.



only indicate a likelihood for success in our program, but for success as pharmacists, as well," says Nazach Rodriguez-Snapp, director of admissions for the USF College of Pharmacy.

Dr. Sneed says this first batch of students absolutely matches his expectations.

"All of our first students have the collaborative, creative, energetic traits we want in this program," he says.

"The USF College of Pharmacy is poised to propel the pharmacy profession forward. It's never been about us, really, but about the students and the patients they're going to serve in the future."

SARAH A. WORTH | USF Health

#### CANCER FIGHTER >

Dr. Douglas Reintgen was principal investigator for the USF study site.

#### Vaccine Shows Promise

For patients with advanced melanoma, the deadliest form of skin cancer. a vaccine combined with a drug that boosts the body's immune system could hold new hope.

USF was among 21 centers nationwide participating in the Phase 3 clinical trial of the combination therapy - one of the most comprehensive studies of the therapy's effectiveness to date. Results of the trial, sponsored by the National Cancer Institute, were published in the June 2 issue of the New England Journal of Medicine.

metastatic melanoma were randomly assigned to receive a peptide vaccine in combination with the

immune-boosting drug interleukin-2, or interleukin-2 alone. The study found that patients who received the vaccine-drug combo had significantly higher response rates and improved disease-free and overall survival rates than patients who received the interleukin-2 alone. It is the first Phase 3 trial to clearly demonstrate a survival benefit in a vaccine for melanoma.

USF Health surgeon Dr. Douglas Reintgen, principal investigator for the tion treatment get FDA approval and



USF SYSTEM

#### **Modernizing Math**

uses computer applications, Web

and SRI International, is already in Pinellas

the learning of advanced math-

SRI International President and Chief Executive Officer Curtis

professional devel-

#### USF SARASOTA-MANATEE

#### Lights, Camera, Learn!

In one of the only ventures of its kind in the nation, USF Sarasota-Manatee and Sarasota-based Sanborn Film and Television Institute have teamed up to offer a new master of business administration degree with a concentration in film and TV production.

The program, launched in the fall, will teach students the knowledge and skills needed to successfully develop, market and finance film and television productions. The College of Business, through its MBA program, will teach necessary business skill sets; the College of Arts & Sciences will provide the film concentration; and Sanborn Film and Television Institute will provide studio-based practicums covering the essentials of film production.

Robert Anderson, Dean of the College of Business, says the new venture is a "commitment to the community to continue to help develop the economic base of the region."

And a commitment to providing real-world education with hands-on experience.

"Students will be involved in learning all aspects of the film industry," says Ken Sanborn, chief executive officer of the Sanborn Film and Television Institute. "It is wonderful to have the technical knowledge, but you also need to have the business foundation to succeed in the film and TV business."

MISSY COOPER | USF Sarasota-Manatee

The USF Sailing Team finished its 2011 spring season with a 12th place finish at the Sperry Top-Sider/ICSA Women's National Championships in Cascade Locks, Ore.

#### **USF POLYTECHNIC**

#### Hi-tech Tracking

Tracking and tracing a cancer pain medication could get more efficient thanks to research under way at USF Polytechnic.

Researchers at the university are working with Cephalon, Inc. to implement and optimize radio frequency identification (RFID) technology for the crucial drug. The technology includes a device that uses radio waves to exchange data between a reader and a small electronic tag attached to the packaging.

RFID is one of several track and trace options being tested throughout the industry to reduce the time necessary for measuring inventory, monitoring distribution and confirming authenticity of pharmaceuticals.

Working with Cephalon, the Polytechnic team recreated a packing production line in the College of Technology and Innovation's research laboratory. The simulated line will allow researchers to accurately implement the technology says Ismail Uysal, associate professor and co-principal investigator on the study.

SAMANTHA LANE L USF Polytechnic

#### RESEARCH

#### Laser Focus

Two USF researchers who have used high-tech scanning devices to unlock the secrets of archaeological sites around the world are the new North American training directors for an advanced generation of laser scanners.

Assistant professors Lori Collins and Travis Doering, directors of the Alliance for Integrated Spatial Technologies (AIST) at USF, will train users on a new portable scanner that captures 976,000 measurement points per second with millimeter-accuracy.

The new FARO Laser Scanner Focus3D technology offers the most efficient and precise method for measurement and 3D documentation of a wide range of projects including construc-

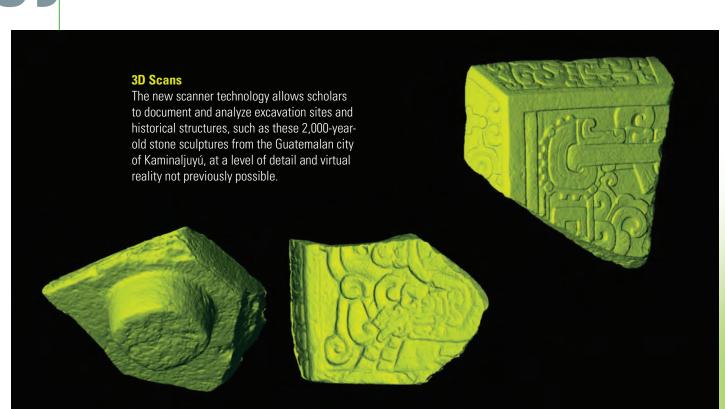


tion, crime scenes and accident sites. In just minutes the revolutionary scanner can do what used to take days - produce detailed, three-dimensional images of complex environments and geometries.

Collins and Doering, who have used advanced technologies to record, capture and recreate ancient archaeological sites spanning many cultures, say the new, laser-based technology will speed some of the most tedious, time-consuming and costly processes in industrial plant and architectural design, heritage management, forensic analysis, building construction and civil engineering.

VICKIE CHACHERE | USF News





#### Flying Syringes

Mosquitoes are nasty little creatures. They carry horrendous diseases like malaria and vellow fever, and devastating illnesses like St. Louis encephalitis.

Now researchers at USF say there's another reason to hate mosquitoes - they carry around hundreds of viruses, many which have never been seen before.

Virus hunters Terry Fei Fan Ng, a recent USF PhD graduate, and Mya Breitbart, an assistant professor in USF's College of Marine Science, made the discovery using a technique developed by Breitbart. The technique allows DNA to be extracted from viruses. sequenced and compared against databases of known viruses. It allows researchers to more rapidly identify viruses not known to exist.

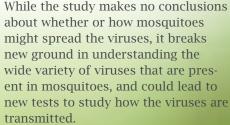
"Most studies of viruses in mosquitoes search for specific, well-known pathogens," says Breitbart, a biological oceanographer. "Our study is fundamentally different because it uses metagenomic sequencing to provide an overview of the diversity of the total viral community - including viruses that infect the many hosts the mosquitoes feed upon, as well as those viruses that infect the mosquitoes themselves."

The researchers' findings were published in June in the journal, PloS One. The study was conducted in collaboration with researchers at San Diego State University, the Genome Institute of Singapore and the Wildlife Disease Labs at the San Diego Zoo's Institute for Conservation Research.

The researchers looked at three species of mosquitoes captured at three different times and places in San

Diego County in a trap baited with dry ice. Viruses were extracted from the mosquitoes' bodies, purified, sequenced and then compared to known virus DNA sequences.

The scientists found a series of animal viruses, including viruses related to herpes and pox virus. In one mosquito they found papillomaviruses. They believe the mosquito picked up the papillomaviruses from the host's skin during feeding. Some 80 percent of normal human skin harbors papillomaviruses, they say, but the virus has never before been detected in mosquitoes.





Breitbart

USF MAGAZINE | Fall 2011 15

#### Passport to Learn

When USF student Thu Can applied to the Genshaft/Greenbaum Passport Scholars Fund, there was no question she was exactly the kind of student who inspired the program. Can, a double major in English and biomedical sciences, is focused, curious and goal-oriented.

The Passport Scholars Fund was established with a \$1 million endowment from USF's First Couple as a way to support and encourage students across the USF System to expand their education through study abroad and service learning opportunities.

Can, who aspires to be a doctor, was awarded the program's first scholarship in May. Weeks later, she traveled to Costa Rica, determined to learn to speak Spanish. Living with a host family, she totally immersed herself in the new language and culture.

It was a life-changing experience, Can says, not just learning a new language but seeing firsthand the desperate conditions facing street people and encountering moments of kindness.

It was the kind of learning experience the Genshaft/Greenbaum
Passport Scholars Fund is all about.

VICKIE CHACHERE | USF News

#### Aaron Dixon

Senior, International **Business Management** Information Systems Salamanca, Spain

"I am learning tons of language; last night I had my first dream in which I knowedgeably communicated in Spanish. I told my professor and she congratulated me stating that the dream was a subconscious attempt of my mind processing language. How cool is that?"

#### Going Places Blog

From internships in China to language programs in Costa Rica, about 550 USF students traveled to nearly 30 countries this summer to take part in an international education experience. Education Abroad, USF's office for international study, awarded scholarships to 27 of those students to help make their dreams of studying abroad a reality.

Meet some of our international scholars who blogged about their experiences.

#### **Andres Delgado**

Graduate Student, Latin American, Caribbean and Latino Studies Buenos Aires, Argentina

"Buenos Aires is a beautiful city. It is called by some of the locals as the "Paris" of South America, and you can definitely see the European influence in the architecture and in the people."

#### Tina Danh

Junior, Biology Beijing and Qingdao, China

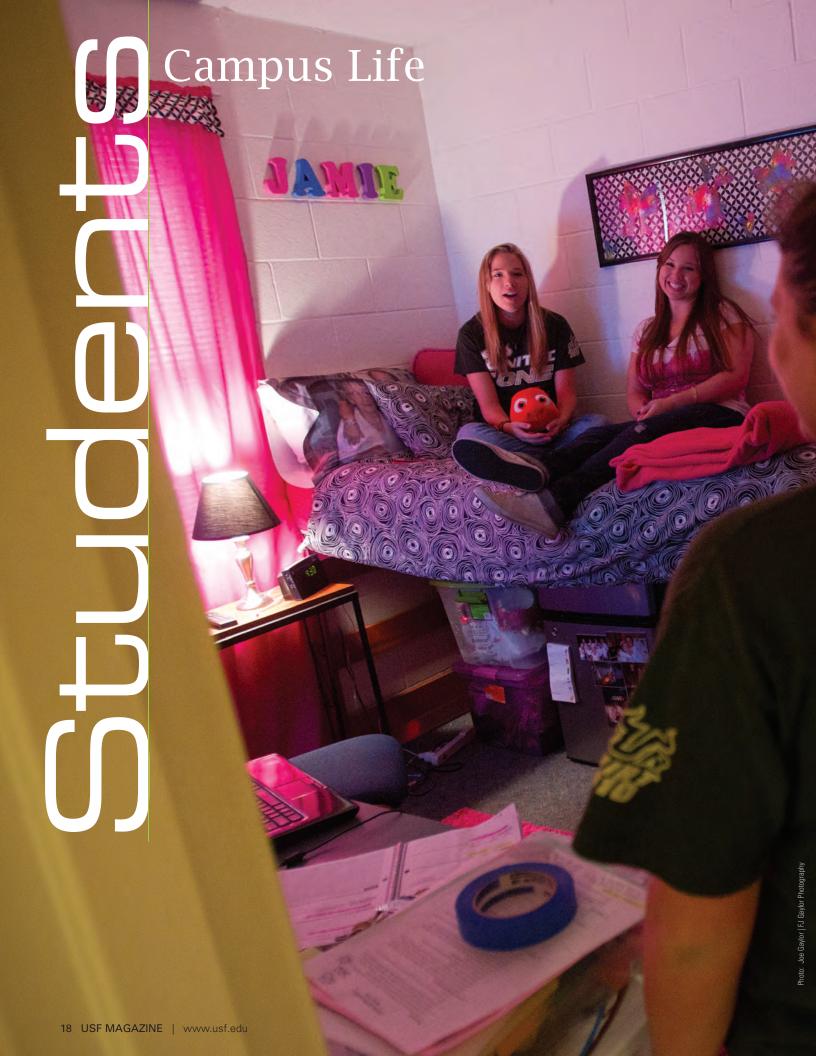
"Every single day, I learn many different things about the Chinese culture. Learning about a different culture really opens your eyes to your own as well. You may find small things that may seem insignificant to you and just a part of who we are until you have somebody ask you, 'Why do you do that?' Then you're left thinking, 'Why do we do that?"

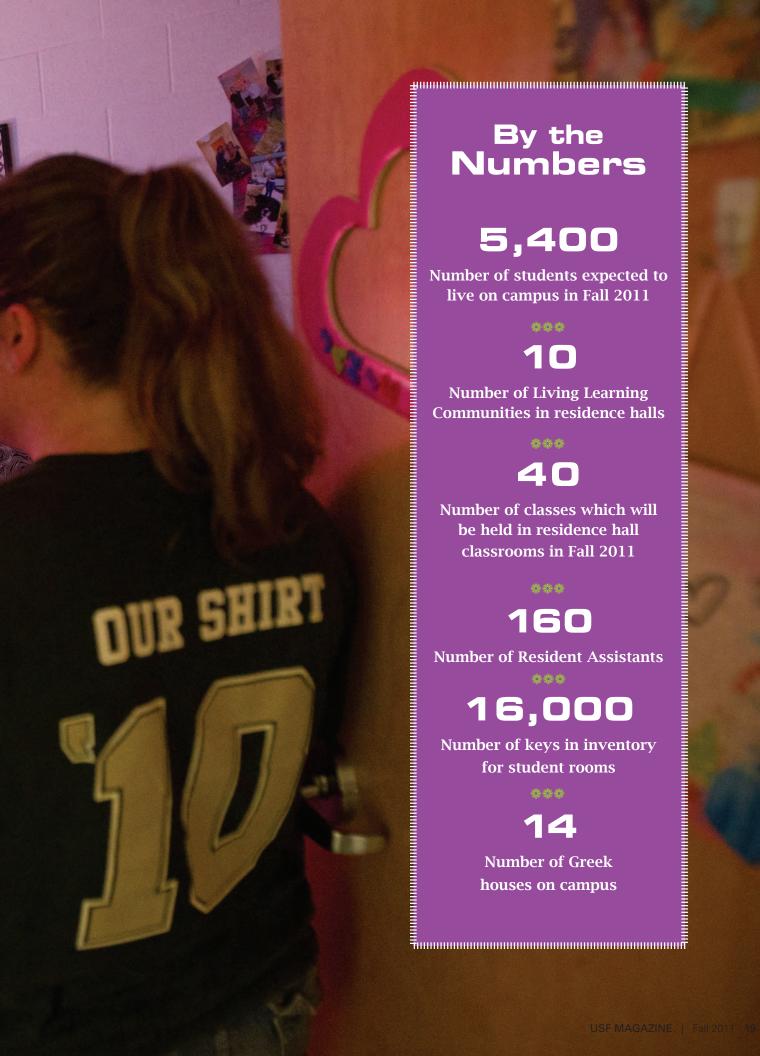
#### Farah Britto

Senior, Mass Communications and Anthropology Cape Coast, Ghana

"The Ghanians seem to know so much about American news and history, as well as that of other countries. I feel like their school system is so much more focused in international affairs than the American counterpart, which might surprise some Americans. It seems that we have some catching up to do too."







#### Heroes



ust as the message of the Freedom Riders swept through the Deep South and the broader nation in 1961, the scholarship of USF St. Petersburg professor Raymond Arsenault has inspired events of commemoration and renewal this year - the 50th anniversary of the Freedom Rides.

The recent celebrations honored the courage and conviction of the hundreds of young people who defied Jim Crow laws and put their lives on the line for the sake of racial justice.

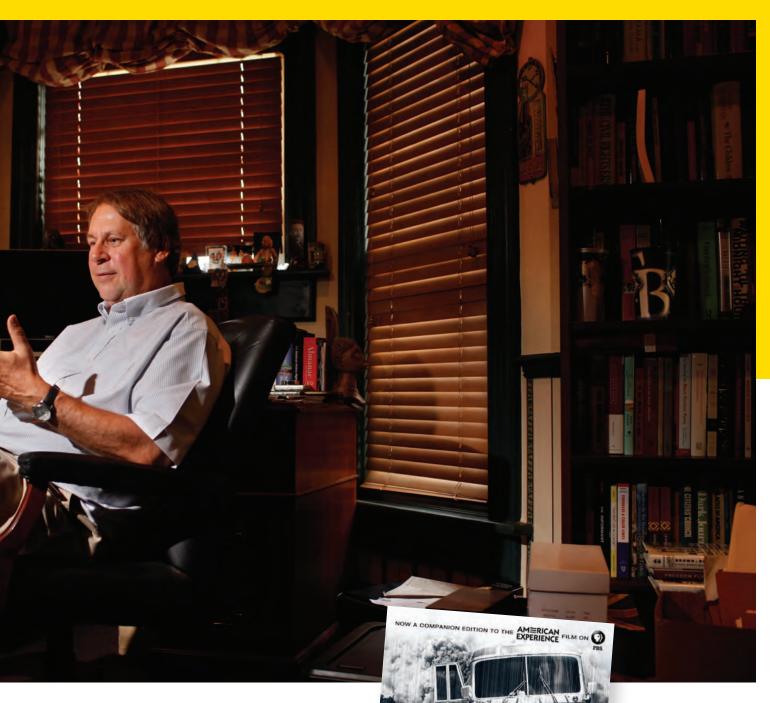
Arsenault, the John Hope Franklin Professor of Southern History at USF St. Petersburg and a founder of the university's Florida Studies graduate program, spent nearly 10 years researching the Freedom Rides, interviewing the Riders and immersing himself in a movement that ultimately desegregated interstate travel and launched a wave of civil rights reform.

His award-winning book, Freedom Riders: 1961 and the Struggle for Racial



Justice, first published in 2006 and republished in a 2011 abridged edition, became the basis for a PBS American Experience documentary, a traveling museum exhibit, and a commemorative bus tour with college students from across the country. The book and the documentary inspired Oprah Winfrey to host a Freedom Riders reunion on her TV program in May 2011. Arsenault appeared on the show.

"The broad dissemination of the book, the film, the traveling exhibit - and most important - the Freedom Riders' message of nonviolence and



social justice extends their legacy of hope, moral courage and personal empowerment," Arsenault said.

Many of the 180 Freedom Riders flown to Chicago for the reunion had not seen each other in 50 years. On the Oprah Winfrey show, former Riders told stories of youthful adventure, sacrifice and commitment. And later, on the commemorative bus ride, they connected with a younger generation of aspiring social activists. Arsenault also led a group of USFSP students on a similar tour for a summer civil rights course he has taught in partnership with

#### **FREEDOM WRITER**

USF St. Petersburg professor Raymond Arsenault spent nearly 10 years researching the Freedom Rides. His award-winning book was the basis for a PBS documentary.

RAYMOND ARSENAULT

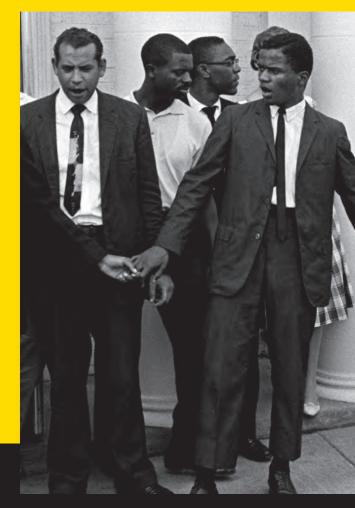
"The Freedom Riders sought to use dignity and love to persuade people to do the right thing," Arsenault says. "Their strategy was to educate through the philosophy and practice of nonviolent direct action. They brought down the system of Jim Crow segregation and changed the world, not through force and violence, but through disciplined self-sacrifice and an abiding commitment to the 'beloved community.'"

In July, the documentary based on Arsenault's book was nominated in three categories for a Primetime Emmy Award from the Academy of Television Arts & Sciences.

Directed by Stanley Nelson and produced by Laurens Grant, the documentary was nominated for Exceptional Merit in Nonfiction Filmmaking, Outstanding Writing for Nonfiction Programming and Outstanding Picture Editing for Nonfiction Programming.

Arsenault worked on and appears in the documentary.







#### RIDE FOR JUSTICE

Arsenault's book, Freedom Riders: 1961 and the Struggle for Racial Justice, focuses on a civil rights effort that led more than 400 black and white Americans to risk their lives riding buses through the Deep South to challenge segregation in interstate transport. The story is one of the most celebrated episodes of the Civil Rights Movement.









A PHOTOS: From top of page, second row, left to right

Prior to serving as coordinator of the Nashville Student Movement Ride, Diane Nash (center) was one of the most respected leaders in the sit-in movement in Nashville, Tenn. Here she leads a group of students in a demonstration in front of the Nashville police station in 1961.

Before they participated in the Freedom Rides, C.T. Vivian, Diane Nash (front row on left) and other demonstrators marched to Nashville City Hall on April 19, 1960.

In Anniston, Ala., an angry mob stoned and firebombed the Greyhound bus holding some of the original Freedom Riders.

Members of the Congress of Racial Equality (CORE) in Washington, D.C. as they prepare for their journey south.

New York college students display posters in support of the Freedom Rides.

# Building a Better Doctor





By ANN CARNEY | USF News

irk Chassey left the room exhilarated. Energized.

After sitting through nearly half a dozen medical school interviews an-

swering the same questions over and over, this one stood out.

"They picked and they probed, poking deep into moments of my life. They peeled back my answers like an onion, getting way past the surface," he says. "I was thrilled. They weren't just getting a snapshot of my life – they were getting a photo album."

Chassey joins a group of 19 students enrolled in the inaugural class of SELECT, an innovative program designed to edu-

cate physician leaders of the future.

Scholarly Excellence. Leadership Experiences. Collaborative Training. This is SELECT.

Where traditional medical education programs choose students primarily on academic credentials, the SELECT program adds an in-depth interview process to assess their emotional intelligence and related key characteristics such as collaboration, adaptability and emotional self-control.





"With SELECT, we intend to change the DNA of health care, one physician leader at a time."

- DR. STEPHEN KLASKO

Program administrators say these characteristics are essential to becoming empathetic, passionate physician leaders. They are the catalysts for change in the nation's health care system.

#### **Crossing State Lines**

The USF Health College of Medicine is committed to producing compassionate, communicative physicians who are top-notch leaders. The new program builds on those strengths.

SELECT pairs the USF Health College of Medicine (USF) with Lehigh Valley Health Network (LVHN) in Pennsylvania. The USF/LVHN partnership, created in March 2009, is crossing state boundaries to prepare physician leaders committed to accelerating change in health care. Change considered long overdue.

Students in the program spend their first two years studying at USF Health in Tampa, then matriculate to Lehigh Valley Health Network (LVHN) in Allentown, Pa. for two years of clinical education. From day one, each student is assigned two faculty mentors - one from USF and one from LVHN for coaching and professional development throughout the duration of the four-year program. Between years one and two, students will complete a project with a leader of their choosing, such as a physician entrepreneur, the state's surgeon general or a health network chief medical officer, to further hone their critical thinking and leadership skills.

It's a program USF Health and LVHN leaders believe could have huge im-



plications for the future of medical education.

"With SELECT, we intend to change the DNA of health care, one physician leader at a time," says Stephen Klasko, M.D., dean of the USF College of Medicine and CEO of USF Health.

#### Transforming Medical **Education**

For more than 10 years, Dr. Klasko has wrestled with questions about the way medical students are selected and educated. "Why do physicians resist change rather than lead transformation?" he opined in a recent editorial for the St. Petersburg Times.

The answer is simple, he says. "After four years of medical school, and three to seven years of graduate medical education, the young physician has joined a cult centered around four biases competitive, autonomous, hierarchical and non-creative." He points to the fact that in 2011, medical school students are still selected based on their science GPA, ability to memorize organic chemistry formulas and scores on the MCAT. "Yet somehow," he says, "we are amazed that doctors are not more empathetic, communicative and creative."

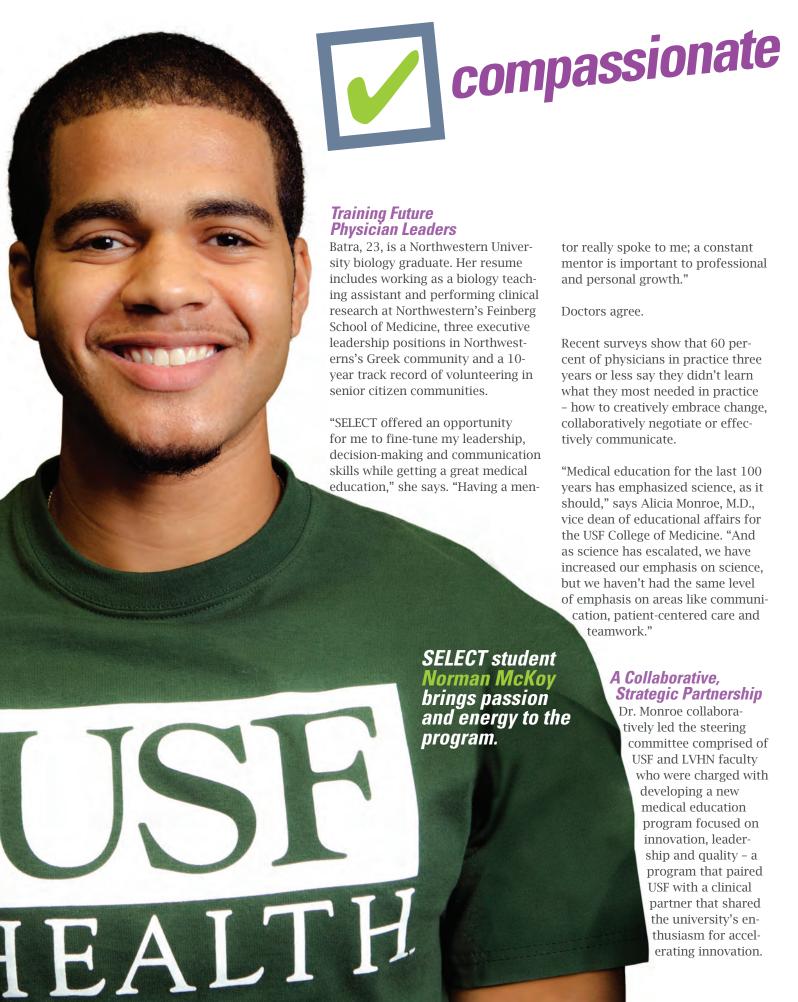
SELECT aims to change all that with its focus on student selection, emotional intelligence and leadership development.

#### **Unique Selection Process**

USF Health worked with the Teleos Leadership Institute to use an assessment for prospective students that probes emotional intelligence. A standard in the business world for the last several years, the emotional intelligence assessment has rarely been employed in academic medicine.

Teleos, founded by two best-selling au-







USF found that partner in LVHN, a top community academic center that has been recognized by U.S. News & World Report for 16 consecutive years as one of America's Best Hospitals.

As he made his way to Tampa, Chassey says he couldn't help wonder, "How does a hospital in Allentown (some 1,100 miles away), match up with a school in South Florida?" It didn't take long for him to make the connection.

"USF is so student-centered. Lehigh Valley is the exact same way about patients. They've taken the time to break down, analyze and improve patient-centered care," he says. "USF's student-centered curriculum and Lehigh Valley's patient-centered care spoke volumes to me."

Chassey, 28, a technical partner in LVHN Cedar Crest's emergency department, says teamwork at the hospital is second to none. "Nurses, doctors, administrators, support staff and technical partners all work together."

The way it should be, according to Dr. Monroe.

"The health care environment is changing," she says. "There is less focus on individuals and more focus on working in teams and systems and how to be an effective leader and member of a health care system."

#### Distinctive Curriculum

J. Alan Otsuki, M.D., a recognized

leader in medical education, was chosen in February to lead SELECT. Dr. Otsuki is the founding associate dean of educational affairs for the USF College of Medicine at the LVHN campus and chief of the Division of Education at LVHN. Otsuki was associate dean for medical education and student affairs and associate professor of emergency medicine at Emory University School of Medicine In Atlanta, Ga.

He calls SELECT a "robust, dynamic, forward-thinking medical training program."

A program whose time has come.

"Health care today needs to be viewed in the context of many drivers – the explosion of medical knowledge, patient access to information, technology advances, financial and outcomes accountability, and an incredibly complex health care delivery system," he says. "Medical students need an understanding of complex health care systems and how health care policy is developed and implemented."

All that content is built into the SELECT program's curriculum which

### Drs. Alicia Monroe and J. Alan Otsuki lead the futuristic medical education program.

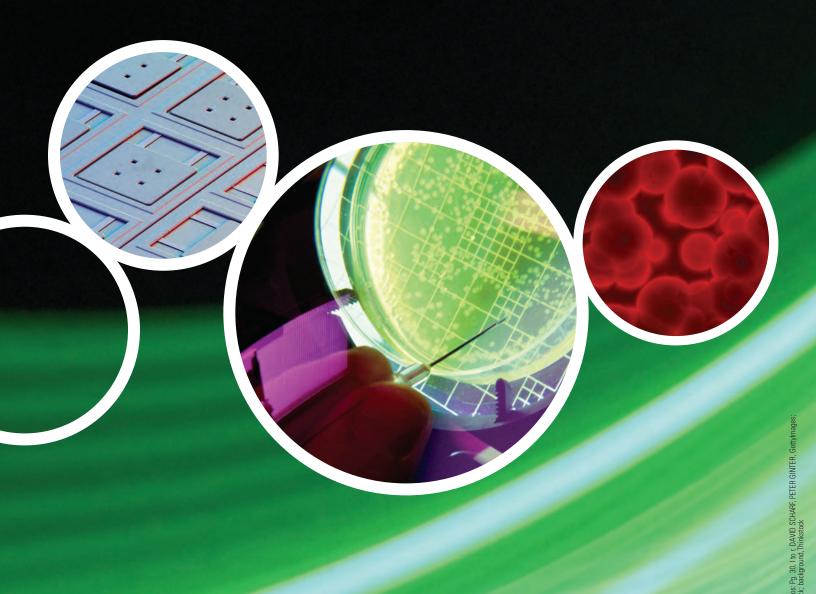
places significant emphasis on leadership development, consisting of three blocks over four years. In year one, emotional intelligence and leadership introduces key concepts and helps students attain individual leadership competencies; year two prepares students to work in teams; and years three and four prepare students to apply leadership and health systems competencies in professional and interprofessional settings.

It's a curriculum and a program that Chassey believes will set new precedents and prepare students to be the best possible doctors.

"They want us to be the ones to push the envelope in patient-centered care. They want us to let our minds run wild; to try things and see if they work," he says. "They really want us, as students, to be at the forefront of health care. I think that's the greatest opportunity I've ever heard of from a medical school."

### Life-Changing PARTNERSHIP

As Draper Lab expands its Tampa Bay presence, its relationship with USF is taking off like a rocket.



By VICKIE CHACHERE | USF News

hen nationally-renowned Draper Laboratory decided to open facilities in the Tampa Bay area three years ago, it was a bold move that endorsed the region's potential to grow a high-tech, high-wage economy.

As a new partner to the University of South Florida, Draper's arrival also signaled the potential for collaboration on research with life-changing potential.

Now, Draper's Tampa Bay presence is about to get another big boost: a doubling of its research space at USF Connect and adding more positions to its local workforce.

Draper's local workforce will grow to about 50 people in a year, says Len Polizzotto, Draper's vice president for strategic business development. Its collaborations with USF on such key global challenges as fighting malaria and creating new tools to diagnose post-traumatic stress disorder have quickly emerged as signature programs.

"It's not what Draper is doing, it's what collectively USF and Draper are doing," Polizzotto says. "We feel very strongly that we have a special partnership with USF.

"Everything we do, we like to think we are doing together."

#### NEW LABS, NEW DISCOVERIES

Founded by Massachusetts Institute of Technology engineer Charles Stark Draper, the nonprofit research laboratory holds a special place in American history. Draper invented inertial navigation, allowing planes, ships, submarines and later space vehicles to navigate by using gyroscopes, and other instruments and later more advanced technologies. The Draper Lab developed the Apollo Guidance Computer for NASA, making the Apollo moon landings possible.

The modern Draper is focused on key areas such as health care, security and energy and it has continued to play a major role in space exploration and the development of technologies for



#### **TEAMWORK**

Clockwise from left: Principal investigators Dr. John Adams and Dr. Dennis Kyle of USF Health are collaborating with Dr. Joseph Cuiffi of Draper Laboratory.

the Space Shuttle and the International Space Station.

Headquartered in Cambridge, Mass., it has had an office and staff in Houston since the Apollo program and expanded to Washington D.C. in the late 1980s. More recently, it has established operations in Huntsville, Ala., Tampa and St. Petersburg.

Three years ago, then-Gov. Charlie Crist and Draper Laboratory's CEO Jim Shields announced Draper's move into the Tampa Bay region as a major coup in building a new high-tech economy for Florida. The seven-year plan will create 165 new jobs between the two Draper locations at an average wage of \$75,000. Polizzotto says despite the economic downturn, the plan remains on track.

USF President Judy Genshaft, who played a key role in selling Draper executives on the idea of a Tampa Bay location, heralded the move as an important step forward in advancing real-world research and repositioning the regional economy.

The physical manifestation of the growing partnership is Draper's expansion - an additional 10,000 square feet of laboratory space for its biomedicalthemed research efforts that are due to be completed by the end of the year.

#### "It's not what Draper is doing, it's what collectively USF and Draper are doing."

- Len Polizzotto, Draper VP

Working alongside Draper's researchers and technicians are two USF Draper Laboratory Fellows, one master's degree and one PhD student. They all have an opportunity to work on major projects. USF undergraduate students also have a role to play, working alongside Draper scientists on experiments, cell cultures and honing their lab skills.

To tour Draper's secure facilities on the upper floors of USF Connect is to step onto the front lines battling some of the world's most vexing maladies.

Shankar Sundaram, the Tampa research center's director, describes a futuristic and hopeful—but not all that far away—world of tiny implantable pumps that put medicines directly where they are needed without causing toxic reactions in parts of the body where they are not.

In one laboratory, scientists are examining cancer cells under a microscope and looking at new drug delivery systems. In another, experiments are under way in the development of new products that could help pioneer the development of artificial livers and kidneys. In a third lab, a technician is testing a new generation of diagnostic instrument that measures light moving through tissue, a device that in its development was tested aboard the Space Shuttle.

Across the bay in Pinellas County, Draper's focus is different but again complementary: creating miniscule electronic circuitry that runs very small machines and looking to create new efficiencies through technological breakthroughs. Its projects are especially focused in the security sector.

The most high profile of the Tampabased projects is the \$5.45 million Gates Foundation award with USF Health to develop technologies to study malaria parasites in hopes that will speed the development of more effective vaccines and treatments. The project includes the development of an advanced device that would mimic the human liver to better study the life cycle of the malaria parasite. The goal of the project: to make the research process more efficient and more targeted so that it can lead to better and quicker remedies.

In many ways, the project illustrates the power of the USF-Draper partnership, Polizzotto notes. USF's strength is in carrying out the research while Draper's strength is in developing a new technology or process.

To do that, researchers are exploring the development of everything from extremely small, implantable sensors that can wirelessly transmit health

information to tiny microchips that could deliver medicine directly to the part of the body that needs treatment. Accompanying that technology are data analysis systems that make sense of what these small devices and transmitters report back on a patient's progress.

"You have to define a very important customer need," he says. "You need to do the research to develop the technology and then take the technology and prototype it."

In addition to working with campus entities such as USF Health and the College of Engineering, Draper also has forged ties with Moffitt Cancer Center, the James A. Haley Veterans' Hospital, MacDill Air Force Base, Tampa General Hospital and Progress Energy.

"The university is significantly on the rise and if you take the whole region with Moffitt, USF Health, USF Medical School, Tampa General Hospital and the Haley VA, there really is a concentration of institutions that's hard to find anyplace else," Polizzotto says. "In Boston, you have a lot of research facilities focused on basic technology development while in Tampa, the focus is more on applied research."

# Evolutionary Steps -

By VICKIE CHACHERE | USF News

ince the first finds of human fossils, scientists have debated how the earliest humans lived and developed the attributes that have come to define modern man.

Now, new research published in the journal *Nature* by an international group of scientists, including USF geologist Jonathan G. Wynn, provides scientific evidence of the landscape that was the stage for human evolution six million years ago. Their findings indicate that early man came to learn to walk on two feet, find new food sources and develop advanced survival skills in the wooded grasslands of East Africa as they left their ancestral home in tropical forests.

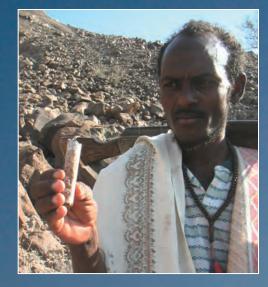
Using chemical signatures recorded in ancient soils, the researchers show that some of man's most important evolutionary steps were taken on the savannahs of Ethiopia and Kenya during the time that spans the separation between man and chimps. By analyzing the sediments where fossils were found, the scientists were able to recreate the landscape and answer some of the persistent questions on how a changing environment helped drive human evolution.

"This is a whole new step in human evolution - even if it just means they (the early humans) were foraging for plants, they were learning new skills and new behaviors," Wynn says. "As environments continue to change, the lineage of humans that seem to survive are those that are adept at finding new foods or adapting to different conditions. It's the change in the environment that creates the new species."

## NEW RESEARCH SHOWS THE EARLIEST HUMANS MOVING FROM TROPICAL FORESTS TO WOODED GRASSLANDS.







Wynn at the Dikika site, carrying a hippo fossil to show paleontologists. Mahammed, a local field assistant, accompanies Wynn. The team's guides are always armed wherever they go.

Wynn played a central role in the announcement of one of the earliest and best-preserved hominin fossil ever found: "Selam," a juvenile Australopithecus afarensis female whose bones were discovered in Ethiopia in 2000.

Selam's remains are believed to be about 3.3 million years old, and her discovery opened the door for new understandings and new questions. Selam had well-developed feet and a lower body adapted for walking and human-like locomotion, but also the long arms that serve apes so well.

Working with scientists from the University of Utah, the Kenya Wildlife Service, James Cook University in Australia, Johns Hopkins University and the University of Arizona, the researchers, whose work was funded by the National Science Foundation and the Leakey Foundation, sought to document the environment in which Selam's and other early humans lived.

By establishing scientific evidence of their habitats, researchers can now move on to other significant questions of how these creatures continued to evolve and understand why some species of early humans did not survive.







SCENES FROM THE FIELD: Ageh, a local field assistant for the international in Dikika, Ethiopia, holds a fossil limb bone; sampling soil; an antelope fossil from Asbole, Ethiopia; research camp.



#### Campaign

# \$111,63

By ANN CARNEY | USF News

It was a record-breaking year for the *USF: Unstoppable* campaign. In fact, it was the largest year for fundraising in the history of the university – by a long shot. In just 12 months, the *USF: Unstoppable* campaign raised more than \$111 million, an astonishing \$30.1 million over the previous record set in FY 2007-08.

Campaign Director Rod Grabowski attributes the success to continuous discourse with prospective donors. "During the course of the economic downturn, it was our philosophy to continue to stay engaged with prospective donors to articulate the needs of the university and help donors understand how their contributions can make a difference at USF."

It is a philosophy that worked, and one that is focused on the future of USF.

"Literally tens of thousands of people joined us to help the University of South Florida as it strives to be one of the finest public universities in the nation," says Joel Momberg, CEO of the USF Foundation and senior vice president for University Advancement & Alumni Affairs. "I am grateful for the tremendous show of support from each and every donor to the campaign."

"This record-breaking year is a testament to the strong support for our vision of becoming one of the best metropolitan research universities in the country."

- JUDY GENSHAFT, USF PRESIDENT

"The continuing success of the *USF: Unstoppable* campaign will provide momentum for the University of South Florida as it grows into a world leader in teaching and research."

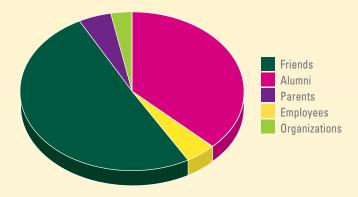
- LES MUMA, CAMPAIGN CHAIR

\$81.5 million

Previous fundraising record set in FY 2007-08

#### Record Year for Fundraising

# TOTAL DOLLARS RAISED IN FY 2010-11



OF MORE THAN 44,000 DONORS, THE LARGEST PERCENTAGE WERE FRIENDS OF THE UNIVERSITY AT 50.6%, FOLLOWED BY ALUMNI AT 37.5% AND PARENTS AT 4.9%. EMPLOYEES COMPOSED 4.2% PERCENT OF GIVERS, AND ORGANIZATIONS (INCLUDING CORPORATIONS, GROUPS AND PRIVATE FOUNDATIONS) REPRESENTED 2.8% OF DONORS.

BY DONORS

44,837
Number of Donors

\$72.6 million

Total raised for program enhancements

In FY 2010-11, program enhancements made possible through the *USF: Unstoppa-ble* campaign came in the form of cash, technology and instructional equipment.

118% Increase in fundraising over FY 2009-10

#### **USF:** UNSTOPPABLE

To date, the *USF: Unstoppable* campaign has raised more than \$476 million of its \$600 million goal. To learn more about the campaign and opportunities for giving, visit www.unstoppable.usf.edu



#### **NEWS BRIEFS**



#### **RENAISSANCE MAN**

Senior guard Chaz Hine, a nominee for the 2011 Allstate AFCA Good Works Team and the Lowe's Senior CLASS Award, has a lot on his plate. In addition to maintaining a 3.86 GPA, the walk-on turned scholarship player helped form the Student Coalition Against Homelessness and Poverty and is active in Disciples for Life, a student-led ministry. In the spring, Hine, who has an operatic voice, was voted "Most Remarkable" among business students. He is currently pursuing an MBA in the College of Business.

#### **SCHOLAR ATHLETES**

150 student-athletes, led by 36 women from the women's cross country / track and field teams and 20 women soccer players, were selected for the 2010-2011 BIG EAST All-Academic Team. Other squads included on the All-Academic Team include men's soccer, baseball, women's and men's golf, softball, women's and men's tennis, women's volleyball, men's track and field, men's cross country and women's basketball. In all, 3,200 student-athletes from the BIG EAST Conference were selected for the team.

#### **NEW TURF**

Bulls fans got their first look at the new USF soccer stadium when the men's team played its first exhibition match on Aug. 20 against the University of Tampa. The stadium, which seats 2,000, has a bowl-like design, bringing fans closer to the game. The new facility is part of the ongoing transformation of USF Athletics. Both the men's and women's soccer teams made NCAA tournament appearances last season.

#### **NATIONAL VICTORY**

USF head softball coach Ken Ericksen led the U.S. National Team to a 6-4 victory over Japan in late July to win the World Cup of Softball VI. Eriksen was named the team's head coach in January, one of the highest honors in college coaching. Eriksen has been USF's softball coach since 1997.





#### Erin Kimmerle

#### By ANN CARNEY | USF News

From the time she was 9, Erin Kimmerle knew she wanted to be a cultural anthropologist. But when she learned about the human rights work being done by renowned forensic anthropologist Clyde Snow during an undergraduate class, she shifted her focus to the field of forensic anthropology.

Forensic anthropology is the study of bones to help law enforcement agencies identify human remains and draw conclusions about the circumstances of death ranging from homicide and suicide to genocide and war crimes.

For Kimmerle, assistant professor in the Department of Anthropology, it has been the basis for a remarkable career. Kimmerle's work has taken her to some of the region's bestknown crime scenes and across the globe to investigate human rights violations in Nigeria, Kosovo, Bosnia-Herzegovina and Croatia. She was the chief forensic anthropologist for the United Nations, International Criminal Tribunal for the former Yugoslavia and also worked as an osteologist for the Smithsonian Institution's Museum of National History.

Today, in addition to her teaching and scholarship, which includes directing the Forensic Anthropology Laboratory at USF, Kimmerle is a member of the Florida Emergency **Mortuary Operations Response** System. She received her degrees in anthropology from the University of Tennessee (PhD), the University of Nebraska (M.A.) and Hamline University (B.A.).

#### USF: How does a forensic anthropologist contribute to an active crime ene investigation?

In a couple of ways. Police may call and ask for assistance in searching for a clandestine grave. Or, they may call for help with identification once they've found a body, skeletized remains or a burial.

#### **USF: What about a cold case?**

Forensic anthropologists create facial reconstructions and biological profiles to help with human identification and trauma analysis.

**USF: What is the most important** thing you look for at a crime scene? Bones. I'm focused on finding all the bones.

#### **USF: What are some of the methods**

Digitizing and measuring skills for metric analysis as well as samples of bones and teeth for chemical isotope analysis to determine where people come from.

#### **USF: What has been the greatest**

Three-dimensional morphometric tools that allow us to estimate ancestry.

#### USF: You've said forensic anthropology is a foundation for human rights.

Nigeria (the Asaba massacre) is a good example. Forensic anthropology is about access to justice. In so many places there has not been any type of accountability – gross human rights violations occur and go unnoticed. By having a forensic anthropologist in a working judicial system, you are pro-



viding access for people to justice and accountability.

USF: What are some of the challenges you face in other countries? Security, infrastructure, power,

Security, infrastructure, power, Internet access and lack of basic equipment. We tend to work in really remote parts of countries post-conflict, and there are always multiple perspectives – one person's war criminal is another person's hero.

USF: What is the focus of your research?

How populations vary in terms of aging and how we can best determine age based on skeletal remains.

SF: What is the most important ing you teach your students?

Teamwork. Everything in forensics, forensic anthropology and life is about teamwork.



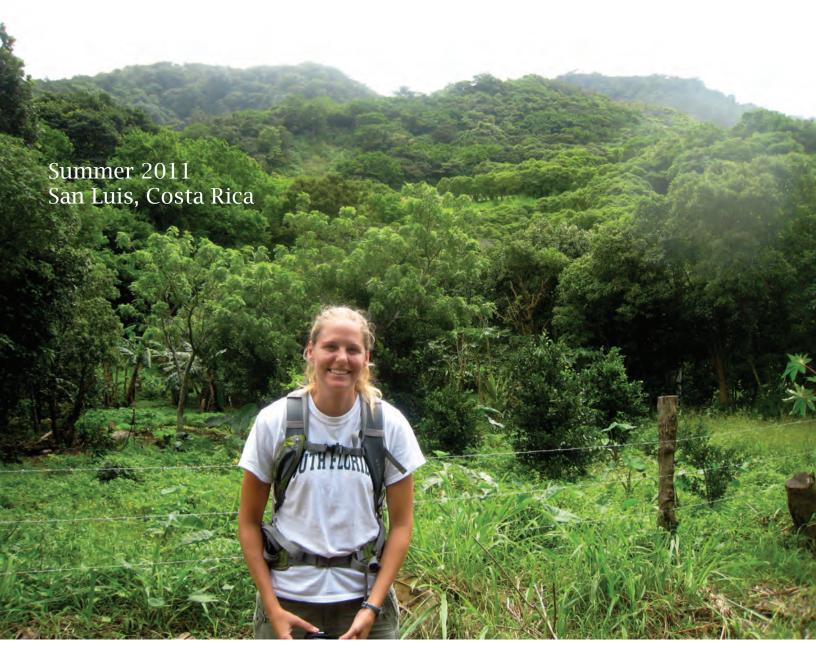
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#### **Global USF**

USF graduate student Melissa Whitney traveled to Costa Rica this summer to study public health. In San Luis, Whitney and a group of USF students conducted a health fair for the local community. Whitney is one of more than 550 USF students who traveled abroad this summer for an international learning experience. Read more about USF's global students on page 16 or scan the QR code at right to read the Going Places Blog.

