Bulls Stampede Seminoles: USF quarterback B.J. Daniels leads the Bulls to a historic win over then-ranked No. 18 Florida State University in the first-ever matchup between the two schools. "They whupped us," said FSU coach Bobby Bowden. Daniels ran for 126 yards and threw two touchdown passes to lead USF to a 17-7 victory.
Features

Justice Served
A weekend degree program designed to prepare criminal justice practitioners for the next step in their careers is the newest graduate-level program in USF’s Department of Criminology. Sixty-one professionals representing 38 agencies already have graduated from the program.

Inspiring Success
Taking advantage of a broad range of learning experiences, as well as the resources and support that make these diverse opportunities possible, USF students are rising to new levels of achievement.

Digital Revolution
USF Health students are on the front lines of a medical revolution – an initiative that aims to digitize medical records and new prescriptions throughout the Tampa Bay region and beyond.
As a new fall semester gets under way, I am awed and inspired by the unmistakable energy and promise spilling from every corner of this remarkable university. Never have we welcomed such a diverse and high-caliber group of students to USF. And never have we been more committed to helping our students succeed.

This exciting start comes on the heels of one of the busiest summers in our university’s history. More than 30,000 students filled the Tampa campus – an incredible 72 percent increase over last summer. We put the finishing touches on our newest residence hall, made significant progress on our 103,000 square-foot music building, and began construction on our long-awaited Interdisciplinary Science Teaching and Research Facility and the Kiran C. Patel Center for Global Solutions.

While the economic challenges facing our university and all universities throughout the state are a harsh reality, these stories are a testament to the fact that we have never let up on our mission to build a high-quality research and academic institution.

We have so much good news to share – and so many ways to share it, as social networking continues to open new doors at USF. Imagine that in just four months, the university’s Facebook page registered more than 14,000 members!

I have no doubt this will be an exciting year at USF – a year of tremendous progress and visions achieved.

Judy Genshaft, President
Unsurpassed in Research Growth

In a newly published ranking in the *Chronicle of Higher Education*, USF was named the nation’s fastest growing university for federal research funds, 2000-2007. (August 28, 2009, *Almanac*).

That means that during those seven years, no other American university grew its federal research at a faster rate than USF and no other group of faculty had a faster rate of earning new federal sponsorship.

To punctuate the point, USF has gone on to set a new research funding record with $380.4 million in 2008-2009. The amount is a $20 million increase over the previous year in research grants and contracts.

USF President Judy Genshaft says the milestone is an important one for the campus community, which has fully embraced the goal of building one of the nation’s premier research universities. It’s not just USF’s national reputation at stake, but the lives that can be changed and improved through world-class research, the president notes.

“We knew that we were making huge strides, but the analysis makes it clear just how far we’ve come in a short period of time,” the president said during her annual fall address in September. “In Fiscal Year 2000, USF’s expenditures of federal funds were $50.5 million. By FY 2007, those expenditures had risen to more than $158.4 million.”

According to the *Chronicle*, USF has seen a 213 percent increase in “federal funds for academic research and development.” This was by far the highest percentage increase in the country based on counts by the National Science Foundation.

USF investigators have been focused in USF’s signature research programs: diabetes, neurosciences and sustainable communities. Both graduate and undergraduate students have made the research mission both part of their education and the personal causes, while USF staff and the Office of Research & Innovation have provided crucial support infrastructure. The university’s Board of Trustees has made national standards of excellence a strategic priority.

“I’m proud of your success and of what it means,” said Genshaft. “USF is a powerful research university, committed to solving real-world problems just as it is committed to superlative education for our students.”

– Vickie Chachere
Socially Connected

The latest USF news is now just a click away – on Facebook. USF launched its official Facebook page in June and already the site has registered more than 14,000 members.

“Facebook is the wave of the future – an important tool for keeping connected with alumni, students, faculty, staff, parents and friends of the university,” says Michael Hoad, vice president of communications for USF. “Every day our membership is growing and every day we are looking for ways to reach out to this important audience.”

The social media site offers a continual fresh supply of university news and information and is updated regularly with photos, stories, video links and more. Fans can participate by adding their comments to the ongoing discussion.

“The USF Facebook page is more than just a Web site. It’s an interactive online community comprised of thousands of USF fans,” says Brian Harff, BS ‘95. “I can read the latest USF news, view photos of campus, learn about upcoming events, and show support for my alma mater, all in one place.”

About 20 other university-related Facebook pages, including pages for USF Athletics, the Alumni Association, Contemporary Art Museum, Office of Student Programs and the Marshall Student Center, can all be accessed from the official page.

Joining the USF Facebook fan community is easy. Simply open a free Facebook account at www.facebook.com and log onto www.facebook.com/usf.edu.

– Ann Carney

Drive Time

Forget about bumbling a ride. A new and innovative program allows students, faculty and staff to rent cars on campus for just hours at a time while helping reduce pollution and traffic congestion.

WeCar, car-sharing by Enterprise Rent-A-Car, got its USF start in July, making the university one of only a handful of campuses nationwide to join the program. The cars, all gas-electric hybrids, give drivers an alternative to the car-on-campus option.

“You only pay for the amount of time you need the car,” says Ed Mierzejewski, director of USF’s Center for Urban Transportation. “You aren’t paying for a car sitting in your driveway or parking space for 23 hours per day, when you only need it for an hour.”

While convenience is one facet of the program, reducing traffic may be another. The center is currently conducting research to study WeCar’s impact on transit behavior. The 18-month study, supported by grants from the United States Department of Transportation and the State of Florida Department of Transportation, will determine whether WeCar helps reduce car trips to campus.

There’s another benefit, too. The innovative car-sharing program is helping USF meet its goals as part of the American College & University Presidents’ Climate Commitment to reduce the carbon footprint of the USF campus to zero.

– Ann Carney
Following a national search, Karen DeSafey Liller has been named dean of the graduate school and associate vice president for Research and Innovation. Liller is a professor in the College of Public Health and served as the associate dean for Academics and Student Services in the college.

Arthur Guilford has been named regional chancellor of USF Sarasota-Manatee. He was vice president and CEO. Guilford will oversee the regional campus’s separate accreditation process.

More than 100 faculty, alumni, students and staff were named to the inaugural class of the USF Academy of Inventors, an organization created to recognize and promote innovation throughout the university community. The academy is open to all members of the USF community, including alumni and affiliates, who have received a patent issued by the U.S. Patent and Trademark Office.

Brig. Gen. Luis Visot was appointed to command the 377th Theater Sustainment Command in Belle Chasse, La., the largest command in the U.S. Army Reserve. Visot, in civilian life, is executive director of the USF Joint Military Leadership Center.

Donna Peterson, dean of the College of Public Health, has been appointed interim executive director of USF World and the Patel Center for Global Solutions. USF World is an umbrella initiative that captures USF’s strategic efforts to provide and promote global learning and research.

Under a recently signed accord, USF became the first university in the nation to partner with the U.S. Department of Veterans Affairs to support returning troops who pursue their education this fall. The Honorable Patrick Dunne, the VA’s Under Secretary for Benefits, and USF President Judy Genshaft signed the accord in June.

Master Architect

ACCLAIMED ARCHITECT SANTIAGO CALATRAVA, best known for his celebrated designs of bridges, transportation centers and cultural institutes throughout the world, has been tapped by USF Polytechnic to design the first building for the school’s new Lakeland campus and update the campus master plan.

Calatrava will design USF Polytechnic’s 100,000 square-foot science and technology building, an iconic building that will set the tone for all buildings in phase one of the campus master plan. Located at the eastern intersection of Interstate 4 and the Polk Parkway, the highly visible structure will be Calatrava’s first constructed design in the southeastern United States and his first educational structure in the country.

“This iconic building will be the symbol of a new Polk County and of a 21st century American university,” according to Marshall Goodman, vice president and CEO of USF Polytechnic. “In Polytechnic, we have a unique model of education and with Calatrava, we will have a unique symbol that represents that spirit.”

A renowned architect, sculptor and structural engineer, Calatrava’s work includes the Montjuic Communications Tower in Barcelona, Spain; the Athens Olympic Sports Center in Athens, Greece; the Tenerife Opera House in the Canary Islands; and the Quadracci Pavilion of the Milwaukee Art Museum in Milwaukee, Wisconsin. In late 2003, Calatrava was commissioned to design the new World Trade Center Transportation Hub for Lower Manhattan.

Since its founding in 1988, USF Polytechnic has shared a campus with Polk State College in Lakeland. When complete, the new campus will have the capacity to serve four times the number of students currently served. Today, USF Polytechnic has a home campus enrollment of 1,305 but serves over 4,000 students. This figure includes both those who designate it as their home campus as well as other students within the USF system who take advantage of courses offered at USF Polytechnic. Groundbreaking for the building is expected in 2010, with a scheduled opening in late 2012.

– USF Polytechnic
HY IS IT THAT in Florida, African American men are 71 percent more likely to develop prostate cancer and nearly three times more likely to die from the disease than white men? That’s among the questions USF Health and Moffitt Cancer Center researchers hope to answer at a new Center of Excellence that will focus on narrowing the state’s racial, ethnic and socioeconomic gaps in cancer care.

In June, USF and Moffitt were awarded a highly competitive, $6-million federal grant to create a National Center on Minority Health and Health Disparities (NCMHD) Center of Excellence. The five-year program grant from the NCMHD, National Institutes of Health, will focus on research, education and training, and community outreach activities to reduce cancer-related health disparities among minority and underserved communities in Florida.

The new Center of Excellence will be among 50 nationwide, and one of three in Florida.

Dr. Richard Roetzheim, professor and director of research for the USF Department of Family Medicine, and Dr. B. Lee Green, professor and vice president of Moffitt Diversity, are co-principal investigators of the USF-Moffitt Center of Excellence on Cancer Health Disparities. Leslene Gordon, community health director for the Hillsborough County Health Department, will serve as community director for the center.

“The underlying goal of the NCMHD Centers of Excellence is to eliminate the disparities that lead to inequities in care and poorer health outcomes for minority and disadvantaged populations. Much more research is needed to better understand why racial and ethnic disparities occur so that we can develop effective solutions,” explains Dr. Roetzheim. “This isn’t just a problem of minority or disadvantaged communities. We all pay the price in terms of human suffering and higher health care expenses when part of our population is in poor health.”

“A major priority of the center will be to set up the infrastructure that will allow us to investigate how socioeconomic, biological, environmental and behavioral factors impact health outcomes,” according to Dr. Green. “The fact that we have institutional support from both Moffitt and USF and individuals with tremendous expertise allows for a more dedicated and sustained effort to address this complex issue.”

The center will leverage Moffitt’s strength in cancer research and treatment, USF’s expertise in other disciplines and its extensive educational programs, and both institutions’ links with the community.

The initial USF-Moffitt study funded by the NIH NCMHD grant will investigate molecular mechanisms that...
may contribute to the disproportionately high rates of prostate cancer among African American men. The researchers will also examine whether isoflavones, a plant-derived estrogen found in soy products, may prevent prostate cancer or delay its progression in this population.

Through training and faculty development programs, the center will work to boost the number of cancer researchers interested in investigating and addressing inequities in health care. The center’s staff will seek out partners such as neighborhood organizations and churches in minority and underserved communities to identify areas of cancer research important to the people who live there.

“We want to help empower minority communities to shape their own research agenda and provide opportunities for increased participation in clinical trials,” says Dr. Roetzheim. “We’re hoping this Center of Excellence will be the incubator for some innovative community-based strategies.”

Clinical trials are critical for the development of effective preventions, diagnoses and treatments for cancer and other diseases. While participation in cancer clinical trials is generally low overall (about 3 percent nationwide for adults), minorities and underserved communities, especially African Americans and those living in rural areas, are particularly under-represented.

“We are very excited about the collaboration between Moffitt, USF and the community,” Dr. Green says. “This joint center will serve as a springboard for us to work together and expand our reach to more effectively address health disparities. Community involvement must be central to the work of the center.”

USF Health and Moffitt have a longstanding track record of working together in the area of health disparities research. The two institutions have collaborated on several studies documenting gaps in cancer care and outcomes across ethnic, racial and socioeconomic groups in Florida. In addition, Dr. Roetzheim is the principal investigator for Moffitt’s successful Patient Navigation Program, a National Cancer Institute-sponsored initiative to develop interventions to reduce cancer health disparities by promoting the timely and culturally-sensitive delivery of cancer diagnosis and care.

– Anne DeLotto Baier
Public Perspective

Journalism professor breaks down barriers between scientists and the public to explain new and emerging diseases.

As news of the H1N1 virus swirls in the media this year, Mark Walters, associate professor of journalism at USF St. Petersburg, sees the global pandemic as another chance to help the public understand the source of emerging diseases—humans.

The journalist-turned-veterinarian-turned-professor focuses on communicating scientific information for the sake of public health through his writing and workshops tailored for scientists and journalists. And with viruses such as H1N1 working their way into human bodies, his message regarding emerging diseases resonates more than ever.

“We aren’t victims,” Walters says. “We’re perpetrators of almost all new diseases. The myth is we’re sitting here minding our own business and here come these nasty diseases, but it’s not like that at all.”

After Walters received his doctorate of veterinary medicine from Tufts University, where he focused on conservation medicine, he wrote Six Modern Plagues and How We’re Causing Them, in which he explains how ecological, demographic and industrial roots of diseases need to be mitigated to improve public health.

“The bottom line is that public health is not just about defense, it’s about offense,” says Walters, whose USF St. Petersburg associate professor Mark Walters communicates scientific information for the sake of public health. He points to humans as the source of emerging diseases.
work has taken him from Alaska to Asia, from Africa to Nepal, and throughout South America and Europe – often landing him at ground zero for new diseases.

His next book will examine influenza, a virus that appears in new strains every year, and answer possibly lifesaving questions. Why is influenza so dangerous? How do new strains emerge? What do they mean for public health, and how can they be prevented? He will look at the elaborate global surveillance system for detecting influenza, the origin of the virus in birds and other animals, and the latest science on the periodic emergence of pandemics.

With knowledge of the science behind disease, Walters imparts the importance of science communication to his students. He teaches science journalism, among other courses, and often writes about the connection between human health and the environment. In 2008, he organized a conference for scientists and journalists at the Poynter Institute for Media Studies with support from the Environmental Protection Agency. The conference created a forum for scientists and journalists to understand the methodologies of each field. In another book project, Walters will create communication guides for scientists based on hundreds of hours of documenting how scientists communicate with the public.

“These will be guides for scientists who want to reach beyond their peers,” Walters says. “It’s important for scientists because their funding depends on it.”

His focus on breaking down the barriers between scientists and the public has reached international audiences. Gretchen Kaufman, director of the Tufts Center for Conservation Medicine, has witnessed the impact.

“The practice of science and health journalism is a critical public service that helps the general public understand the complexity of the world,” Kaufman says. “Mark has a unique complement of talent and training, including his veterinary training, which provides important insights into a very difficult and changing area of health – something which should be important to all of us.”

— Melanie Marquez
AFTER BEING SELECTED from more than 140 applicants in the spring, USF’s Power Center for Utility Exploration (PCUE) and Progress Energy Florida are busy building one of the largest and most comprehensive smart grids in the Southeast. The $15 million grid will introduce alternative energy sources, like solar power and biodiesel fuel, into the electrical power supply for at least 5,000 customers in St. Petersburg and St. Pete Beach.

“Smart grids are one way to develop a system that is flexible with a different portfolio of energy sources that can survive natural and man-made disasters,” says Alex Domijan, principal investigator on the three-year project and PCUE director.

The project comes as national leaders are increasingly turning their attention to smart grids as a way to make energy consumption more efficient and as a means of incorporating more sustainable energy sources into the nation’s power grid.

Researchers estimate that improving the efficiency of the national electricity grid by 5 percent would be the equivalent of eliminating the fuel use and carbon emissions of 53 million cars.

Among the features of the smart grid, which Domijan says is the culmination of more than two decades of research, is the ability to communicate real-time energy price information to consumers. By knowing the price being paid at different times of the day, consumers would be encouraged to conserve during peak demand hours and manage their energy consumption throughout the day.

“You want this to spread through the whole country because that’s the only way to improve efficiency and reduce greenhouse gases,” Domijan says.

Once developed, the smart grid will be the first in Florida and one of the largest in the nation delivering power to homes and businesses. Unlike systems in other cities that implement elements of smart grid technology, Domijan says the USF project will be a fully integrated system of renewable energy sources, advanced sensors, communication and control technologies and two-way communication between utilities and customers while producing a more reliable and higher-quality power system.

— Ann Carney
Ocean Initiative

USF and Mote Marine Laboratory sign a landmark agreement to strengthen joint initiatives in education and sustainability.

COMMON GEOGRAPHY, concerns about the Gulf of Mexico and the creatures which inhabit it have long united USF and Mote Marine Laboratory as partners in scientific research. But a new agreement signed this summer promises to take that cooperative relationship to a new level in scientific research, expanded learning programs and economic development.

The affiliation agreement between USF and Mote Marine Laboratory will expand on what has been a growing, three-year relationship between USF and Mote through the Joint Center for Coastal Ocean Studies. The new partnership will allow for the pursuit of new research grants and funding and combine the varied resources of both institutions on projects centered on research, education, community outreach and commercialization of newly developed technologies.

Mote and USF’s College of Marine Science have regularly joined forces in research on such key Florida issues as red tide, fisheries management, ecotoxicology (the effect of toxic substances on the marine environment) and marine mammal, shark and sea turtle research. The new affiliation agreement expands the formal relationship between the two institutions to include research and technology transfer projects in other disciplines.

“It builds a stronger and broader effort for our research efforts and educational activities – from marine science, to engineering, environmental sciences, business and medicine,” says USF Vice President for Research and Innovation Karen Holbrook.

One of the first projects that will unite the two institutions is USF’s Research Foundation joining as an investor in Mote’s sturgeon farm – a unique facility in eastern Sarasota County that is remaking the practice of fish farming, often a dirty and environmentally-unfriendly practice, into a clean, sustainable means of providing high-quality food.

The freshwater sturgeon – some 40,000 pounds of them – are farmed in a meticulously clean, 200-acre park where their meat and caviar have become a branded delicacy. An automated filtration system that keeps the water clean has eliminated the need to dump antibiotics into the fish tanks, as many commercial fish farms do, and waste products from the fish tanks are pumped into a natural area where plants are grown for wetlands restoration.

But for all its advances, the sturgeon farm has one last hurdle – it takes a tremendous amount of energy to keep the tanks and water going. And that’s where USF’s sustainable energy technologies through the Florida Energy Systems Consortium come in.

Researchers hope the sturgeon farm can become the site of a solar energy project that would help supply the power the farm needs to run – making it truly a model for food production worldwide.

“We think these efforts should also become an important new economic driver for the state of Florida,” says Kumar Mahadevan, Mote president. “It’s especially important in these tough economic times that organizations like Mote and USF work together to help improve and diversify the state’s economy through such innovative collaborations.”

– Vickie Chachere
Safety First

Program helps Florida businesses reduce workplace injuries while turning safety into profits.

The workshop floor of an architectural millwork company can be a hazardous place. “Woodworking equipment has a lot of potential for injury,” says Tom Deagan, safety director with Architectural Specialties Trading Company, a small business in Pensacola, Fla. “The tools are sharp, and the blades are moving fast.”

A 30-year industry veteran, Deagan has seen some serious accidents. But thanks to his firm’s decade-long associa-
tion with USF SafetyFlorida, those types of incidents in his shop are few and far between. Working with USF SafetyFlorida consultant Joe Cundiff, his company has implemented a safety management program that continues to save the firm approximately $50,000 a year in workers' compensation costs alone, not to mention the cost of lost time and productivity associated with an injured employee.

USF SafetyFlorida is a free and confidential small business safety consultation program administered by the USF College of Public Health and funded by the State of Florida and OSHA. Last year, the program's 12 consultants conducted 745 safety and health consultations, identified almost 2,000 hazards – most classified as serious – and provided 26,000 hours in consultation, training and education to private industry across the state.

With a focus on companies in high-hazard industries such as construction, landscaping and nursing homes, SafetyFlorida's mission is to demonstrate how reducing workplace injuries and illnesses can help small, private-sector businesses profit from safety in today's competitive marketplace. Consultants help employers comply with OSHA safety standards, lower costs for workers' compensation, and decrease the number of days employees lose to illness and injury.

Charlene Vespi is USF SafetyFlorida program manager and a nationally recognized expert who serves as president of the National Association of OSHA Consultation Program Managers. She says that while USF safety and health consultants tour a worksite to identify physical hazards, "We do not limit our service to noting hazards and advising on how to meet OSHA safety standards. We also help develop safety management systems that educate employees so they can understand that their own behavior can be the worst hazard of all – or their greatest protection."

Deagan says that's true at his company. Some of the safety procedures implemented there – "common sense" measures such as never removing a safety guard from a saw and wearing safety glasses at all times – have become part of the firm's safety-oriented culture and new safety orientation program for new hires. "There's no way we could have gotten our safety program going without SafetyFlorida. We're huge proponents."

So is Moss & Associates – a construction management company based in Fort Lauderdale that is ranked among the nation's top 100 building contractors and is the second largest in South Florida. According to Brian Trusky, vice president-loss prevention, his firm has been working with USF SafetyFlorida consultants since the company was founded five years ago, and the greatest impact has been with trade contractors.

"USF SafetyFlorida provides an invaluable service," he says. "Because consultants come out to all of our jobs, both big and small, and are a friendly and helpful presence, our contractors are exposed to the same consultation services that we use so there's a 'domino effect.' Having safer contractors makes our jobs run more smoothly and ensures everyone is safer."

There's another facet to that domino effect created by USF SafetyFlorida that promulgates the value of workplace safety. According to USF SafetyFlorida director Yehia Hammad, USF professor in the Department of Environmental and Occupational Health, the program provides occupational health nursing students in USF's College of Nursing with the opportunity to attain real-world safety consultation experience by accompanying consultants to worksites.

"Through this mentored experience, these nursing students gain a better understanding of OSHA regulations and how the USF SafetyFlorida consultation program serves Florida's small businesses."

"The American worker, motivated by safety, can compete with the best in our global economy," says Vespi. "Safety, therefore, is at the heart of small business profits in Florida and across the nation."

– Mary Beth Erskine
Dr. Bob Deschenes uses a nuclear magnetic resonance spectrometer to help explain the causes of disease at the molecular level.
Decoding Disease

Dr. Bob Deschenes, chair of molecular medicine in the College of Medicine, studies disease at the molecular level.

What most of us see when we look at someone with Alzheimer’s disease is human anguish, a slow slide into a world beyond memory.

Scientists who study molecular medicine see that tragedy as well – but they see something more. They know that behind the face of anguish, deep inside the brain of a person with Alzheimer’s, a protein called beta amyloid is forming clumps and tangles inside the brain – folding and misfolding upon itself until it creates havoc.

“You have these proteins that you find tangled and that’s a real molecular puzzle,” says Dr. Bob Deschenes, the new chair of molecular medicine in the USF College of Medicine. “Why are they not folding properly? It may be like a Slinky, which moves, but comes back to the same shape. However, once tangled, those tangles can propagate and be difficult to return to the right shape. The same may be occurring in the tangles observed in an Alzheimer’s brain.”

Answering questions like that is what Dr. Deschenes and his department’s scientists aim to do. These are scientists who study the biggest questions, such as what causes Alzheimer’s, by looking at the tiniest of things – the structures of proteins and the inner workings of molecules. It’s a field that has huge, if yet largely unrealized, potential for success.

“We’ve got a long way to go,” he says.

But he’s convinced that the “rational design” that scientists can follow when they can see and understand how different molecules interact is the wave of the future. It is why Dr. Deschenes came to USF this year. He sees great potential in the collaborative research environment at USF bringing applied science to medicine’s biggest problems.

“The basic idea of having molecular medicine play a central role in all of the clinical disciplines, as well as the basic sciences, is what attracted me.”

Dr. Deschenes’ work offers unusual opportunities for collaboration, since studying how molecules interact applies to every branch of medicine. He also is the associate dean for the USF/Moffitt Research Partnership. In that role he is working with Dr. Said Sebti, professor and leader of the Drug Discovery Program at H. Lee Moffitt Cancer Center & Research Institute to establish a collaborative research consortium. He also works extensively with scientists based at USF’s Byrd Alzheimer’s Institute.

“We’re combining complementary expertise to come up with novel understanding and novel solutions,” says Dave Morgan, chief scientific officer at the Byrd Institute. He and Dr. Deschenes already have applied for a grant to hire two joint faculty members.

Molecular medicine could be especially useful in Alzheimer’s, he says, because of its potential to discover more about the abnormal tangles of beta amyloid proteins.

These are scientists who study the biggest questions, such as what causes Alzheimer’s, by looking at the tiniest of things – the structures of proteins and the inner workings of molecules.

Understanding the shape and structure of these proteins – how they fold and accumulate, how they change – may give us insights into how to prevent the disease,” Dr. Morgan says.

USF has invested about $1.2 million in a new device, a nuclear magnetic resonance spectrometer that analyzes how atoms behave, that will help with studying how those proteins fold. It also will be used to study new drugs with the potential to treat other diseases.

The department will use other high-tech tools as well to study how molecules interact. That ability is vital in order to see, for example, how a new drug interacts with a virus or bacterial cell, Dr. Deschenes says.

“What you need to be able to see is what’s going on in every atom as those two molecules come together,” he says.

Dr. Deschenes’ own research centers on cancer cell signaling using yeast as a model system. Because yeast cells share many basic properties with mammal cells and can be studied using sophisticated genetics and molecular techniques, they provide an excellent model to study cancer. Dr. Deschenes has been looking at a particular gene and how it tells cancer cells to grow – or not grow. If you could figure out how to stop the signals from that gene, you could stop various types of cancer in its tracks.

“If we let yeast cells tell us what’s important through genetics,” Dr. Deschenes says, “we are often surprised by what nature tells us.”

– Lisa Greene
HE VENETIANS CALL IT \textit{ACQUA ALTA}, the time of year when the Scirocco and Bora winds conspire with the full moon to push the Adriatic Sea up through the Lagoon of Venice and into the Piazza San Marco, sending tourists in their wellies scurrying on wood catwalks and blocking boat traffic from low-hanging bridges.

It is at this time of year when Venice – more waterlogged and more precarious than usual – that Ted Van Vleet is in his element.

For Van Vleet, a USF marine chemist in the College of Marine Science, what is intriguing in Venice is not only the ubiquitous water and the iconic canals themselves, but also what’s in it.

It’s the chemistry of Venice – the world’s most romantic city – that is Van Vleet’s life’s work.

For nearly 25 years, Van Vleet has investigated, documented and analyzed chemical pollution in Venice, playing a significant role in cleaning up the waters of the fabled city and making it more livable now than a generation ago. His expertise on Venice led him to a consulting role in the development of the Venice flood gate project, a monumental $7 billion engineering feat designed to protect the city from the increasingly intense acqua altas and the rising sea levels that threaten the world’s coastal cities.

While doing most of his work some 5,100 miles away in his laboratory at the marine science complex in St. Petersburg, Van Vleet’s dedication to science has turned into a devotion to the city, one of UNESCO’s world heritage sites.

“What takes me there is my work and the projects, but my love for the city is in the art and the architecture and its historical context,” Van Vleet said in a recent interview in his office with a sweeping view of Bayboro Harbor. “It’s the way the city has survived for a thousand years.”

As these Italian romances tend to go, Van Vleet’s quarter-century attraction to Venice began quite by chance. In 1985, he spotted a notice from the Gladys Kriebel Delmas Foundation in New York calling for proposals. The foundation provided small grants to scholars interested in Venice, primarily those studying art history and architecture which had been a great passion of Kriebel and her husband Jean Paul Delmas, who were wealthy patrons of the arts and part-time residents in an apartment on the Grand Canal.

Perhaps because she was the daughter of a chemistry professor, Van Vleet says, he managed to win a grant to travel to investigate the petroleum contamination in the waters surrounding the chain of islands that make up the city, which had boomed as an industrial area in the years following World War II.

On his first visits, the pollution from the city’s lack of a modern wastewater system was so bad Van Vleet’s eyes would burn and become infected.

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On his first visits, the pollution from the city’s lack of a modern wastewater system and from nearby Porto Marghera was so bad Van Vleet’s eyes would burn and become infected. He went digging for evidence of the pollutants – petroleum hydrocarbons, chlorinated hydrocarbons and fecal sterols to be exact – and found them in the marshy sediments and mussel samples.

Working closely with academic counterparts in Italy in six- to eight-week stints and in more than 30 visits, Van Vleet’s work pointed them toward pollution hot spots, like the city’s famed canals, where toxins had built up in sediments. The Italian authorities took note and a decade ago began cleaning up the city.
The early dredging of Venice’s canals not only allowed for the removal of the contaminated sediments, but improved water flow that helped mitigate the chronic flooding which has grown worse as sea levels have risen, Van Vleet says. His work also alerted Venetians to the chemical dangers that lurk in the lagoon, whose abundant mussels and fish stocks are a major food source for the city.

“It’s a much cleaner city than it was 10 or 15 years ago,” he says. “It’s good to see it much cleaner and much more livable than it was.”

Today, Van Vleet’s eyes no longer burn during his visits to Venice. Diligent cleanup efforts, including draining and dredging the canals of their toxic goo, have decreased levels of petroleum contamination, as confirmed by follow-up studies.

But that does not mean the city has dodged other threats from the water which surrounds it, leaving Venice’s future as fragile as an old Murano goblet teetering on a table.

Rising sea levels increase the threat of flooding and storm surge, and no city is as endangered as Venice. Residents have grown weary of flooding and the difficulty of life in an ancient city, leading Venice to lose one-third of its population in the last 30 years. A mere 60,000 residents call the city home, although more than 150,000 tourists a day pack its narrow passages.

For some, the answer to Venice’s future is in the flood gates – Modulo Sperimentale Elettromeccanico, nicknamed MOSE, which is Italian for Moses – that are designed to protect the city. Seventy-eight massive, inflatable structures will rise as sea levels rise to protect the city and deflate as the waters recede when the project is complete, projected to be sometime around 2011. Van Vleet’s role has been to make sure that the chemistry in the environmentally fragile area – including the delicate sea grass beds important to marine life in the lagoon – is not altered by the gates.

The lessons learned from Venice, Van Vleet notes, have far-reaching implications, even for his home port of Tampa Bay. Rising sea levels will be a challenge for all coastal cities in coming decades. Flood mitigation and balancing the needs of environment with those of coastal residents are destined to become worldwide issues of concern, he says.

For now, the immediate task for Van Vleet and the legions like him enchanted by Venice is preserving an international treasure beyond compare and giving those who call it home a better quality of life.

There is, after all, an undeniable chemistry between the city and the scholar.

“It’s a very special place,” Van Vleet remarks, his expression reflecting a far-off fond memory. “It has a way of getting under your skin – although perhaps that is a bad metaphor.”

– Vickie Chachere
Discovery

Scanning the Past

Archaeologists travel to Guatemala to help preserve Mayan frieze.

HOPPERING 500 FEET ABOVE THE mountains and jungles of Guatemala to one of Mesoamerica’s most remote archaeological sites isn’t standard fare for most university professors. But for USF archaeologists Travis Doering and Lori Collins, it’s just another day’s work in the field.

The recent discovery of a 2,300-year-old Mayan stucco frieze at El Mirador, in the Petén region of Guatemala, led the two USF researchers to the site in May. Doering and Collins are directors of the university’s Alliance for Integrated Spatial Technologies (AIST). Along with anthropology graduate student Bart McLeod, they were invited by Richard Hansen, director of the Idaho State University Mirador Basin Project, to three-dimensionally document the carved stucco panels with laser scanners for cultural heritage preservation and research purposes. Given the unique expertise of Doering and Collins in high-resolution 3D scanning of Mesoamerican antiquities, AIST was a natural choice to conduct the work on the ancient panels.

El Mirador is more than the largest and one of the earliest Mayan settlements – it is considered the second largest archaeological site in the Western hemisphere. Under threat from logging interests, artifact looting and the drug trade across the Mexican border, the Mirador Basin is biodiverse and expansive. The archaeological site covers approximately 500,000 acres, dwarfing Guatemala’s famous Tikal ruins, the country’s largest tourism draw.

“We were asked to document the frieze for its preservation and conservation. They’re going to be doing some restoration and they wanted to capture it in its full detail before any of the work started,” says Doering.

Illustrating reptilian creatures, deified monsters and anthropomorphic swimmers, the two, 26-foot-long panels are noteworthy as the earliest depiction of the characters in the Popol Vuh, a Mayan creation myth. Sculpted of limestone and stucco, the miraculously preserved pre-Christian mural suggests that the Maya’s complex creation tale far predated their...
contact with the Western world. Its location, as part of an aqueduct system, deepens our understanding of how the Maya harvested rainwater and funneled it across the Acropolis of the now jungle-covered ruins.

Utilizing short and mid-range three-dimensional scanners that direct lasers across a surface—whether it be a small artifact or entire Mayan temple—the AIST researchers create a three-dimensional file with accuracy down to a human hair.

“We’re capturing millions of spatially related points, essentially X, Y and Z coordinates, in what looks like a photograph, but is in fact a dense point cloud of data that records the object or area in its entirety,” says Collins. “The accuracy levels make it seem like you are actually in front of the piece.”

The scans provide a wealth of measurable spatial data and reveal contours and surface detail that photographs and the human eye often miss. The data maintains the spatial perspective and prevents any bias that a lens or camera position might impose on an object. In addition, unlike plaster casting or ink rubbings that can damage a fragile object, a visual representation is created without harming the original piece. “It’s non-contact, non-invasive and non-destructive,” says Doering.

Among the end goals of the project is to utilize the scan data to replicate the original piece for off-site display as part of El Mirador/Maya exhibitions in European museums. With the Internet’s capacity to share information on a worldwide scale, scan data is crucial to the creation of accurate virtual museum environments, allowing researchers to study archaeological sites and artifacts remotely. The research project was made possible by the Foundation for Anthropological Research and Environmental Studies (FARES), sponsor of the Mirador Basin Project, and through permission from the Instituto de Antropología e Historia (IDAEH), the Guatemala agency responsible for the protection and maintenance of the nation’s cultural heritage.

“Scan data offers the ability to see things as they really are and interact with the objects and sites in a virtual environment without needing to go there, like a time traveler in your own chair in front of the computer,” says Collins.

The time travel is set to continue: AIST has received a National Science Foundation grant to return to Guatemala to scan and analyze the monumental stone sculpture at the 2,500-year-old archaeological site of Takalik Abaj in early 2010.

Doering adjusts the laser scanner to capture minute details of the ancient sculpture. The highly accurate graphic information is recorded in digital format, a feature that allows the data to be viewed on the computer screen in real-time (inset) to assure quality control.
The research project was conducted near the largest pyramid in Mesoamerica, La Danta, which towers 230 feet above the jungle floor at the archaeological site of El Mirador.
St. Pete Beach Chief of Police David Romine says USF’s Master of Arts in Criminal Justice Administration gives students the necessary skills to sit in the police chief’s chair.
HEN ST. PETE BEACH
Chief of Police David
Romine began his policing
career in 1971, he called it
a job. Today, he calls it a
profession.
“A profession has stan-
dards,” he says. “You have
to educate yourself. You
have to progress.”

Romine, a 38-year veteran of law enforcement who has
been chief in two Florida cities, has done both.

He holds a Bachelor of Science degree in Criminal Justice
and is a graduate of the FBI National Academy and the FBI Law
Enforcement Executive Development Program.

Last year, fulfilling a promise he made to himself early on,
Romine earned a master’s degree, an achievement he calls “one
of the highlights of my career.”

Romine was a member of the second graduating class of
USF’s Master of Arts in Criminal Justice Administration (MACJA)
program. Similar in format to an Executive MBA, the program
prepares criminal justice practitioners for advanced levels of
management by enhancing technical skills, improving decision-
making processes and increasing analytic capabilities.

The weekend degree program is the newest post-graduate
degree program in USF’s Department of Criminology, a depart-
ment recognized nationally for its rigorous academic standards.
The department’s doctoral program has been ranked among the
top 10 in the nation by the National Professional Association of
Criminology Doctoral Programs and the Chronicle of Higher
Education. Separate from the two-year Master of Arts in Crimi-

Justice Served

sionals – practicing criminal justice administrators like Romine.
Every Saturday for five straight semesters, Romine and his
colleagues from a variety of criminal justice agencies, would
head back to school. From 9 to 5 they tackled subjects like
“Theory, Practice and Research in Law Enforcement;” “Theoreti-
cal Approaches to Criminal Behavior;” “Local Government Ad-
ministration and Finance;” “Research Methods;” and the dreaded
“Quantitative Analysis.”

“It was hard; it should be,” says Romine. “The skills you
learn here are the skills you need to survive sitting in the police
chief’s chair.”

The program follows a traditional cohort model in which
each entering class comprises a cohort and proceeds through
the program as a cohesive unit, explains Max Bromley, MACJA
program director. It was designed, he says, to prepare criminal
justice professionals for the next step in their careers.

“There are so many big issues that confront these profes-
sionals on a daily basis,” says Bromley, who spent 22 years in
the USF Police Department, rising to the position of assistant
chief before becoming a full-time faculty member in 1996. “The
MACJA program helps develop better problem-solving skills in
criminal justice practice.”

Problem-solving is the goal behind the program’s culminating
experience – the Capstone Project. Using analytical skills and the
knowledge they have gained, each student prepares a proposal
for addressing a problem in his or her agency or work unit.
Problems range from turnover, training and leadership succes-
sion to crime prevention, budget constraints and the transmission
and prevention of HIV/AIDS in the state’s correctional systems.

For Romine, the problem was alcohol-related recidivism.
“St. Pete Beach has a population of 10,000. It is six-and-a-
half miles long and one mile wide; 118 places sell alcohol,” he
“In addition to research and scholarly publications, the department places a high value on intervention – work in the field to produce change.”

- Lorie Fridell

says. “The majority of officer injuries and use of force incidents involve dealing with intoxicated persons.”

Analyzing the high percentage of repeat offenders among the city’s population of individuals arrested for alcohol-related incidents, Romine set out to study the effectiveness of jail time on repeat offenders, the majority who could be described as alcohol dependent. “If we know alcoholism is a disease, are we doing the right thing by sending these people to jail? I believe there’s a better way – one that’s beyond the economic resources of most cities today,” he says.

“It’s easy to get caught up in day-to-day operations,” adds Romine, whose department includes 27 sworn officers and 10 civilians. “This project helped me to focus on the bigger issues.” And, he says, it taught him to apply and extend evidence-based research to real-world problems.

Sixty-one practitioners representing 38 agencies have graduated from the MACJA program since it began in 2006. The program’s two current cohorts, one which began in August 2008, and one in August 2009, have 24 and 27 members, respectively. Overall, about half the students come from the field of law enforcement, the balance practice in the fields of probation, corrections, mental health and social services. Fifty-two percent are female.

Sherry Munroe, Administrative Office of the Courts 20th Judicial Circuit, Charlotte County Pretrial Supervisor, a cohort III graduate, traveled 194 miles round-trip to attend classes each week. She was grateful for the interaction with her cohort colleagues, a group which included juvenile probation officers, corrections and law enforcement professionals and even a wildlife officer. For Munroe, continuing education is a natural.

“People have to be educated to understand how the system works and how to put it all together,” she says. “We all work toward the same thing, but it helps to understand how everyone fits into the scheme of things.”

Munroe’s Capstone Project focused on improving the quality of life for the court’s night workers through proper eating, sleeping and other personal habits. Already some of her suggestions are being implemented by the human resources department in the 20th Judicial Circuit Administrative Office of the Courts.

Munroe hopes the knowledge and skills she acquired in the program will help her move up in the court system and one day lead to a teaching position.

While the MACJA program is the newest graduate-level program in USF’s Department of Criminology, it is based on a solid foundation. The department, established in 1972, began offering a traditional master’s degree program in criminology in 1974. It includes among its graduates Gil Kerlikowske, current director of the White House Office of National Drug Control Policy (story at right). In 1998, the department became the second in the state to offer a PhD program.

Lorie Fridell, associate professor and graduate program director, says it was the strength of the department’s graduate program that lured her to the university in 2005.

“In addition to research and scholarly publications, the department places a high value on intervention – work in the field to produce change,” says the nationally recognized expert on police use of force, violence against police and racially based policing.

Fridell teaches the “Critical Issues in Law Enforcement Administration” course in the MACJA program. The course is designed to further students’ knowledge of research and research methods using real-world examples like the new and contradictory research on how best to conduct a police lineup.

“If you know about research methods, you can make an informed decision about which protocol for lineups is most effective. Some of the research challenges the way policing has always been done.” That, she says, is a good thing.

Fridell’s goal for MACJA students enrolled in her class is two-fold: “To be able to conduct research in their own organizations and to be informed and analytical consumers of research produced by others.”

She believes the cohort model improves the educational experience and makes it easier to tackle difficult and emotionally charged topics like racially based policing.

Today, USF’s criminology department is part of the university’s College of Behavioral and Community Sciences. The new college was formed in the summer of 2008 to focus on the development and implementation of innovative solutions to address the complex and problematic behavioral issues that affect individuals and the communities in which they live.

“Crime is a fundamental aspect of human society,” says Thomas Mieczkowski, professor and chair of the Department of Criminology. “At both the undergraduate and the graduate levels we focus on the complex facets of this field. And, through targeted programs like the MACJA, we are helping to train and elevate working professionals.”

Professionals like Chief Romine.
THE NATION’S HIGHEST RANKING OFFICIAL on drug control policy, Gil Kerlikowske, got his start at USF. Kerlikowske, who earned both his bachelor’s and master’s degrees in criminal justice at the university, is today director of the White House Office of National Drug Control Policy (ONDCP). Nominated by President Barack Obama and confirmed by the U.S. Senate, Kerlikowske is responsible for establishing the policies, priorities and objectives for the nation’s drug control program.

Kerlikowske’s ascent to the national stage follows a decorated career serving as chief of police in four cities and 25 years as a law enforcement officer in Greater Tampa Bay – a career he blends with the higher education skills he acquired at USF.

USF: Why is higher education so important in the field of criminology today?

Kerlikowske: A key value of higher education is an understanding of the importance of research for producing effective practice. Criminal justice is incredibly complex; policy and expenditure issues require very strategic and sophisticated thinking. It is important for criminal justice leaders to use research to guide decisions in policy and practice.

USF: How did USF help prepare you for your current role leading the nation’s drug policy office?

Kerlikowske: The nature of the faculty produces a curriculum that blends the theoretical and the practical. My program of study combined coursework, research and practical experience. This combination expanded my knowledge of crime and criminal justice and gave me tools and ways of thinking that served me well in my professional career and continue to serve me as director of the ONDCP.

When stressing the importance of education, Kerlikowske often quotes Ben Ward, New York’s first black police chief who died in 2002. Speaking on what college does for a police officer at a Harvard University function many years ago, Ward said, “It puts doubt where there was certainty and it puts questions where there were answers.” That, Kerlikowske believes, says it all.
Attaining Knowledge. Preparing for a Future Career. Becoming an engaged citizen focused on serving others. By any definition of success, USF students are rising to new levels of achievement.

They earn prestigious internships, awards and seats in nationally competitive programs. They maintain impressive GPAs while managing multiple academic, civic and professional endeavors. They are engaged in service to individuals, communities and the common good and are role models for younger students.

USF students most certainly have “school spirit” – and it’s a spirit of success.

“Students are our raison d’etre,” says USF Executive Vice President-Academic Affairs and Provost Ralph Wilcox. “Our first and foremost responsibility as a university is to provide the opportunity for all students to succeed academically.”

To help do that, Wilcox says the university places a high premium on making a broad range of learning experiences available to undergraduates. “Our priority is to provide the resources and support that create a broad array of diverse opportunities,” he says, “But it is the students who take the initiative and ultimately achieve success.”

Five USF students – Sarah Wilson, Dazaun Soleyin, Leena Hasbini, Jordan Markel and Kristen Corpion – took that kind of initiative this past summer. Instead of focusing on typical summer pursuits such as sand and surf, these high-achieving students opted to focus on success – their own, as well as the success of others.

Sarah Wilson’s summer included an internship in Cannes during the Cannes Film Festival, a trip to L.A. with her crew to the Campus MovieFest International Grand Finale where her film received top honors, and an internship with a film company in New York City.
Filmmaker keeps her career in focus

Cannes. Hollywood. New York City. Each city is, in its own right, a filmmaker’s mecca. Experiencing all three in one summer’s time was an amazing whirlwind of opportunity for mass communications major Sarah Wilson.

Wilson’s passion for filmmaking started years ago when, in the quiet darkness of a movie theater, she fell in love. “It may sound silly,” she says, “but I fell in love with Spiderman. It got me hooked on film, leading me to start making movies of my own.”

During the summer of 2009, that passion for filmmaking led her first to the French Riviera, where during the 62nd Annual Festival de Cannes, she participated in a two-week internship with a small film production company. “Cannes was unforgettable. I learned about the buying and selling of film, but the deeper understanding and knowledge that I gained about the industry was probably the greatest benefit of the experience.”

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Next stop: Hollywood. For two consecutive years, Wilson and her filmmaking crew of USF students had taken the top regional award at Campus MovieFest, which bills itself as the “world’s largest student film festival.” This year’s film, *Rhapsody*, which competed against the works of more than 75,000 students from 56 colleges and universities, was one of the top 46 films screened at the International Grand Finale at the Paramount Theater in Los Angeles.

Throughout the three-day festival, Wilson and fellow students attended workshops with industry experts. They established contacts with film professionals. But undoubtedly the highlight was becoming red carpet stars when *Rhapsody* received top honors for “Best Picture.”

Last stop: New York City, where Wilson spent two months interning with Open City Films, an award-winning, Manhattan-based production company and leader in the independent film industry. “I was involved in development, which meant reading a lot of scripts and trades and basically following the literary works and goings-on in the industry. Doing so, I learned so much about what it takes to find good, worthwhile material and to become a great producer.”

While her summer was multi-faceted, spanning both oceans and continents, Wilson says a single objective united her experiences: “reigning in opportunity and making important career moves.”
“It’s not at all easy to break into this business,” she says. “You really have to stay focused.”

An excellent attribute for a filmmaker.

Role model, mentor, friend

With natural warmth and amiability wrapped in a quick, contagious smile, Dazaun Soleyn has a passion for dance, a penchant for business, and a goal to bring the two together by opening his own performing arts school.

Yet, just beneath the unassuming surface is a deep reserve of determination and courage developed by confronting challenge and choosing success. It’s this strength of character that enabled Soleyn to be an influential role model, no-nonsense mentor and supportive “big brother” for high school students who participated in USF’s Upward Bound program last summer.

Upward Bound is a year-round national program that helps low income students and “first in their family” students get into college. USF has participated in Upward Bound for 43 years and offers the largest program in the state.

As a former “bounder” and student employee in USF’s Upward Bound office, Soleyn’s first-hand experience, as well as his professionalism, made him a natural fit to help lead the summer program. He also believes in “living by example.” A sophomore majoring in management and dance studies, Soleyn was admitted to USF while still in high school, maintains a 3.50 GPA, including a 4.0 last semester, and represents the university as a USF Ambassador and a board member of the Student Alumni Association. He works as a human resources trainee at a local hospital and was offered an internship in U.S. Senator Mel Martinez’s office.

Dazaun Soleyn served as a residential counselor for USF’s Upward Bound program. He acted as a mentor and role model for area high school students who lived on campus for six weeks during the summer taking classes and experiencing campus life. Upward Bound is a national program aimed at providing fundamental support to students from first-generation and/or low income families. Soleyn understands the invaluable impact a mentor can have on a student’s academic future and wants to ensure success for others. So for six weeks this summer, when 84 students lived on campus taking classes and participating in activities, he acted as a residential counselor.

“Residential counselors mentor students emotionally and academically. We can ‘make or break’ the Upward Bound experience for them,” says Soleyn. “I can identify with the challenges these students are experiencing, so I knew I could have an impact.”

With 24-hour-a-day responsibilities, Soleyn says the position was a lesson in sacrificing for the good of others – such as staying up until 4 a.m. to counsel a troubled participant. He continues to stay in touch with students,
Leena Hasbini received a nationally competitive teaching internship through Breakthrough Collaborative. The volunteer internships place students in one of 27 U.S. cities or Hong Kong to work with high-potential, low-income middle school students as teachers and role models.

checking on their progress and providing encouragement.

“I want them to understand the big picture,” says Soleyn, “to think with the end in mind, knowing where they want to go and what actions to take to get there – to be successful.”

The heart of an educator

Leena Hasbini has a heart that is easily touched by children in difficult circumstances, and that led her to the most demanding summer experience of her life. Completely voluntary, it was also the most rewarding experience she has ever had – teaching disadvantaged middle schoolers intensive summer classes in an effort to help set them on the road toward college.

Hasbini, who has worked as a substitute teacher for Hillsborough County Schools and as a computer lab specialist for the Boys & Girls Club loves children. And she loves a challenge.

In high school, multiple dual enrollment classes gave her a significant jump on college credits. Taking summer classes and 19-credit semesters at USF is enabling her to complete an undergraduate degree in business management in only two and a half years and graduate at 19. Her goal is to earn a master’s degree in guidance and eventually obtain a position in school district administration.

So it’s no wonder that when Hashini learned about Breakthrough Collaborative and its summer teaching internships, she was intrigued. A nationally competitive program, Breakthrough is consistently chosen by The Princeton Review as one of the top 10 internships in the United States for undergraduates, attracting thousands of interested students each year despite a rigorous application process.

Hasbini earned a volunteer position working in a school based in Fort Lauderdale, Fla., for eight weeks. Breakthrough bills itself as “the hardest job you’ll ever love,” and Hashini agrees.

“The days were extremely long and hard,” she says, beginning at 7 a.m. and lasting well after 6 p.m. Every day, she taught two classes of “Global Conflicts of the 20th and 21st Centuries” and co-taught “Explorations in Nutrition.” She participated in daily committee meetings with other teachers and mentor meetings with students. At night, she worked on lesson plans – in addition to coursework for five online education classes she was taking through USF.

“It was a challenging experience that not only developed my skills but also my confidence and resolve,” says Hashini. “The idea that people at Breakthrough thought of me, a young college student, as someone with the ability to be a strong, competent teacher, opened worlds of possibility for me and instilled a strong feeling that I can do anything I set my mind to.”

Bench to bedside

As a future physician, senior biology major Jordan Markel is drawn to what he calls the personal, “patient
side” of medicine. At the same time, the biologist in Markel is fascinated by the basic science that addresses the causes of human disease and illness.

That’s why the opportunity he had this summer to participate in research where clinical questions are brought to the laboratory was, in his words, “tailor made.”

A new clinical and translational science center launched by Harvard Medical School last fall got Markel’s attention. Based on a National Institutes of Health award, the center’s mission is to transform patient-oriented research while creating new levels of collaboration across the university. It’s this “bench-to-bedside” research mission that compelled him to apply for a research internship in the center’s inaugural program. He was one of just 10 undergraduates selected from a national pool of candidates.

Markel was involved in a research project focused on the development of novel techniques for the preservation and long-term storage of red blood cells. “Blood transfusions are a tremendous help in saving lives, and there is an enormous clinical need for red blood cells,” he says. “Maintaining the quality and safety of the cells is imperative, but current methods of preservation result in a lot of damage to cells.”

Markel says he particularly appreciated “the collaboration with MDs and PhDs and the insights I gained into both the clinical and the basic sciences.”

No stranger to laboratory research, Markel has worked with Andreas Seyfang and John Sinnott in USF’s College of Medicine. He is currently completing a graduate certificate in clinical investigation and is a community research coordinator for the USF Department of Pediatrics. A MARC U-STAR scholar, Markel is also the first USF student to receive recognition from the prestigious Barry M. Goldwater Scholarship and Excellence in Education Program. In addition, Markel is a 2009 recipient of a microbiology undergraduate research fellowship from the American Society for Microbiology.

Markel wondered what it would be like to work side-by-side with chemical engineers and physicists during his summer internship. “They welcomed my perspective. I felt like part of the team right from the start,” he says. “Although I’m not a doctor yet, this research allowed me to continue making contributions to medical care. I hope to continue working at the interface of clinical practice and science.”
Opening courtroom doors

In February, Harvard Law School, in partnership with NYU School of Law and the Advantage Testing Foundation, announced a new summer program aimed at helping outstanding, underrepresented students of modest means get into the nation’s top law schools. The intensive five-week program, called TRIALS, provides a unique opportunity for select students to learn about law school from the field’s most influential scholars, while receiving rigorous LSAT preparation. Tuition and all expenses are included, plus students receive a $3,000 stipend to replace summer employment income. Unsurprisingly, the announcement drew more than 5,000 applicants. Just 20 of those students were selected for the program’s inaugural session.

USF’s Kristen Corpion was one of them.

Corpion has had her mind set on becoming a lawyer since she was a child, and Harvard Law is her dream school. “My father has serious health challenges that started when I was 7,” she says. Even at that age, Corpion was sensitive to the complicated legal difficulties he encountered as a result of his condition and wanted to help. “So I decided I would right my family’s problems through law.”

Corpion graduated from high school in three years with a 4.8 GPA. The daughter of a chef and a seamstress, she was the first in her family to attend college. She started at USF studying political science, and soon added a second major in anthropology to her course load. She founded USF’s first Mock Trial club and in addition to other leadership positions on campus, cites multiple demands on her time – the financial need to work at least 20 hours a week, to be with her father during his frequent hospital stays, and to assist with her mother’s business. Despite it all, she maintains a 3.93 GPA.

“I think I see the world from a different perspective than most of my peers,” says Corpion. “Having the opportunity to do nothing but study was a luxury.” While the schedule was intense and the work exhausting, she was inspired by guest speakers and attorneys. “After spending five weeks at one of the best law schools in the world, I am enthusiastic about becoming the best advocate I can be.”

Corpion plans to enter public service law and work in the area of health care and disability rights. “I am passionate about providing the sick and underrepresented members of our society with Harvard caliber legal representation.”

People like her father.
STEVEN PROPER PEERED over Allison Reiter’s shoulder at the computer screen, asking her how to join the health care revolution.

His actual question was a little more prosaic: How can I tell my prescription has really gone to the pharmacy?

With a few clicks of the mouse, Reiter shows him. Dr. Proper quizzes Reiter and her colleague, Suki Conrad, on other aspects of how to use the computer software to write prescriptions electronically. But when he starts trying to fool the program, asking it for drugs that he used 30 years ago, it’s clear Reiter and Conrad, both USF medical students, have a convert. Dr. Proper is ready to change his office prescription pads for mouse pads.

To him, the switch makes sense.

“This is the wave of the future,” he says.

But as these USF students are finding out, it isn’t always so easy. The students are on the front lines of an ambitious project called PaperFree Tampa Bay. The effort aims to convince Tampa Bay’s doctors to start writing electronic prescriptions.

USF Health unveiled the project in March with a bang. “We’re here today to start a revolution,” is the way Dr. Stephen Klasko put it when he announced the plans at a media-packed press conference attended by U.S. Rep. Kathy Castor and Tampa Mayor Pam Iorio.

Dr. Klasko, CEO of USF Health and dean of the College of Medicine, hopes to use federal stimulus dollars to hire 132 “e-health ambassadors” to fan out over a 10-county region, visiting 10,000 doctors to show them how to e-prescribe. USF is partnering with a private software company, Allscripts, and will install the software free for doctors who participate.

Project leaders hope that once doctors see how easy it really is, they’ll start doing it – and that many will jump to the next step, making all their medical records electronic.

If they can pull it off, Tampa Bay really will be the spark for a health care revolution.

“This will be the proof of a concept that can become a model for the entire nation, to help physicians quickly and easily transition from paper-based care to electronic health records,” Dr. Klasko said at the unveiling.

It’s hard to argue against e-prescribing. National studies estimate that 7,000 Americans die each year because of medication errors. Proponents say electronic software could pre-
vent many of those errors, often caused by misreading names or dosages in handwritten prescriptions.

E-prescribing also is more convenient for patients, since their doctors send prescriptions directly to pharmacies, as well as more efficient for doctors, since the software can track patients’ allergies and other drugs. The federal government wants doctors to e-prescribe: Medicare will soon pay doctors more if they e-prescribe, and private insurers are likely to follow.

It seems, in short, like an idea whose time has come.

This summer, USF Health hired Conrad, Reiter and eight other medical students to be the “e-health ambassadors” for PaperFree’s pilot project. The goal: to visit nearly 100 doctors over the summer.

They had their work cut out for them. Even though the technology is readily available, fewer than 10 percent of America’s doctors have made the switch. The students soon found that just convincing busy office managers that they needed to see the doctor was their first challenge.

Still, they persisted. They got a boost when the Hillsborough County Medical Association told members about their work. And they found many doctors were happy to see them just because they like helping medical students.

One afternoon in July, students Marcus Freeman and Patrick McNair found themselves waiting to see a doctor. They talked about e-prescribing with the zeal of missionaries.

“I like the whole aspect of making the process more efficient – cutting costs and improving patient safety,” McNair says. “It gives the physician a lot of ways to become more efficient,” Freeman says. “And it’s easy. It doesn’t require any equipment.”

The students don’t even bring laptop computers with them, because the demonstration system is all online.

Soon, the students were ushered in to see otolaryngologist Dr. Rene Boothby. He likes the idea of e-prescribing, and he likes the system they show him. But, he told them, his needs are different. As a specialist, he sees many of his patients only once. He wanted to make sure the e-prescribing system would interface with his patient entry data, so that patients’ names and personal information didn’t have to be entered into a computer twice.

Concerns like Dr. Boothby’s are easy to quantify. Some of the reluctance stems from concrete problems: Will the system make running the office more difficult? Will patient records still be confidential? Will it cost too much? Those questions are becoming easier to answer – especially since PaperFree will install the basic e-prescribing software for doctors for free. Advocates say e-prescribing is secure, and that, as doctors learn to use it, it becomes easier than flipping through paper charts.

Those issues don’t entirely explain the slow pace of change, Dr. Klasko told the students a few weeks after their visit to Dr. Boothby. He sat down with them to hear about their experiences, and pointed out to them that the Bush administration once planned to get the nation’s doctors using electronic records by 2011 – something that’s...
clearly not going to happen. The Obama administration has re-set the clock to 2014.

Part of the reluctance comes from doctors’ culture, Dr. Klasko told the students. They’re trained to value autonomy, hierarchy, and scientific certainty – not creativity, change and trying new things. Just look at how many doctors are pilots, he joked.

“That’s not a creative sport – at least, not if you want to land,” he said.

Following set rules may work well in the operating room – or in the cockpit – but it seems to make some doctors less eager to change how they manage their data, he says. Still, Dr. Klasko and other health policy experts say those attitudes are changing. He’s delighted with the visits the students have made so far.

“This has been incredibly successful to this point,” he tells them.

Jay Wolfson, associate vice president for health law, policy and safety at USF Health, is helping to lead the PaperFree effort. After meeting with the student group, Wolfson talked about the changing medical culture. With Medicare reimbursements changing, he says, many doctors realize that change may be forced on them.

“This is a way that physicians can take control of their own destiny,” Wolfson said. “Physicians have learned the hard way that if they don’t get in front of an issue, they wind up underneath it.”

PaperFree is now working with the Rural Health Network to bring e-prescribing to their physicians and clinicians, a group that has signaled its interest in participating in order to improve care for its patients. The U.S. Departments of Veterans Affairs and of Defense, leaders in electronic health records, are particularly interested in this outreach effort. Current USF defense department-funded informatics projects are being linked directly into the PaperFree effort — with emphasis on the large number of veterans and their families in Florida.

Wolfson said he’s also finding that the medical students have opened doors for PaperFree.

“They’ve created good will,” he says. “Word has gotten around from other physicians that the idea behind all this has value. They know we’re different from a private company. We’re not just pushing a product. We’re here to learn as well as to innovate. We’re improving quality, safety and outcomes.”

USF is teaching this group of medical students something else as well. They’ll graduate without ever writing on a prescription pad.
A Passion for Philanthropy

USF Trustee Debbie Sembler believes it is important to sustain and support causes and entities that are close to your heart.

Every year in December, Debbie Sembler, her husband, Brent, and their three children take a family field trip. And every year it’s the same destination – Menorah Manor, a local nursing home, where the Semblers have adopted a group of Russian Holocaust survivors.

Working through an interpreter, each family member shares a personal update. Then it’s time for the gifts – hand-selected items from a wish list, and an occasional surprise, like cable access to Russian television programming that provides the residents a connection to their roots.

“It’s something that started with my daughter’s bat mitzvah eight years ago, and it has turned out to be one of the best things we do as a family,” Sembler explains.

For Sembler, a USF System trustee and chair of the USF St. Petersburg Campus Board, making a difference is something she learned early on.

“I was brought up by parents who are very giving, particularly with their time,” she says, adding that she married into a family with similar values. “My husband and in-laws are incredibly philanthropic and caring. We are blessed and lucky enough to give to others.”

Sembler first became involved with USF in 2003, when then-Governor Jeb Bush appointed her to the USF Board of Trustees. Two years later, when the USF St. Petersburg Campus Board chair position became vacant, Sembler stepped in.

“I love that campus – just being there and seeing its growth,” she says, enumerating recent developments on campus.

Sembler’s involvement with the university isn’t limited to her board positions. She says it was a former development officer who got her started giving back to USF financially.

“He found out that I have a passion for tolerance and fighting genocide. He knew my past involvement and created something meaningful to fit,” she says. That something is the Debbie and Brent Sembler Florida Holocaust Museum Lecture Series in the USF St. Petersburg College of Education. Today, her support of the university also includes USF Public Broadcasting, the Patel Center for Global Solutions, USF Athletics, USF Hillel and USF Women in Leadership & Philanthropy.

“It’s important to keep things you are passionate about alive; you have to give to keep them growing,” Sembler believes. “It gives me more of a connection to sustain an entity and help it grow.”

Sembler has done a lot to help USF grow, and as is true for all causes and entities she supports, she’s passionate about it.

“I really believe in Judy Genshaft. I believe in her vision and mission and all that she is accomplishing even in these economic times. The system, as a whole, has grown academically; the caliber of students has grown.”

USF is just one of the Florida native’s philanthropic interests. Sembler additionally supports the Florida Holocaust Museum, All Children’s Hospital, Shorecrest Preparatory School, Gulf Coast Jewish Family Services, the American Heart Association, the Jewish Federation and Temple Beth-El. She is a past recipient of the Florida Holocaust Memorial Museum “To Life” award, the Gulf Coast Jewish Family Services Honorary Award, and the 2008 “Woman of Distinction” award from the Jewish Federation of Pinellas County. In November, along
with President Genshaft, Sembler will be honored by the Anti-Defamation League.

Sembler’s greatest passion is her family – her husband, Brent, vice chairman of The Sembler Company, one of the country’s leading shopping center development and management companies, and their three children – Tayllor, 21; Logan, 19; and Preston, 14.

“My kids are thriving and doing well. I hope I’ve raised them to be philanthropic, to know the value of money and to give back to your community,” she says.

“Thankfully I have great kids.”

While Sembler’s life today is largely about philanthropy, her past includes a successful marketing and public relations career. She spent seven years as a public relations executive in New York City. In 1984 she returned to Florida, helping to open the Wyndham Hotel Sea World in Orlando as public relations director, and later serving as the marketing director for Old Hyde Park Village in South Tampa.

It was a good fit for Sembler who loves fashion. Her winter itinerary this year included a stop at New York Fashion Week. “I went with three wonderful women on a trip sponsored by our Tampa Saks Fifth Avenue. Now we are all on a ‘Style Council’ for the store.”

Sembler was born in Hollywood, Fla. She grew up in Daytona Beach and today makes her home in Pinellas Park. That puts her close to USF.

“I love my involvement with USF,” she says. “I have met amazing individuals through my relationships with the university. But it’s more than that. I have received more thank yous, more kind wishes, more smiles than anyone should receive,” she says. “USF has reinforced my commitment to giving.”

— Ann Carney
Connecting with Fans

USF Athletics taking advantage of new technologies to reach Bulls fans.

With the 2009 USF football season well under way, the Greater Tampa Bay community is rallying around the Bulls like never before. And, while 2009 is shaping up to be one of the most exciting seasons in program history, it also is proving to be unlike any other because of the new ways USF is connecting with fans—and fans are connecting with the Bulls.

GoUSFBulls.com, the official website of USF Athletics, is a national leader in its usage of new technologies and social media in an effort to connect with fans in every way possible.

Among those ways are: BullsVision Streaming and On-Demand Video & Radio; Daily News Wire; Digg.com; E-News; Facebook; Interactive Guides; Live Stats; Live Chats; RSS; Twitter; USF Federal Credit Union TwT Polls and YouTube.

“We want to make a concerted effort to embrace any new technology that our fans are utilizing,” says USF Assistant Athletic Director for Communications Chris Freet. “If Bulls fans are congregating in online social networks, we want to take part and provide a service within that platform. If there is a more efficient way to deliver the news to fans via Twitter, RSS or Live Chats, we want to embrace that opportunity and push the envelope.”

Gone are the days when fans actually typed in the URL for GoUSFBulls.com, now the information is delivered to them. Bulls fans can have breaking sports news delivered to their e-mail box via E-News and RSS. If they want it in text message format, Twitter will turn around Tweets from @USFFootball or @JimLeavitt at a faster rate than most cell phone providers.

While the constant stream of information is not for every fan, the opportunity to receive messages directly from Coach Leavitt and inside the walls of the football program is alluring to a large portion of the population.

“We know that not everyone cares that Coach Leavitt went into a Tampa auto parts store, and not only was he not recognized, but he was offered a student discount,” says Freet. “But Twitter provides a platform for the in-between news. The stuff the die-hards love. It also creates conversation between fans, coaches and department personnel.”

If conversation with fellow Bulls fans is what you are
craving, check out Facebook.com/USFAthletics. The budding site provides an inside scoop on everything related to USF Athletics and is a great sounding board for Bulls fans.

And while we are currently in the age of 24/7 connectivity, there are plenty of offerings for fans who want to remain anonymous.

Fans can access the Interactive Guides to each program, the Daily News Wire, read hand-selected USF news articles on Digg.com and vote on the USF Federal Credit Union Daily TWT Poll all without ever having to give any information away.

If video is what they are after, the BullsVision media player on GoUSFBulls.com provides streaming and on-demand video around the clock. A huge archive of video highlights, interviews, features and much more is free to all browsers on GoUSFBulls.com. The streaming video is the only content that requires a subscription and that comes at the low cost of $10 a month. Fans can also find BullsVision on YouTube with tons of free offerings.

“All of these additional offerings are complementing GoUSFBulls.com,” says Freet. “We are hearing from our fans like never before, so if there is a new way to connect that we haven’t embraced, please let us know. Because that is what this is all really about: Connecting with our fans.”

Bulls Pride

FORMER MEN’S BASKETBALL player Charlie Bradley (pictured), former women’s basketball player Wanda Guyton, former director of athletics Dick Bowers, former Olympian and All-American in rifle Michelle Scarborough and the members of the 1984-85 National Champion USF Swimming Team joined a prestigious group in September – the inaugural class of the USF Athletics Hall of Fame.

“This group represented the University of South Florida with class in all endeavors, while bringing prestige and pride to the USF Athletics department through their success in the athletic realm,” says Lee Roy Selmon, who chairs the Hall of Fame Executive Committee. “Their accomplishments while competing for the Green and Gold were nothing short of remarkable.”

Induction into the Hall of Fame is the highest honor bestowed by the USF Athletics Department.

– Chris Freet

– Ann Carney
TRY TO FOCUS THE spotlight on Patricia Alvarez McHatton and she’ll do her best to redirect that attention toward her students – her graduate and undergraduate students at USF, as well as the middle schoolers she works with in the community.

Alvarez McHatton is an assistant professor in the Department of Special Education in USF’s College of Education. But like a proud parent, she’s eager to show you her students’ work and to boast of their accomplishments. She peppers a conversation with stories about the wisdom and compassion of sixth graders and the insight and enthusiasm of special education majors.

You could chalk it up to the fact that Alvarez McHatton is a born educator. Quite surprisingly, however, the road to academia was not the first she traveled in her life. While she now holds a doctoral degree in curriculum and instruction with an emphasis in urban special education, she was once a licensed master electrician who spent nearly 16 years in the electrical contracting business.

Today, Alvarez McHatton’s work is grounded in school-university-community partnerships. Her research interests include teacher preparation with an emphasis on secondary special education, experiential learning, and participatory action research focused on youth empowerment. In April, she was featured on the cover of *Diverse Issues in Education* for her latest research project in cooperation with the nonprofit literacy organization I CAN! Community Education Coalition, Inc.

Her greatest reward? Those moments in the classroom and with students “that live in your heart forever.” They become the stories that make her eyes glisten.

USF: Tell me about your roots and early educational experiences.

Alvarez McHatton: My family and I left Cuba when I was 6 years old to escape Castro’s regime. Those first years were traumatic. I didn’t transition well to elementary school. I loved middle school, but I felt disconnected in high school. I saw a lot of social and racial inequities and in my adolescent mind I thought that the “real world” would be more just, so I dropped out.

USF: What did you do then?

Alvarez McHatton: I went to work. Got my GED. Started moving my way up in the electrical contracting business. I became a vice president. It was a terrific job, a great time in my life.

USF: So why did you change your career path?

Alvarez McHatton: I remember it very clearly. It was during the early 1990s when there was a lot of focus in the media on juvenile crime. It was...
a perfect spring day. I was driving to Tampa General Hospital where we were doing a job, and I heard yet another story on the radio about problems with youth. It occurred to me at that very moment that I had the disposition to work with these types of kids. That I wanted to be a teacher.

USF: What made you decide to pursue a career in higher education?

Alvarez McHatton: Being a middle school teacher in special education was the best job I could ever have had. But I realized that by becoming a teacher educator, I could help prepare quality teachers for kids who really need the best teachers in the world. And they, in turn, could make a difference with many more children than I could alone.

USF: Do you miss it?

Alvarez McHatton: Yes. In any job there are things that you have to do and then things that feed your soul.

Working with middle schoolers feeds my soul, so I spend some time each week at local schools doing that. As a professor, it also keeps me connected to real issues and legitimizes what I tell my USF students.

USF: What are some of the issues that interest you?

Alvarez McHatton: Issues of marginalization, stigma, and discrimination of youth of color, specifically Latina/Latino students.

USF: What’s the greatest challenge teachers face today?

Alvarez McHatton: Believing in themselves and being confident enough to advocate for instruction as it should be. Remaining hopeful that you’re making a difference. Teaching is not like being in sales where if you meet your quota for the week, you know you’ve been successful. Sometimes you don’t know if you’ve been successful until years later.

USF: What is one of the most significant steps forward in education?

Alvarez McHatton: The expectation that all children should be successful.

– Mary Beth Erskine
Fan Day attracted XXX number of bulls supporters to Raymond James stadium. XXX (player) signs a special football for a young fan.

USF’s newest residence hall, Juniper-Poplar Hall, welcomed students to the Tampa campus in August. The seven-story, 1,050-bed learning community features three classrooms, an in-house dining hall, a convenience store, a Starbucks and a barbeque-style restaurant. About 900 freshmen and 100 upper-classmen reside in the new hall.