The undergraduate and graduate students profiled in the following pages demonstrate what can be accomplished when an institution is determined to create and sustain an environment in which expectations are high and students are provided with both the opportunities and the support they need to succeed.

Like so many of the students we serve at USF, they are a diverse lot, representing a broad range of interests, backgrounds, and career aspirations. Some are the first in their families to attend college. A number are military veterans. Others have international roots. And several have overcome economic disadvantages, learning or physical disabilities to achieve their goals.

Their remarkable accomplishments are their own, but they also reflect the collective and concentrated efforts of a global research university dedicated to that success. Few universities in the country have made such a deep institutional commitment to student achievement, a fact reflected by the establishment of USF’s Office of Student Success in 2010 and the ongoing work of the Student Success Council, which helps oversee and coordinate the university’s many initiatives to increase and improve academic resources.

The Office of Student Success, under the direction of Vice Provost Paul Dosal, brings together the energies of talented and helpful staff in Undergraduate, Graduate, and International Admissions, University Scholarships and Financial Aid Services, Community Engagement and Partnerships, the Academy of Teaching and Learning Excellence, and the Office of the Registrar to recruit high-achieving students and provide them with a positive teaching and learning environment designed to enrich all aspects of the student experience. Our goal is to ensure that every student who enters USF leaves fully satisfied with her or his USF experience and carrying a diploma that is highly valued in the increasingly competitive, knowledge-based, and technology-driven economy of the 21st century.

We have made solid progress. During the past decade, the number of USF students successfully completing the journey from initial enrollment to Commencement has nearly doubled, from 5,449 in 2002-03 to 10,528 in 2012-13, the most in university history. With more than half of those degrees awarded now in science, technology, engineering, mathematics (STEM), health sciences, and other areas of strategic importance, USF also has emerged as the state’s leader in the percentage of baccalaureate graduates employed in Florida.

At the same time, as the result of heightened admissions standards, strengthened advising and counseling services, enhanced and expanded opportunities for undergraduate as well as graduate research, more innovative teaching methods, and improved technology, USF students and alumni are bringing distinction to themselves and their alma mater in record numbers. In fact, since 2011, they have earned more nationally competitive scholarships and fellowships — 96 in all — than students at any other college or university in Florida. You can read more about this and USF’s Office of National Scholarships on page 28.

Of course, there is always more that can be done so that additional students like those profiled within this booklet might take full advantage of the many opportunities afforded them at USF. Together, university leadership, our deans, faculty, and dedicated staff remain committed to pursuing new policies, programs, and practices that help fulfill our students’ hopes and dreams and engender still more compelling stories of student success.

Ralph C. Wilcox, PhD
Provost and Executive Vice President
“Without the support of USF, I probably would have had to work while going to school. But because of scholarships, I had the opportunity to pursue my dreams.”

About Christie:
Class of 2013
Majors: Cell Biology, Microbiology and Molecular Biology; Spanish
College: Arts and Sciences (Honors)
From: St. Petersburg, Florida
Awards:
• Holcombe First Generation in College Scholarship
• Honors College Discovery Research Scholarship
• Scholastic Achievement Scholarship
• Undergraduate Award for Scholarly and Creative Excellence
• Goldwater Scholarship
• Summer Training Fellowship, National Cancer Research Center, Madrid, Spain
• NIH Oxford-Cambridge Scholarship (USF’s first)
Community Involvement:
• Volunteered at Shriners Children’s Hospital
• Volunteered at Casa Esperanza and Nutre Hogar in Panama City, Panama
By the time she was a sophomore, Christie Campla, ’13, no longer had time for marching band. Going to class and spending 30 hours or more in the lab each week as a cellular and molecular biology major, with another major in Spanish and a minor in chemistry, can have that effect.

Still, the reward for temporarily setting aside her tuba made it all worthwhile. Just the fourth USF student to earn a Goldwater Scholarship — the nation’s most prestigious award for undergraduate students in science — she is the first to be named a National Institutes of Health (NIH) Oxford-Cambridge Scholar. As such, she had the choice of spending up to four years pursuing a fully funded doctoral degree at either Oxford University or Cambridge University, two of the world’s most prestigious research universities located in the United Kingdom.

She opted for Oxford, where, while walking in the footsteps of such historical luminaries as economist Adam Smith, authors Lewis Carroll (“Alice in Wonderland”) and J.R.R. Tolkien (“The Hobbit”), astronomer Edwin Hubble, and British military hero T.E. Lawrence (better known as Lawrence of Arabia), she also hopes to extend her undergraduate research at USF in the field of recombinant biomaterials, particularly as they might improve methods for drug preservation and targeted delivery.

“It’s a pretty hot area right now,” says Campla, whose interests also extend to regenerative medicine or the process of replacing or regenerating human cells, tissues or organs to establish or restore normal function.

Her ultimate goal is to one day lead her own lab and research team, as well as teach at the university level.

Campla, who as a freshman arrived on the Tampa campus like 44 percent of all USF students — as eligible for a federal Pell Grant providing need-based aid to low-income undergraduate students — was among 60 finalists, “mostly Ivy Leaguers,” vying for one of only 20 NIH Oxford-Cambridge Scholarships awarded nationally in 2013.

She credits her success to her faculty mentors, Professor of Chemical and Biomedical Engineering Piyush Koria and Assistant Professor of Cell Biology, Microbiology and Molecular Biology Meera Nanjundan, as well as the help she received from the university and its many friends and benefactors in the form of a USF Holcombe First Generation in College Scholarship, USF Honors College Discovery Research Scholarship, USF Scholastic Achievement Scholarship, and USF Undergraduate Award for Scholarly and Creative Excellence.

“Having that support really motivated me,” Campla says. “Without it, I probably would have started out in community college and had to work while going to school. I might have just been happy to get my degree and be done with it. But because of scholarships, I had the opportunity to pursue my dreams.”
“I loved every minute of my work at USF, especially the opportunity to participate in cutting-edge research.”
The week after he graduated from high school in 2008, Ramon Alejandro “Alex” Ruiz, ’13, arrived in the United States as a political refugee from his native Cuba, unable to read, write or speak English.

Five years later, as a senior physics major at the University of South Florida, he was named the recipient of one of only two prestigious Chancellor’s Fellowships offered nationwide in 2013 at the University of California-Berkeley, thereby earning the distinction of being the first student from USF to be accepted into one of the Top 10 postgraduate physics programs in the world.

Several of the remaining nine also offered Ruiz full PhD fellowships including Yale University, Brown University, and Cornell University in the Ivy League as well as Carnegie Mellon University and Penn State.

“My mom was so excited she couldn’t stop crying for days. She is so proud,” recalls Ruiz with a smile. He chose UC-Berkeley believing it to be his best opportunity for realizing his long-term career goal of becoming an academic physicist, “where I can apply physics principles to find solutions to biological problems.”

Always interested in cancer-related science, Ruiz says he came to USF as an undergraduate because of the university’s reputation for research excellence and because it offered smaller class sizes that would allow him the opportunity to work more closely with professors such as Associate Professor of Physics Hariharan Srikanth, in whose lab the young émigré first became interested in multi-functional materials, magnetism, and nanotechnology or the manipulation of matter at the atomic or molecular levels.

Since then, Ruiz’s research has concentrated largely on the development of a new generation of magnetic sensors, with possible applications in the chemical, biological, and medical sciences. With the additional guidance of his USF research advisor, Assistant Professor of Physics Manh-Huong Phan, he designed and built his own magneto-optic Kerr effect (MOKE) spectrometer, used to investigate at microscopic scales the magnetization structure of materials based upon the changes to light reflected from a magnetized surface.

While the optical elements and magnets were purchased commercially, Ruiz assembled and calibrated them. He also demonstrated his talent for innovation by building the instrument’s housing out of a $16 closet organizer he picked up from Walmart and black trash bags.

“Nanoscale science opens new and exciting research opportunities, specifically in terms of the detection and treatment of cancer cells,” explains Ruiz, who compiled an extensive list of peer-reviewed publications, conference presentations, scholarships, and awards during his years at USF. “Current cancer treatments are invasive and primitive, affecting both healthy and cancerous cells.”

Moving forward, Ruiz hopes to focus his research on new techniques that will allow for the isolation of single cancer cells using magnetic nanoparticles and microwires many times thinner than a human hair.
“You feel like you’ve been recognized so that someday you might be able to do something that could change people’s lives or the way technology or the world works.”
For Jean Weatherwax, ‘12, even the sky may prove an insufficient limit on her talents and ambition. Among the options USF’s first winner of a prestigious Marshall Scholarship for postgraduate study in the United Kingdom has considered for the period following completion of her master’s degree in electrical engineering at Imperial College-London, where her work focused on developing a self-calibrating glucose array system for Type 1 diabetics, is pursuing an additional degree in space technology at University College, also in the English capital.

So, maybe one day, USF’s first astronaut alum?

Typical of her low-key personality — “I just want to make some cool gadgets and if I can make a difference, then I’ll feel fulfilled” — Weatherwax temporizes. But, no one should be surprised if it happens. Honors College Dean Stuart Silverman certainly won’t be, pointing out that Weatherwax has a well-established record for taking on challenges and surmounting imposing odds.

“Thousands of students nationwide apply for Marshall Scholarships each year and only a relative few are successful,” Silverman says. “It’s an extremely rigorous process and for Jean to have secured this scholarship in the midst of a very busy schedule of classes, labs, and other commitments while an undergraduate is remarkable.”

In fact, fewer than 40 American students each year receive Marshall Scholarships, which provide full funding for up to three years of study at Imperial College-London, a member of the UK’s illustrious Russell Group and one of the Top 10 research universities in the world, according to the Times Higher Education World University Rankings. Among its distinguished faculty and alumni, the college counts 14 Nobel laureates and two winners of the Fields Medal in mathematics.

With an extensive background in the design and fabrication of biocompatible electronic devices, Weatherwax also is one of only four USF students to be named the recipient of a Barry M. Goldwater Scholarship, the nation’s highest honor for undergraduate study in the sciences. Just 300 or so Goldwater Scholarships are awarded to college sophomores and juniors annually.

Another tantalizing clue to Weatherwax’s long-term and potentially otherworldly aspirations: she is a former Motivating Undergraduates in Science and Technology (MUST) Scholar with NASA. During summer 2011, she interned at the space agency’s Ames Research Center in California, helping to develop a system for synthesizing graphene, a flat monolayer of carbon atoms one million times thinner than a human hair but 200 times stronger than steel. NASA currently is investigating the material in terms of the structural integrity of future spacecraft.

Oh, and she was born in Seattle, home of — yes, that’s right — the Space Needle.

— USF Honors College
Dean Stuart Silverman
USF graduates Tim Kenny, ’07, and Shaun Robinson, ’05, are both in the moving business but at different levels. Or, one might say more accurately, altitudes.

As lead mechanical engineer for Worldwide Aeros Corp., Kenny is involved in designing a radically new kind of “flying submarine” that he, his colleagues, and investors believe could be the next big thing in air freight.

As founder and CEO of Strong College Students, meanwhile, Robinson has created a successful commercial and residential moving business while giving jobs to scores of college students, many of them enrolled at USF.
When he started Strong College Students in 2005, Shaun Robinson was still a USF undergraduate just trying to earn a little extra income while completing his degree.

“But, the company grew and suddenly I was employing friends, fraternity brothers, and other students,” recounts Robinson from within the 10,000-square-foot warehouse he recently acquired to replace the company’s original headquarters — his student apartment. Upon his graduation, he had to consider closing the business in order to pursue a graduate degree in architecture.

“With everything on the line, I stopped to analyze what was important to me and decided to take a risk with Strong College Students,” he says, with a nod to the entrepreneurial spirit that infuses the learning experience at USF as a significant factor in his thinking.

During his time on campus, Robinson also participated in several of the university’s leadership development programs, which he credits for his “lead from the front attitude” and continuing passion for community engagement. In addition to running Strong College Students, he is actively involved as a board member for several Tampa Bay area charitable organizations.

In 2012, Strong College Students booked more than 900 moves and is now branching out nationwide, making its youthful CEO, USF’s Outstanding Young Alumni in 2009, one of the country’s youngest minority franchisors. The Tampa Bay Business Journal also has recognized him as being among the region’s Top 30-under-30 business leaders.

The responsibility of being such a role model is not lost on Robinson. Each year, he shares his business and marketing knowledge with hundreds of students at local colleges and universities including his alma mater.

“It’s a privilege to mentor these motivated young men and women,” he says. “It’s thanks to the hard work of so many like them that our brand is growing.”

A continent away, inside a decommissioned military hanger in Tustin, Calif., just south of Los Angeles, Tim Kenny sits at the controls of “Dragon Dream,” the prototype of a new generation of hybrid airships that is a far cry from the zeppelins or dirigibles captured in old black-and-white newsreels or even the modern blimps seen floating over major sporting events today.

That’s because “Dragon Dream,” a high-tech construction of carbon fiber tubes and honeycomb aluminum panels sheathed in thousands of square feet of shiny Mylar, treats the “floating” part differently than blimps, which, like birthday balloons, are great at rising but not so good at returning to earth. That lack of buoyancy control means traditional blimps have to be tethered by a ground crew after “landing” and any weight that’s offloaded has to be replaced with an equally heavy load — say, of sand or lead — for the craft to keep its equilibrium.

To overcome both challenges, Kenny and his fellow Worldwide Aeros engineers combined a variety of aerodynamic and aerostatic principles to create a “control of static heaviness” (COSH) system that enables “Dragon Dream” to shift its buoyancy from heavier-than-air (think: helicopter) during ground operations to lighter-than-air during flight by transferring helium between the airship’s main chamber and a series of lightweight compression tanks in the hull. Compressing the gas makes room for the ship to take on more air, allowing for a slow and much more controllable descent; in that sense, the airship functions like a submarine, which variously displaces water and air in its ballast tanks to rise or descend.

The innovation allows for pinpoint cargo deployment — whether mining equipment destined for roadless stretches of Alaska or food and medical supplies being rushed to disaster scenes — from a hovering position, on the ground or even at sea.

“You could take this vehicle and go to destinations that have been destroyed, where there’s no ports, no runways. The Aeroscraft could go in there and offload its whole cargo even if there’s no infrastructure, no landing site for it to land on,” says Kenny, who previously has discussed the project in the pages of Popular Science and Business Week magazines as well as on “CBS This Morning.”

A full-size, 500-foot-long version of the still sizable 266-foot “Dragon Dream” is being designed with an initial cargo capacity of 66 tons, comparable to the 85-ton maximum payload of the U.S. military’s C-17 Globemaster transport plane.

So far, the Pentagon and NASA have invested $35 million in development of the Aeroscraft, which also will have a 3,100-mile range, top speed of 140 miles per hour, and service ceiling of 12,000 feet — all well beyond the capabilities of traditional blimps.
“Climate change is a forefront issue and it’s something that we can’t ignore any longer. The United States, as a world leader, needs to set forth an example and take the initiative of making this a global concern.”

About Shaza:
Class of 2014
Majors: Environmental Science and Policy; Chemistry
College: Arts and Sciences (Honors)
From: Bradenton, Florida
Awards:
- Presidential Scholarship
- Hollings Scholarship
- Udall Scholarship (USF’s first)
- Boren Scholarship
Community Involvement:
- President, Keep Our School Beautiful
- Director of Politics and Activism, USF Student Environmental Association
- Power Vote Fellow, Energy Action Coalition
- Volunteer: EcoMentors
- Volunteer: Southern Energy Network
Were she a hockey or soccer player, Shaza Hussein, ’14, would get credit for the rare hat-trick, having “scored” three times on her applications for major national scholarships.

A Presidential Scholar and Honors College student with a double major in environmental science and policy and chemistry, Hussein netted her first success in 2011, when she was named the recipient of an Ernest F. Hollings Scholarship, awarded to undergraduate students interested in education or public service careers involving science and the natural resources.

Offered by the National Oceanic and Atmospheric Administration (NOAA), the Hollings Scholarships provide students with up to two years of financial assistance (to a maximum of $8,000 per year) for full-time study during the nine-month academic year, as well as a 10-week, full-time paid internship during the summer at a NOAA facility somewhere in the United States or its territories. Hussein spent her internship at the Wells National Estuarine Research Reserve in Maine, helping create and/or enhance educational programs for schoolchildren taking part in the facility’s various summer camps.

She earned her second major award in 2012 as one of just 80 students nationwide — and the first ever at USF — selected to receive a Morris K. and Stewart L. Udall Foundation Scholarship supporting undergraduate research related to the environment.

Not only was she the first USF student to win the $5,000 scholarship, Hussein also was the only student in the state of Florida to receive the prestigious award that year.

Her impressive three-peat was completed in 2013, when she was chosen to receive a Boren Scholarship for international study.

Funded by the National Security Education Program, the highly competitive Boren Scholarships (only 161 were awarded nationally for 2013-14) provide up to $20,000 to undergraduate students to study abroad in areas of the world that are critical to U.S. interests and generally underrepresented in study abroad, including Africa, Asia, Central and Eastern Europe, Eurasia, Latin America, and the Middle East.

Hussein used her Boren award to fund her study of Arabic in Oman, on the southeast coast of the Arabian Peninsula. She also capitalized on the opportunity to conduct research on the effects of global warming and environmental degradation on third world communities, an offshoot of an earlier undergraduate research project investigating carbon burial in wetland and mangrove ecosystems and their response to climate change and sea-level rise.

A first-generation American hailing originally from Ohio via Bradenton, Fla., Hussein intends ultimately to pursue a PhD in climate science and environmental sociology in preparation for a career as an environmental activist, educator, and researcher.

In a 2013 Princeton Review poll, 62% of college applicants said a college’s commitment to the environment would influence their decision to apply to or attend that school. Established in 2011 with 70% of students voting in favor of its creation, USF’s Student Green Energy Fund is used to assist the university in conserving energy, reducing energy costs, lowering greenhouse gas emissions, and promoting renewable energy technologies.
“It’s wonderful to have been part of some fundamental research that could be key to a new understanding.”

About Christin:
Class of 2013
Major: Biological Oceanography
College: Marine Science
From: Northport, New York
Awards:
• Three-year, $120,000 NSF Graduate Research Fellowship Program grant to study marine mammals in Antarctica, among other places
In less than two years, between February 2008 and December 2009, more than 130 swimming world records were broken by athletes wearing high-tech swimsuits made of materials resembling the microscopic, tooth-like scales called dermal denticals found in shark skin — an evolutionary advantage allowing some of the sea’s most feared predators to speed through the water at more than 45 miles per hour.

Though now officially banned by the International Swimming Federation, the astonishing technological breakthrough still is one of the best known commercial applications arising from the emerging field of biomimetics or the study of the structure and function of biological systems as models for the design and engineering of man-made materials, machines, and processes.

Another example — advanced sensors able to detect and follow the latent trail of things that already have moved from one location to another through the water — may soon result from the research of former Fulbright Scholar and newly minted USF PhD graduate Christin Murphy, ’13.

Biologic adaptation, especially as driven by predation or the preying of one animal on others, “far surpasses” anything humans are able to achieve in terms of improving the effectiveness, functionality, precision, and durability of man-made systems, Murphy says. Her doctoral research, supported by a grant valued at more than $120,000 from the National Science Foundation, focused on the specialized function of the whiskers of harbor seals and sea lions.

When something transits through water, it creates water-borne disturbances, a “hydrodynamic trail,” that can persist for relatively long periods after the object has left the scene. Though generally unnoticeable by man, like bloodhounds and other canines on land that have a sense of smell thousands of times more acute than humans, enabling them to identify and follow scents even days after they were deposited, seals and sea lions still can find and follow those hydrodynamic “breadcrumbs” through the incredibly advanced sensory structure of their whiskers.

“Their abilities are fantastic,” says Murphy, whose work has taken her as far afield as Antarctica and the Pinniped Cognitive & Sensory Systems Laboratory at the University of California Santa Cruz — along with USF’s College of Marine Science and the University of Virginia’s Bio/Thermal Fluids Laboratory, one of three collaborating organizations involved in her research.

“If we can mimic that biology and create a kind of ‘artificial whisker system,’ then the potential really is there for developing advanced sensors that could dramatically improve the use of autonomous vehicles” in more accurately assessing marine animal populations and recording related behaviors.

Such a system, Murphy adds, also may be of interest to the U.S. Department of Homeland Security as well as local law enforcement agencies with responsibilities for monitoring and protecting the nation’s ports, providing a new means to detect, track, and/or trace possible intrusions of those economically vital and often strategically important areas.
“You can never make too much of an impact. I want to change the world one cure at a time.”

About Kenyaria:
Class of 2014
Major: Cell Biology, Microbiology and Molecular Biology
College: Arts and Sciences (Honors)
From: Fort Pierce, Florida
Awards:
• UNCF/Merck Science Initiative Scholarship
• Summer Medical and Research Training (SMART) internship, Baylor College of Medicine, Texas
Kenyaria Noble, ’14, is used to overcoming obstacles and surpassing high expectations in pursuit of her goals. As a high school senior at Lincoln Park Academy in Fort Pierce, Fla., she was a three-time St. Lucie County champion in track and field, sprinting and soaring to victory in the 300 hurdles, high jump, and triple jump and leading her team to the county title.

But, when it came to her chances three years later for beating the field to win one of just 15 Merck Science Initiative Scholarships awarded to college juniors in 2013, the aspiring physician and medical researcher admits she had little anticipation of actually winning. Thousands of students across the country apply for the prestigious $30,000 awards every year.

Even when the confirmation arrived that she’d been selected, Noble remained incredulous. “Everyone was telling me how this scholarship is the key to any medical school I want to go to,” she recalls. “I just can’t believe that I won!”

On the heels of her Merck scholarship, Noble, who chose USF over Howard University and Spelman College because of its reputation as a leading research university, also earned a much-coveted Summer Medical and Research Training (SMART) program internship at the Baylor University College of Medicine in Texas. She planned to use the opportunity to expand her research into the basic mechanisms of aging and aging-related disorders such as Alzheimer’s and Parkinson’s disease by examining the role of steroid receptor co-activators in the regulation of gene expression.

Research is Noble’s passion, because, says the cell biology, microbiology and molecular biology (CMMB) major, “It’s constant problem solving.”

Among the specific problems she’s previously investigated as an assistant in the lab of her undergraduate mentor, CMMB Assistant Professor Patrick Bradshaw, are the effects of caffeine and melatonin (a naturally occurring hormone that factors in the human sleep-wake cycle) on the health of mitochondria, the “powerhouse” of the cell, and how mitochondria dysfunctions contribute to a myriad of diseases as well as aging.

“Dr. Bradshaw has given me such tremendous insight into what the career of a researcher would be like, and has shown me the type of qualities I should want in myself when I become a professional,” says Noble, who after graduating from USF intends to seek not only a medical degree, but also a joint PhD that would allow her to combine the roles of medical doctor and researcher.

Once again, the potential challenges to overcome are great; only a handful of universities nationwide offer that dual degree option and, on average, they admit 15 or fewer students each year.

Although this time, Bradshaw, at least, has every confidence that Noble will continue to succeed.

“I have no doubt that Kenyaria will be able to go wherever she wants because she is one of the few students who deeply understands every step of what she’s doing in the lab and uses that knowledge to plan and carry out her own experiments,” Bradshaw says. “She is committed to medical research, and her love for science, coupled with her capacity for hard work, is an unstoppable combination.”
Great teachers change the lives of their students forever.

At USF, a global research university dedicated to student success, nothing is more important than the promotion of effective teaching in the classroom. So, while other college and universities concentrate their efforts on enhancing the student experience with programs that — as noted educational theorist Vincent Tinto describes it — “sit at the margins of the classroom” and do little to change the perception of higher education as being a mere “spectator sport,” USF seeks to develop innovative practices that actively engage students and faculty in a learning process that involves mutual discovery and celebrates the classroom as the center of transformative scholarship.

Extensive research by Tinto and others shows that such a collaborative approach to “constructing knowledge” influences significantly students’ willingness to persist in their programs of study. It also demonstrates that to create such a positive academic environment necessitates discerning, developing, and empowering faculty that believe in high-quality contact with students, communicating high expectations, encouraging active learning, and using active learning techniques.

In recent years, through the establishment of the Academy for Teaching and Learning Excellence (ATLE) and similar initiatives focusing on improving teaching and learning across campus, USF has been fortunate to identify many faculty members who not only continue to emphasize the classroom and/or laboratory as the crossroads for social and intellectual integration, but also are able to more powerfully affect change toward collaboration and “shared knowledge” as a product of their own professional accomplishments.

They are leaders who inspire and motivate others to succeed. And, increasingly, they bring further renown to the university through a growing list of national honors.
AAAS ELECTS 15 USF FELLOWS

With expertise that ranges from stem cells, climate change, and toxicology to graduate education, computer science, and blueberries, 15 USF faculty members were elected 2012 Fellows of the American Association for the Advancement of Science (AAAS), the fourth-highest total among the 245 organizations worldwide with the most AAAS Fellows named that year.

All told, AAAS counts more than 126,000 individual and institutional members, making it the world’s largest general scientific society. AAAS seeks to “advance science, engineering, and innovation for the benefit of all people” by fostering education in science and technology, advancing international cooperation in science, promoting the responsible use of science in public policy, and strengthening and diversifying the science and technology workforce.

Fellows are elected annually by the AAAS Council for meritorious efforts in areas such as teaching, research, technology, service to professional societies, and the communication of science to the public.

Among those chosen from USF for AAAS membership in 2012 are,

Cesar V. Borlongan, Professor of Pharmacology and Molecular Therapeutics
Lynn Wecker, Professor of Community and Family Health
Karen Liller, Professor of Anthropology
Lorena Madrigal, Professor of Neurosurgery and Brain Repair
Paula Bickford, Professor of Cell Biology, Microbiology and Molecular Biology
Richard Pollenz, Professor of Integrative Biology
Susan Bell

James Garey, Professor of Physics
George Nolas, Professor of Integrative Biology
Earl McCoy, Professor of Molecular Medicine
Robert Deschenes, and Professor of Integrative Biology Peter Stiling.

A mechanical engineering professor at USF for 25 years, Dr. Autar Kaw is one of four professors selected out of more than 300 nominees from across the country as a 2012 U.S. Professor of the Year.

Presented by the Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education, the award is widely regarded as the top honor in the nation for undergraduate teaching.

Kaw, one of the nation’s leading experts on the difficulties associated with assembly of bascule-type (draw) bridges, was recognized in the doctoral and research universities category and lauded for his innovative work in using technology and social media to integrate real-world problems and evidence-based solutions into engineering education. His popular Holistic Numerical Methods Institute Web site, blog, and YouTube video lectures have been viewed by hundreds of thousands of engineering students and practitioners around the world, earning Kaw the unofficial honorific as “The Numerical Methods Guy.”

Whether writing “plain English” textbooks — he has four, on numerical methods, matrix algebra, composite materials, and programming — or establishing a special lending library at USF (the only one of its kind on campus) to ensure that the students in his courses have access to a sufficient number of the most important engineering reference materials, Professor Kaw is committed to using engineering, science, and technology as pathways for improving people’s lives and careers.

"Dr. Kaw possesses all the qualities of a great educator. He is dedicated, innovative, motivated, and displays genuine compassion for students and their development. He is a leader. When you are in one of his lectures, Dr. Kaw inspires you to learn, inspires you to seek more, and inspires you to ask questions in a manner that sticks for life."

– USF engineering graduate Daniel Miller, ’11

Professor Autar Kaw:
• Jerome Krivanek Distinguished Teacher at USF, 1999
• Archie Higdon Distinguished Educator Award, 2003
• Curriculum Innovation Award, American Society of Mechanical Engineers, 2004
• CASE Florida Professor of the Year, 2004
• National Outstanding Teaching Medal, ASEE, 2011
• 2012 U.S. Professor of the Year

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“USF helped me make a mid-career shift and set a new course as an entrepreneur with a new focus on sustainability.”
Such was Tampa Bay Times business columnist Robert Trigaux’s view in a summer 2013 article about the region’s uneven record-to-date at building an “entrepreneurial ecosystem” to supplant “old guard companies” in favor of a startup culture with the potential to “deliver a critical injection of fresh ideas, enthusiasm, and new jobs into our sluggish economy.”

If Trigaux’s words sound like an alarm bell ringing, USF Professor Michael Fountain, at least, has confidence that help is on the way. That’s because, as director of the university’s nationally ranked Center for Entrepreneurship, he knows that soon to be standing square in the middle of that crossroads will be Eve Spengler.

“I consider her to be a member of my top echelon ‘A-Team’ of students for initiatives related to entrepreneurship,” says Fountain. “The caliber of her work has been exceptional.”

Already a successful consultant and fundraiser specializing in advanced technology startups when she entered USF’s master of science in entrepreneurship in applied technologies and master of arts in global sustainability programs in 2010, Spengler was a key figure in the university’s Innovation Hub Research Project, compiling a master list of innovating enterprises in the area while exploring with business, economic development, and educational thought leaders across central Florida the steps necessary to encourage and facilitate technology transfer in support of business and job creation.

Among her other achievements while at USF, Spengler also served as a research associate with the Alliance for Integrated Spatial Technologies, working on high-tech advancements in geographic information systems such as LiDar — a technology combining a laser’s focused imaging with radar’s ability to calculate distances — for high-definition digital mapping of conservation assets as well as the preservation of historic artifacts.

In addition, she led a research team charged with constructing a strategic market assessment for commercializing water purification technology, created with yet another team of fellow students an award-winning business plan for ShipSharps, a company promoting the environmentally sustainable disposal of medical waste, and spent a five-week internship working on-site in London, England, at the headquarters of a tech start-up seeking to harvest the kinetic energy from people’s footsteps and transform it into electrical power.

Subsequently identified as a leader with a clear commitment to sustainability, the USF Board of Trustees appointed Eve in 2012-13 to a voting member position on the USF Student Green Energy Fund Council, where she was tasked with reviewing proposals and approving allocations tapping more than $1 million dollars in funds for campus sustainability initiatives.

Upon graduation, she looked to partner with an international company “and work diligently to advance transformative universal technology with the potential to shape and change our world.”

Her ideal fit “is a company committed to sustainability, and honoring the triple bottom line: people, profits, and planet,” Spengler says. “Working effectively with diverse constituencies, I want to help position the company for exponential scale up and ultimately propel all stakeholders towards a brighter future.”

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**About Eve:**

**Class of 2013**

**Majors:** Entrepreneurship in Applied Technologies; Global Sustainability

**Colleges:** Business; Global Sustainability

**From:** Chicago, Illinois

**Awards:**
- Esthus Citizenship Award, Tulane University
- American Association of University Women Outstanding President of the Decade (2000-2010)

**Community Involvement:**
- USF Student Green Energy Fund Council
- Owner: Advancing Universal Technology, LLC

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As a member of USF’s Student Green Energy Fund Council overseeing the distribution of more than $1 million in support of campus sustainability initiatives, Spengler helped USF achieve Tree Campus USA status from the National Arbor Day Foundation for the second year in a row.
USF continued a proud history of veteran support in 2013-14 by celebrating its three newest Tillman Military Scholars. Only 60 of the annual awards were presented overall, with Morsani College of Medicine students Richard Mendez, Anthony DeSantis, and Alicia Irvin representing five percent of the total and positioning USF second to only Harvard and George Washington universities (with four scholars each).

The prestigious scholarships are awarded by the Pat Tillman Foundation, created to honor the former National Football League player who gave his life serving as a U.S. Army Ranger in Afghanistan. They assist recipients with not only academic expenses such as tuition and fees, but also other needs including housing and child care.

Since 2011, USF has been the academic home of at least nine Tillman Scholars.

“This university has been the most veteran-friendly out of all the universities I’ve ever been in contact with, through applications or having attended,” says Mendez, who is pursuing a master’s degree in medical sciences. “USF by far stands above all others.”

“At USF, you’re not just a number or merely a paying student. This campus’ entire goal is to get you through to graduate at a level to be successful when you leave.”

– Edward Woodward, 2012 Tillman Scholar
Mendez arrived on campus after deciding during the last of his multiple combat tours in Iraq and Afghanistan with the 75th Ranger Regiment that he wanted to become a doctor. Anticipating his graduation from USF in 2017, he hopes to eventually serve veterans as a physician at a Veterans Administration medical center.

His Tillman Scholarship will help him accomplish that mission. “I look forward to having the opportunity to share my experiences and encourage other veterans,” Mendez says.

Likewise, DeSantis believes it is important “not only to continue your service beyond your time in uniform, but also throughout the rest of your life.” He is grateful for the Tillman Scholarship that will allow him to continue his service by providing quality medical treatment to others.

As a captain in the U.S. Marine Corps on duty in Iraq, DeSantis says his passion for a medical career was ignited after seeing physicians bring relief to those suffering from illness and the wounds of war.

Although busy with his medical studies, he has been able to get a head start on his future career as an active volunteer at the James A. Haley Veterans Hospital near campus.

Former First Lieutenant Irvin, meanwhile, also set her sights on becoming a doctor while serving as an Army Military Police platoon leader in Iraq.

“I had a really great experience with the soldiers I worked with,” says Irvin. “I have always been interested in a health career and realized that I could serve these men and women even more meaningfully by becoming a doctor and one day returning to active duty.”

Irvin is enrolled in the Morsani College of Medicine master’s program and has the distinction of being USF’s first female Tillman Military Scholar.

USF is one of 16 campuses nationally serving as Tillman Military Scholar University Partners, which are selected based on their innovative service member-specific support programs and proven culture of community for military families. As a partner, each institution conducts outreach to its veteran and military spouse student population.

“IT is very important to all of us at the University of South Florida that our recognition of veterans and their contributions and sacrifices go far beyond ceremonial tributes,” says President Judy Genshaft. “Our student veterans bring important and unique life experiences to campus that contribute to a diverse learning environment for all students.”

In addition to participating in the Tillman Scholars program, USF demonstrates its commitment to student veterans and their reintegration through a wide array of other outreach efforts. “USF is proud to serve our growing student veteran population with dedicated campus personnel, onsite Veterans Administration representation, special course offerings and social programs, and a separate 3,000-square-foot Veterans Achievement Center — all focused on easing the transition from military life to campus life,” says Larry Braue, director of the university’s free-standing Office of Veterans Services.

In recognition of its dedication to student veterans, Military Times magazine has ranked USF as the fourth most veteran-friendly university in the nation.
Inter-service rivalries are as old as the U.S. military system itself. Look no farther than Army vs. Navy, two teams that have been battling it out for “bragging rights” on the football gridiron for more than 114 years, becoming one of the most enduring and revered traditions in all of college sports.

But, an interesting thing happens when that annual contest is over and the national TV and radio networks have switched their coverage to the next game on the broadcast schedule. Cadets and midshipmen, victors and vanquished alike, stand shoulder-to-shoulder and sing each academy’s alma mater in a show of mutual respect and solidarity.

That same inspiring spirit of brothers and sisters in arms also can be found among the nation’s many veterans, including the swelling ranks of those enrolled at USF (approximately 1,700 in 2012-13), now recognized as among the top four “Best for Vets” universities in the country by Military Times magazine.

Meet Kiersten Downs and Dwayne Scheuneman, two of those veterans at USF whose courage and commitment to “duty,” “honor,” and their fellow service members has not diminished, but only changed focus, since their time in uniform.
“When we give veterans the support they need, they excel above all of their peers. There’s this drive, there’s motivation … there’s just this unbridled potential to move forward.”

– Kiersten Downs

After seven years with the Air Force, including one tour in Iraq as well as three other deployments, Kiersten Downs arrived at USF as a PhD candidate in applied anthropology and felt like “an immigrant leaving their home country and moving to the United States.”

“It’s culture shock,” adds Downs. “The transition can be lonely, people can isolate themselves. It can be difficult.”

So, she quickly enlisted with Student Veterans of America (SVA), a national grassroots organization founded in 2008 to provide veterans with the necessary resources and support to thrive in postsecondary education and beyond.

Almost immediately, Downs helped secure grants from USF Student Government to initiate weekly events for the USF chapter of SVA, of which she was elected president in 2012. That led to additional efforts with vice president Sean Sorbie to develop a new business plan for the chapter, which they presented at SVA’s national conference in Orlando, securing another $1,500 grant to restructure its official procedures.

Next, Downs brought the chapter into a new partnership with USF’s Office of Veterans Services and the national organization “Got Your 6” to design a curriculum for a campus support network in which professional faculty and staff are trained on the resources available for their veteran students. That USF-designed curriculum will be the pilot program for similar initiatives at other universities nationwide.

Photos of Kiersten Downs by Bryce Mosesley
“Since she came on board, our SVA has grown exponentially. We have people now that are engaged,” says Larry Braue, director of the Office of Veterans Services. “She’s been out there meeting people and finding connections. **We’ve never had the kind of national recognition that we’ve gotten since she arrived.** It’s great for the school. It’s great for veterans.”

But, it wasn’t enough for Downs. As summer 2013 approached, she felt a compelling need to go the extra mile for SVA — 3,815 extra miles to be exact. So, on June 1, she climbed aboard her custom Cannondale bike in San Francisco and headed east. Destination: SVA national headquarters in Washington, DC.

Downs’ aim with her Bike America Student Veterans Ride for Education was to raise awareness and $50,000 for the national SVA, and **to remind Americans of the challenges veterans face** while transitioning from the military back to civilian life.

“Current military culture includes multiple combat deployments for many veterans. The extended duration of those deployments combined with other combat related challenges such as war-related disabilities, tend to complicate the transition further,” Downs says.

“At USF, we are fortunate to have the Office of Veterans Services, which processes military education benefits for vets on campus. However, **it is important that more colleges take the necessary steps** to provide proper support services to ensure a smooth transition for their student veterans, thus encouraging academic success at all levels. This is exactly what Student Veterans of America is trying to do and why I chose to support them with the cross-country bike ride.”

Downs received help spreading her message from the new mtvU program “Random Acts.” As she was still preparing for her ride, the show’s producers showed up on campus mid-spring with a video crew as well as duffel bags of supplies to enhance her trip, including a Garmin GPS, GoPro camera, and a $1,000 gift card to help her mother fuel the RV that followed along as a support vehicle.

“It’s really interesting when you tell someone you’re biking across the country because if they are not cyclists their first reaction is like, ‘Oh my goodness, you’re crazy, I would never do that,’” reflects Downs, who completed her cross-country trek on Aug. 5 in the nation’s capital. “But I also think that **it inspires people to maybe think about their own goals and what it is that they want to accomplish.**

“I am very inspired by higher education in general. It’s a passion of mine; it’s what has gotten me to this point in my life. I also believe in the mission of Student Veterans of America wholeheartedly and want to see it become the strongest student veterans association in the country.”

Downs receives well wishes from USF President Judy Genshaft and Athletic Director Doug Woolard before setting out on her coast-to-coast ride.
Dwayne Scheuneman is always on the move. Whether he’s dancing, racing or studying, he approaches life with a high level of energy.

That’s why when the Navy veteran injured himself in a swimming pool accident more than 15 years ago, his first words after realizing he was paralyzed were, “Game on.”

From his pursuit of a degree in elementary education to teaching a classroom full of children in St. Petersburg’s Great Explorations preschool, Scheuneman refuses to let his disability slow him down — a fact to which the judges and official scorers for the 33rd National Veterans Wheelchair Games, held in Tampa during summer 2013, can attest.

Despite not having competed in a wheelchair games since a similar meet in Los Angeles a decade earlier, Scheuneman came away from the Tampa competition with four gold medals, crossing the finish line first in each of his track events, the 100-, 200-, 400-, and 800-meter races.

Though unquestionably the product of much training on the USF oval, Scheuneman also traces his athletic success to another association with the university. He’s been involved with USF’s Dance Program for 10 years, participating in its internationally famous Rolling Dance Chair Project (a revolutionary rethink of how wheelchairs and other assistive technology can be incorporated into dance) since its inception in 2006. He performs all over the country and believes the experience benefits his racing in many ways, but primarily through improving his upper body strength and sense of timing.

“There is definitely a lot of technique to track, especially, you know, when you push you’re stroking with your arms, you’re timing when to hit your wheels ... there’s definitely a rhythm to it,” says Scheuneman about propelling and maneuvering his racing wheelchair around the track, especially among other competitors.

“When you go around the curves, you also need to know just when to start making that turn so you’re not wasting energy.”

A transplanted northerner, Scheuneman first left the snowy climes of Upstate New York to live in Jacksonville, but soon relocated to Tampa, where he says he’s found “an incredible support system” within the University of South Florida community and, particularly, its relationship with the nearby James A. Haley Veterans Hospital. Affiliated with USF’s recently rechristened Morsani College of Medicine since 1972, the hospital is the busiest of four VA polytrauma facilities in the nation.

“I heard that James A. Haley had a whole unit for spinal cord injuries,” recalls Scheuneman, who was paralyzed from the chest down as a result of his accident. “So, I decided to move to Tampa in 2000.”

At the time, his racing career had only just begun. Now, with four gold medals and an otherwise very busy dance card — in addition to his studies, Scheuneman oversees his own dance company, REVolutions — he’s started to think about leaving his track days behind.

“But I don’t know,” he says, smiling broadly, “because since I’ve been training, I’ve been thinking maybe I can dance and race. So, that’s where I am today. I’m a USF Bull.”
More than just a renovation of the second floor of the Library, the creation of the university’s Science, Math, and Research Technology (SMART) Lab in 2012 represented both a complete repurposing of the space and a whole new approach to teaching basic math and science skills on campus.

Based on the concept of less lecturing and more active learning, the SMART Lab has taken the previous model of math course instruction — traditionally two large lecture classes per week plus two small breakout sessions with a teaching assistant — and replaced it with one in which students participate in a single weekly overview/discussion class complemented by a minimum of three hours in the lab each week with ready access to on-demand assistance from professors, graduate assistants, and peer tutors.

It also has reinvigorated the 40-year-old Library in its central role as, in President Genshaft’s words, “the heartbeat of the university where all things come together” to propel both students and USF to new academic heights.

“This is not just a book warehouse anymore,” added USF Libraries Dean Bill Garrison, noting that more than 400,000 bound volumes had to be relocated to make way for USF’s new high-tech center for teaching and learning. “The development of the SMART Lab has confirmed the Library as the most active learning hub on the entire campus.”

Boasting state-of-the-art technology in the form of 330 computers loaded with instructional software providing access to interactive tutorials, videos, animations, e-books, and other digital resources, the SMART Lab is designed to improve passing rates in key gatekeeper courses such as college algebra and statistics that are prerequisites for
students to advance in many math-intensive programs. It is open during normal library hours and, when not reserved for classes, students can use the lab as much as necessary to master the work.

And initial results suggest that the university has made another wise investment in promoting and supporting student achievement.

During Fall Semester 2012, the passing rate for the more than 1,000 students enrolled in the redesigned college algebra course rose to 77 percent, up from 63 percent in fall 2007, when the course was taught in the traditional format. Equally important, the withdrawal rate dropped from almost 19 percent in 2007 to only two percent, demonstrating that more students are working through and passing the course.

Encouraged by these outcomes, the university subsequently moved updated finite mathematics and precalculus courses into the SMART Lab in spring 2013, spreading the benefits of course redesign to more students and putting them on a faster track to success.

Students who earn high grades early "establish a record of academic success and are more likely to persist and earn their degrees," observes Paul Dosal, USF’s vice provost for student success.

Also part of the $3.3 million makeover of the Library’s second floor was expansion of the popular Learning Commons, previously confined to a portion of the building’s ground floor.

With additional seating for more than 300 and equipped with 13 large screen “collaboration stations” facilitating small-group work, the expanded Learning Commons quickly has become the new study area of first choice among students on campus.

On average, according to Library figures, between 150 and 180 students can be found using the space at any given time. Although, on several occasions during the last three weeks of the fall 2012 and spring 2013 semesters, the area reached its capacity as students prepared for finals. “Students had long asked for additional space for collaboration and group study, and that’s precisely what they’ve been given in the Learning Commons expansion,” Garrison says.

He noted, too, that the facility’s close proximity to USF Tutoring and Learning Services, similarly located on the second floor of the Library, contributed to a 43 percent increase in student users and 131 percent surge in visits to the tutoring center during spring 2013 — positive trends reflected in later measures of student performance in the classroom.

Surveys completed by students who attended tutoring indicate that 76 percent improved at least one full letter grade in the courses for which they sought help, and 32 percent moved from failing to passing. In Florida and across the country, the lingering effects of the 2009 global economic downturn have raised expectations that universities provide enhanced career development opportunities that improve students’ competitiveness in the job market once they graduate. To these ends, the USF Career Center offers workshops, consultations, and specialized training for all students.

In August 2012, it augmented these efforts with the opening of the Job Shop on the first floor of the Library. In addition to providing a bank of computer work stations that students may use to research employers and apply for internship and cooperative education opportunities as well as part-time and full-time professional employment, the Job Shop has helped the Career Center extend its services beyond regular office hours and deliver peer-to-peer job search coaching sessions during evenings and weekends.

Of the more than 3,250 sessions conducted during the academic year 2012-13, nearly two-thirds took place in the Job Shop, where students, assisted by career counselors, were able to work on writing effective cover letters and resumes and refine their online job search strategies.

“Career exploration, advising, and ultimate placement are increasingly critical components of the USF student success initiative,” says Paul Dosal, vice provost for student success. “The Job Shop adds an important new dimension to our efforts to promote and facilitate students’ career planning.”
That was the thinking in 2007, when university leadership committed to the establishment of an Office of National Scholarships (ONS), charged with publicizing the availability of prestigious undergraduate and postgraduate scholarships and fellowships and assisting students in applying for them.

And, like the final shot in the film “Field of Dreams” with an endless line of cars streaming toward that magic baseball diamond carved out of an Iowa cornfield, come they have, in greater and greater numbers.

In the year the office opened its doors, only two students claimed national scholarships. By spring 2013, USF students and graduates were earning more nationally competitive scholarships and fellowships than students from any other Florida college or university — a total of 96 in just the two-year span beginning in fall 2011, including the university’s first Marshall, Udall, and National Institutes of Health Oxford-Cambridge Scholarship winners.

It was during academic year 2011-12, too, that USF first earned designation by the Institute of International Education as a “Top Producer” of U.S. Fulbright Scholars, placing the university alongside other esteemed institutions such as Ivy Leaguers Harvard, Yale, Columbia, and Cornell. The intensely competitive Fulbright program facilitates students’ ongoing academic enrichment by providing generous grants for individual study and research in more than 150 countries around the world.

Helping USF students secure internationally oriented undergraduate and postgraduate awards has, in fact, become something of a hallmark for ONS, in full accord with the university’s strategic emphasis on creating and promoting academic opportunities “in a global context” that recognizes the significance of international relations in an increasingly interconnected world.

“If you build it, they will come.”

“Without the Office of National Scholarships, I would not have gotten this scholarship. They were incredibly helpful with my essay, because sometimes it’s hard to put into words exactly why you want to do something, and they helped me develop a plan and a clear set of goals so I could get the scholarship.”

– Sarah Sharifstein, ’15, Gilman Critical Language Scholar (Egypt)
Of the 62 U.S. freshmen and sophomores sent by the Fulbright Program to the United Kingdom each year for summer institutes, for example, four in 2013 were from USF, representing six percent of all awards and the largest total among 50 universities in 32 states. (Elsewhere in Florida, only one student each from the University of Miami and Florida State were selected.)

In addition, ONS boasts an impressive record turning out recipients of Gilman Scholarships, which encourage students to choose non-traditional study and internship abroad destinations in order to foster mutual understanding between the people of the United States and a more diverse spectrum of people in other countries.

“Living and learning in another nation not only exposes our students to alternate views, but also adds enriching social and cultural dimensions to their educational experience,” says Linda Lucas, director of ONS. “It provides them with the opportunity to return home with a deeper understanding of their place in the world, encouraging them to be a contributor, rather than a spectator, in the international community.”

During academic year 2012-13, USF produced a record total of 20 Gilman Scholars — eclipsing the previous high of 17 set the previous year — including 14 summer awards to lead all institutions in Florida and more than all but four other universities in the country.

“We knew that our students were capable of competing for and receiving these illustrious and highly prized scholarships,” Provost Ralph Wilcox says. “They meet our stringent standards to be admitted, they’re working hard, earning excellent grades, and engaging in the community in a variety of ways — exactly what earns the kind of recognition and financial support they deserve. It was simply a matter of creating the institutional infrastructure, a support system to instill a greater sense of self-confidence in our best students and assist them through the often complex and challenging application process.”

In the two-year span 2011-2013, USF students earned more nationally competitive scholarships than students at any other Florida college or university.
From 2011 to 2013, USF was academic home to 10 Fulbright U.S. study/research grant recipients, placing it among the top Fulbright-producing doctoral universities (public and private) in the nation.

“Clearly, our strategic emphasis on student success has taken root and is bearing handsome results,” says USF Provost Ralph Wilcox.

The Fulbright Program is one of the most prestigious scholarship programs in the world. The highly competitive, merit-based awards for international education and exchange have been given since 1946 and enable U.S. citizens to study or conduct research in more than 150 participating countries.

USF’s Fulbright study grant recipients represent multiple disciplines at the university and include:

**ZAK BOGGS ’08, ’10**

**Majors:** Biomedical Science (Undergraduate); Marketing (Masters)

**Colleges:** Arts and Sciences; Business

**From:** Vienna, West Virginia

At the age of 24, USF alumnus Zak Boggs retired from Major League Soccer (MLS) after a three-year career with the New England Revolution in order to pursue cancer research at the University of Leicester in England. His work, funded by a Fulbright grant, was inspired by his upbringing in the foothills of the Appalachian Mountains—a region infamous for its cancer clusters—and motivated by a grandmother lost to cancer.

With a stellar combination of two USF degrees, athletic success, a highly developed sense of civic responsibility, and all-American potential, Boggs is the recipient of both the John Wooden Citizenship Cup from Athletes for a Better World and the MLS Humanitarian of the Year, the latter a recognition of his substantial history of volunteering at Boston Children’s Hospital during his time with the Revolution.

“I just want to help and give,” says Boggs. “Every time I’ve ever volunteered anywhere, I feel like I get more out of it than I would have ever thought possible.”

His Fulbright experience in England allowed Boggs to earn his master’s degree in medical sciences and continue contributing to society by examining potential cancer treatment pathways through mRNA splicing.

**VINICIO CARIAS ’13**

**Major:** Biomedical Engineering

**College:** Arts and Sciences

**From:** Providence, Rhode Island

USF student Vinny Carias’ Fulbright award adds to an impressive list of achievements earned both inside and outside of the classroom.

In 2010, Carias was a project leader for a Draper Laboratory University Research and Development project, developing injection-moldable nanocomposites for multi-chip-modules (MCM) technology. For his work on the project, he was recognized by the Florida High Tech Corridor Council for excellence in student research.

Two years later, he was selected as a Leadership Fellow in the Graduate School’s Doctoral Student Leadership Institute, and in 2013 he continued his biomedical engineering research at the University of Freiburg Institute for Microsystems Technology (IMTEK), one of the largest research institutions in the field of micro and nanotechnology in Germany.

Carias was one of only 80 students nationally to receive a Fulbright Research Grant to Germany in 2013. Upon his return to the United States, Carias expected to use the data and results from his research at IMTEK to complete his doctoral work at USF.

“USF has prepared me and given me the tools to succeed,” says Carias, who already has presented his research at the Nanotech Conference and Expo (2010), Society of Hispanic Professional Engineers National Conference (2010), and the Gordon Research Conference of Polymers (2011).
JOANNA ROZPEDOWSKI ’05, ’09, ’14

Majors: Political Science; Philosophy; Government and International Affairs
College: Arts and Sciences
From: Originally from Poland, but considers New York City her hometown

Joanna Rozpedowski grew up in eastern Europe during a transitional political period, developing an early interest in political science at a time when much of her family and school environment was consumed by political, historical, and philosophical discourse. She also spent much of this time listening to the BBC, Radio Free Europe, and the Voice of America, which she believes further influenced her early political sensibilities.

After receiving her bachelor’s and master’s degrees in political science and philosophy from USF, she was given the opportunity in 2012 to participate in an internship with NBC News/CNBC at the Republican National Convention in Tampa.

In 2013, she was able to pursue a master of laws (LLM) degree in international human rights law at the University of Liverpool School of Law in England, courtesy of a Fulbright grant, one of only 46 awarded to U.S. students for study in the United Kingdom that year.

Upon returning from Liverpool, Rozpedowski hoped “to generate an intercontinental discussion on the normative dimensions of law and politics and encourage reflection on the impact and purpose of supranational legal regimes and their growing relevance in international relations.”

RYAN SALAZAR ’12

Major: Music
College: The Arts (Honors)
From: St. Petersburg, Florida

His Fulbright grant allowed USF grad Ryan Salazar to pursue a master’s degree in music education at the University of London’s Institute of Education.

Originally from St. Petersburg, Salazar’s commitment to make a difference for children in public schools is deep and passionate. It led him to USF’s Honors College and College of The Arts, where he developed into an award-winning scholar focused on educational reform.

His work with Assistant Professor of Music Education Clint Randles in the fields of informal music pedagogy, innovative musical practices, and teacher preparation earned Salazar USF’s Undergraduate Research Award. He was later selected as one of only 20 students (from a student body of more than 40,000) nominated by USF faculty in 2011 to receive the prestigious Golden Bull award honoring undergraduate and graduate students for extraordinary leadership, scholarship, and service to the life of the campus.

Also in 2011, the Institute for the Recruitment of Teachers recognized Salazar’s scholarship by selecting him as one of just 30 students nationally to attend the Institute.

After completing a Florida Gubernatorial Fellowship in 2013-14, the former drum major for the USF marching band Herd of Thunder planned to earn a PhD in education and pursue a career in public education.

DEMELZA HAYS ’12

Majors: Economics; International Business
College: Business
From: Tampa, Florida

Demelza Hays found her niche at her hometown college of USF. During her time at the university, she founded the USF Spanish tutoring program, the USF Punjabi Club, and Tamarindo Properties, LLC, a real estate company that invests in foreclosed homes and manages other properties within the Tampa Bay area. She was also an intern for U.S. Congresswoman Kathy Castor.

“No school other than USF could prepare me as thoroughly to lead the tremendous life that I have been granted,” Hays says, adding that her USF experiences “helped me build strong bonds within the community and gain the knowledge that anything is possible with hard work and dedication.”

That dedication paid off in 2012, when Hays was awarded a Fulbright grant to study the impact of microfinancing in villages located in rural Punjab State, India.

On returning from her Fulbright work, Hays was accepted into the Toulouse School of Economics in France. With a love of traveling, languages, and business, she hoped to use the opportunity to enhance her prospects to become a Foreign Service officer for the U.S. State Department… after earning a PhD in economics.
ANNE PFISTER ’12

Major: Applied Anthropology
College: Arts and Sciences
From: Denver, Colorado

As a PhD student in applied anthropology with a concentration in biocultural medical anthropology, Anne Pfister’s academic achievements both inside and outside of the classroom culminated in a 2012 Fulbright research grant that enabled her to travel to Mexico City to study the cultural paradigms of local deafness and their impact on identity and language socialization among Mexican youth. This work follows her preliminary research with Mexico City’s deaf community conducted in 2010 and funded by a grant awarded to her by USF’s Institute for the Study of Latin America and the Caribbean.

Upon completion of her Fulbright studies, Pfister planned to analyze the data collected in Mexico for her dissertation. As a collaborative investigator, her research will be informed by, and shared with, the Mexican deaf community through various avenues. Pfister was mentored at USF by another Fulbright Scholar, Associate Professor of Anthropology Daniel Lende.

She is a recipient of the Provost’s Award for Outstanding Teaching by a Graduate Teaching Assistant, has both published and presented her research, and has given back to multiple communities through volunteer service with not-for-profit organizations in the Dominican Republic, Guatemala, and Colorado.

BRITTANY VOSLER ’08, ’15

Major: History
College: Arts and Sciences
From: Tampa, Florida

Brittany Vosler was awarded a Fulbright research grant to continue her history doctoral dissertation research at the University of the West Indies-Cave Hill in Barbados. She is one of only two U.S. students to receive a full grant to Barbados under the Fulbright program in 2013.

Focusing on the British Caribbean, and specifically Barbados, her research looks at how Pan-Africanism and other internationalist ideologies connect local struggles against colonial rule with modern global politics.

Vosler is a former graduate teaching assistant in the Department of History and received the 2009-2013 Graduate Instructional Fellowship. She also was awarded the 2012 Swanson Memorial History Research Fellowship.

Vosler has published in the British Scholar and presented her research at the USF Graduate Research Symposium and the USF Phi Alpha Theta Regional Conference.

Upon her return to the United States, she planned to use her extended research in Barbados to complete her dissertation under the supervision of Professor and History Chair Fraser Ottanelli. Her ultimate career goal is to teach British history and Caribbean history at the university level.
DILLON SWIFT ’12

Major: Trombone Performance
College: The Arts
From: Satellite Beach, Florida

Dillon Swift — like Ryan Salazar, another trombonist — earned his Fulbright grant to pursue a one-year master’s degree in musical instrument training in Germany. He studied at the Hochschule für Musik und Theater Rostock under renowned classical trombonist Jamie Williams.

Selected to receive the Presser Award, given to USF’s most outstanding undergraduate music student as identified by the president of the university and the head of the music department, Swift also is the recipient of a USF Presidential Scholarship, the Dorothy M. Smith Music Scholarship, and a USF Talent Grant.

He is an accomplished musician and has studied and performed at important classical music festivals in Eisenstadt, Austria, Greensboro, N.C., and Hot Springs, Ark., and with the London Symphony Orchestra. With a published article in the International Trombone Association Journal and membership in the International Association of Jazz Educators, he would one day like to teach on the university level and perform in a full-time orchestra.

TRINA HALFHIDE ’12

Majors: Environmental Science and Policy (Masters); Engineering Science (PhD)
College: Arts and Sciences; Engineering
From: Trinidad and Tobago

Trina Halfhide’s research focuses on microalgae and their ability to produce valuable compounds that can be turned into algal biofuel products. In 2010, she was able to further her study by way of a five-week research internship in Norway at the Norwegian University of Life Sciences. Just two years later, she earned a Fulbright research grant and returned to Norway to continue her investigations.

Halfhide’s dedication has been recognized before — she is the recipient of the Graduate Assistance in Areas of National Need Fellowship, and the USF Tharp Endowed Scholarship Fund Graduate Award for students in the sciences.

While at USF, she was the principal investigator for the university’s Solar Initiative funded by a $160,000 grant from the USF Student Green Energy Fund. She also worked as a research assistant for Associate Professor of Civil and Environmental Engineering Sarina Ergas.

Her research has been published in the journals of Toxicological & Environmental Chemistry and Environmental Monitoring and Assessment and she has presented her work at the International Water Association Leading Edge Technology Conference.

Halfhide hopes to integrate her research skills and knowledge learned during her Fulbright experience into solving environmental problems around the world.

MICHAEL JONES ’07

Major: Teaching
College: Education
From: Sarasota, Florida

After graduating with a master’s degree in teaching from USF, Michael Jones developed an interest in open access academic curricula while serving as an education consultant in Cambodia. His work in designing curricula for schools in Siem Reap Province made him well aware of the limited resources available in the country, and consequently, in the developing world. “While well-funded classrooms are great, there has to be a way to help educate with limited resources,” says Jones.

In August 2011, he founded Open Equal Free, a not-for-profit organization whose mission is to provide educators in schools in developing countries with training, lesson plans, news, resources, and networking opportunities to provide education at the lowest budget possible.

He continued this work with a Fulbright postgraduate research grant to Laos, which allowed him to research educational practices being implemented in Laotian schools.

Jones’ ongoing efforts with both Open Equal Free and Child’s Dream to connect with schools are designed to create resources and improve education and teacher quality in Laos.

“It’s always thought, and research repeatedly shows, that education is a vital key for improving one’s life,” Jones says. “I’m so excited to have been awarded a Fulbright grant. Not only is it a tremendous honor, but it will allow me to continue my work on improving the quality of education in the developing world.”
"I knew about USF because it’s one of the biggest campuses in the U.S. and I was impressed because of the beauty of the campus."

Trang Luong likes the way USF professors create interaction in class and focus on a student’s individual situation — like being an international student.
In 2011, Trang Luong left her home in Vietnam to study abroad. At the time, she could not have known that just two short years later she would become USF’s first international student to win a prestigious national scholarship.

“I knew about USF because it is one of the biggest universities in the U.S. and I was impressed because of the beauty of the campus,” says Luong, who entered USF as an INTO student. The INTO USF partnership, launched in 2010, offers many international students opportunities to attend USF, learn English, and eventually matriculate into the university’s academic programs.

“By the time I was about to start my study in America, my English proficiency was quite low, and I had some difficulties in learning and communicating,” says Luong. She credits the INTO USF program with helping to greatly improve her English comprehension through tutoring services, weekly meetings, academic advisors, and classes specifically designed for international students.

After taking general math and chemistry courses in her first two semesters, Luong discovered her vocation for engineering fields and decided to seek a degree in civil engineering. Her introduction to research took place in the physics laboratory of Dr. Manh-Huong Phan, and her hard work and dedication paid off in 2013 when she was awarded a DAAD RISE internship. The eight-week summer position allowed Luong to join a research group of international PhD students working on a civil engineering project at Bauhaus-Universität Weimar in Germany.

“The project offered by the Bauhaus-Universität Weimar was truly significant to me,” enthuses Luong, adding that the opportunity enhanced her understanding of both civil engineering and the world.

Luong was first enticed to the DAAD RISE internship opportunity by Dr. Linda Lucas, director of USF’s Office of National Scholarships.

“She paved the way for me to apply for a summer internship project, which will strengthen and broaden my academic experience,” Luong says.

While at USF, Luong stays very involved in both her classes and campus activities. The USF chapter of the American Society of Civil Engineers provides her with opportunities to immerse in the practical applications of structural engineering design, including field trips to local cement plants and the I-4 Connector site in downtown Tampa as well as lectures and other guest speaker events.

In her spare time, Luong is also a volunteer researcher in USF’s Functional Materials Laboratory, a resident assistant, and a math and physics tutor for USF’s Tutoring and Learning Services.

“Deciding to study abroad at the University of South Florida was the most momentous turning point in my life,” says Luong. “Not only has this decision given me a wonderful student life at school, but it also offers me a brighter and better future.”
“I’ve loved teaching since I was a young kid. I love learning and carrying on that learning to others – it’s part of me.”
Public interest in the U.S. Constitution and the nation’s other founding documents seems to ebb and flow with the latest political or legal controversy. But they are subjects about which Elizabeth Rasmussen, a graduate student in the College of Education, has always been passionate.

As USF’s first James Madison Fellowship recipient, an honor earned by only 56 current and prospective teachers in the country in 2013, Rasmussen was able to further pursue that passion by securing a ticket to a month-long summer seminar on the Constitution held at Georgetown University in the nation’s capital. The prestigious symposium was taught by four of America’s leading constitutional scholars.

“I have always loved history and social studies,” says Rasmussen. “This fellowship meant so much to me because I was truly living what I love.”

While participating in the intense “Foundations of American Constitutionalism” course, she was also able to argue a mock Supreme Court constitutional case in front of a Washington, DC, district court judge and meet Supreme Court Justice Antonin Scalia.

“It was a great experience,” Rasmussen recounts. “I enjoyed being in the classroom learning about American constitutionalism and I was thrilled to then be able to go and see it first hand during my time in DC.”

The long-term impact of Rasmussen’s fellowship experience is certain to be felt, too, by her students at Fort Meade Middle-Senior High School in central Florida, where the master’s degree candidate in secondary education teaches social studies.

Homeschooled from kindergarten to 12th grade, Rasmussen understands especially the hard work and dedication that goes into student learning. Growing up, she was tested by outside instructors each year. During elementary school, one of those evaluators told her parents that Rasmussen would probably never attend college because of her several learning disabilities.

Still she persevered. “I really pushed myself,” says Rasmussen, who started taking college classes when she was 16. “My approach is to be the best I can be. I have always strived to do that — to do the best I can do — and to do what I love.”

By the time she completed high school, Rasmussen was only a year away from an associate’s degree at St. Petersburg College, where she was named a finalist for the Apollo Award, the college’s top honor. She went on to earn her B.A. magna cum laude from the University of North Florida.

Enrolling at USF in 2012, Rasmussen had already been a full-time teacher for five years. “I knew that USF’s College of Education had an outstanding reputation,” she says. “All of the classes that I have taken here have really helped me enhance my teaching. I have learned practical skills that make me a better teacher. That is the goal of these programs — to make you an even better teacher than when you started.”

During one of her courses in social sciences education, Rasmussen was required to videotape herself teaching in front of her class. “My professor gave me amazing feedback. While praising my strengths and what I was doing well, she was also able to see how my classes really were and give me great ideas on how I can improve my teaching.

“USF’s College of Education has some great professors who truly want to see their students succeed and grow,” says Rasmussen, who hopes to use the knowledge she’s gained in the master’s program and through the Madison Fellowship to enhance her ability to shape the minds of her students.
“Getting your degree online is not easy. You have to be organized. You have to read the books. You have to write the papers. You have to make the deadlines. If you don’t, it’s not happening.”

About Eric:
Class of 2013
Major: Criminology
College: Behavioral and Community Sciences
From: Seffner, Florida
Awards:
• Graduated with distinction
Eric Biel, ’13, is the first to say that his route to a bachelor’s degree from USF was “very eclectic,” as one might gather from his major in criminology coupled with a minor in biomedical physics.

But he’s equally quick to characterize the experience as being “completely awesome.”

“There’s just something about being among all the great academic minds at USF that makes you want to plug into that as much as possible. I’m interested in so much,” says Biel, who transferred to USF after completing his associate’s degree at nearby Hillsborough Community College.

Having long been a volunteer science and math tutor for his fellow students both in high school and at HCC, Biel started out at USF thinking about a major in secondary education, but later switched to mathematics, until the highly structured nature of that curriculum and its in-class requirements proved not a good fit with his work responsibilities as a staff assistant with the Home Instruction for Parents of Preschool Youngsters (HIPPY) program located in the College of Behavioral and Community Sciences.

“My schedule really didn’t permit me to go to school full-time,” Biel recalls. He credits HIPPY State Director Dr. Mary Lindsey with continuing to emphasize that he persist with his education by finding a more flexible course of study.

“She was very proactive in pushing me toward success, for which I’m very grateful. And I couldn’t have been more thrilled to find a place in the criminology program, which allowed me to complete almost all of my courses online.”

In fact, Biel says he needed to attend only one class in person to complete his major. The math credits he’d accumulated earlier in his USF career also meant he could finish his minor in biomedical physics with just two additional courses, also taken online.

He received his diploma in May 2013 as one of only four students in the College of Behavioral and Community Sciences to graduate “with distinction,” as determined by the faculty of the college based upon the four criteria of scholarship, research (for his work with HIPPY), service to the community (as a tutor, local PTA volunteer, and staff advisor to the USF skimboarding club), and overcoming adversity (the loss of his left eye as the result of an accident during batting practice with an area softball team he managed while at HCC, also as a volunteer).

Although, because of his somewhat circuitous route, Biel took slightly longer to graduate than more traditional students, he says the opportunity to work on campus while pursuing his degree also meant that he was able to walk across the commencement stage with zero debt. In addition to increasing the number of courses available to students online, the university has made initiatives to raise the prospects for on-campus employment and limit the amount of debt incurred by students high priorities of its student success planning.

“I think it’s absolutely accurate to say that I feel like USF has been an active partner in helping me toward my educational goals,” says Biel, now a graduate student in the College of Business’ MBA program.

“Everyone here is always trying to make students aware of the opportunities available to them. Everyone is always so positive. I don’t know how much I would have wanted to continue with school without all of that encouragement and support.”
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