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Florida Institute of Technology President Dwayne McCay and First Lady Mary Helen McCay were among dozens of visitors to a new research vessel that will help faculty and students conduct marine research and tackle some of the state’s most vexing ecological issues, from hurricane erosion and oil spills to red tide.

The R/V W.T. Hogarth visited Ocean Club Marina in Port Canaveral on Jan. 22, the second of 10 visits planned at ports around Florida. Named after William Hogarth, the marine research scientist who served as director of the Florida Institute of Oceanography (FIO) from 2011 to 2016 and was former dean of the University of South Florida College of Marine Science, the $6 million, 78-foot, coastal-class ship was built at Duckworth Steel Boats in Tarpon Springs. It was launched May 23 and is sponsored in part by Florida Tech. As many as 800 principal investigators from Florida Tech and 30 other Florida universities and institutions that comprise FIO will utilize the Hogarth for data collection, observations and research.
Dear Alumni and Friends,

As most of you know, I’m a self-described old rocket scientist. That’s why it has been particularly thrilling to see the resurgence in activity at nearby Kennedy Space Center as private rocketry is getting off the ground in new and exciting ways. From Blue Origin to SpaceX, the future of commercial space flight looks very bright indeed.

No recent activity at the space center better encapsulates this future than Elon Musk’s successful Falcon Heavy test launch Feb. 6, where the most powerful rocket currently in use lifted a Tesla roadster into space as proof of the new system’s ability to carry heavy payloads into Earth orbit and beyond. Nothing like the liftoff rumble reverberating from the Falcon Heavy’s 27 engines and 5.13 million pounds of thrust has been felt along the Space Coast since the 1970s and the Apollo program’s glory days.

This bold era of commercial spaceflight is particularly exciting for Florida Tech, as faculty and student research intersects with this new activity. Our alumni, too, are contributing in meaningful ways to success at Blue Origin, SpaceX, NASA and other areas of this brave endeavor.

The Florida Tech family is proud to be a part of spaceflight’s future. We have rocket fuel in our veins. Our motto “To the stars through science” describes who we’ve always been, and who we remain.

Sincerely,

Dwayne McCay, Ph.D.
President
Florida Tech Receives $246M Siemens Technology Grant

Software Crucial for Developing Advanced Manufacturing Workforce

Siemens has provided Florida Tech with an in-kind software grant that will enable the university to offer students powerful, hands-on learning experiences to better equip them for future STEM careers.

The in-kind grant has a commercial value of more than $246 million. It is centered on Siemens’ industry-leading product lifecycle management (PLM) software, which is used by more than 150,000 companies around the world in the aerospace, automotive, medical device, machinery, shipbuilding and high-tech electronics sectors. More than 75 companies in Florida use the software, including Northrop Grumman, whose Manned Aircraft Design Center of Excellence is based in Melbourne.

These companies use Siemens’ PLM software—including Simcenter™ and NX™ software, the Teamcenter® portfolio and the Tecnomatix® portfolio—to design, develop and manufacture some of the world’s most sophisticated products, and Florida Tech students across the university’s colleges and programs will now be able to use the same programs.

“Software is at the core of an ongoing digital transformation that is changing the way our customers approach the manufacturing process, from design to production into service,” said Tony Hemmelgarn, president and CEO of Siemens PLM Software. “Through our partnership with Florida Tech, we are helping empower the next generation of digital talent with access to valuable hands-on training with both software and hardware tools. This real-world, project-based learning will offer students the STEM skills they need to succeed in the digital future.”

The software will benefit students at both the undergraduate and graduate levels. At the College of Engineering & Computing, for example, the software will be used in junior- and senior-level classes in mechanical engineering and bioengineering, as well as by student design teams such as Formula SAE. At the graduate level, the software will be used in the automotive engineering department.

“Having been an industry executive, I am keenly aware that industry needs graduates who are educated using the latest, sophisticated tools and methodologies so that these new employees can be immediately productive,” said Michael Grieves, executive director of CAMID and a university research professor. “This software grant will help make Florida Tech graduates highly attractive and move their résumés to the top of an employer’s list.”

Siemens has nearly 5,200 employees in the state of Florida spanning power generation, transmission and distribution, energy efficient buildings and infrastructure, medical imaging and health care diagnostics technologies. The company’s software and hardware solutions have helped automate processes and increase efficiency in areas ranging from manufacturing to city infrastructure, and even theme parks.

“One of our core values is to prepare students for a lifetime of success, and this grant will offer them the opportunity to learn the cutting-edge skills that will be essential for success in advanced manufacturing.”

—President Dwayne McCay
SAVOIE READERS
Several alumni wrote in to correct the caption about the Fall 2017 issue cover photo. The diver is wearing a Savoie helmet, not a Miller helmet.

“Love the stories about the Jensen Beach campus and UT program. I’m proud to be part of it! I loved my days at FITJBC. I worked 20+ years as a commercial diver. Left the business 15 years ago to work in local government and recently retired. One small correction, the guy on the cover is wearing a Savoie, not a Miller.”
—Roy Duffield ’79

Stephen Nippert ’81, the diver in the photo, also wrote in about the helmet. “The Savoie helmet was my favorite. It was cool looking and had great visibility. I sold the wetsuit back in the late ‘80s. I still have the pocket knife and weight belt that I was wearing that day. I bought the weight belt in Louisiana when I was working for Ocean Tech in Morgan City.”

FIT ALUMNI AT THE 147TH ANNUAL MEETING OF THE AMERICAN FISHERIES SOCIETY

1. Martha Bademan Guyas ’09 M.S., biologist with the Division of Marine Fisheries Management, Office of the Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida
2. Jesse Blanchard ’09, ’12 M.S., Ph.D. Candidate, Wetland and Fish Ecology Lab, Florida International University, Miami, Florida
3. Anthony Cianciotto ’14, ’17 M.S., Research Associate, Department of Biological Sciences, FIT
4. Jynessa Garkle-Garrett ’10 Ph.D., Postdoctoral Research Associate, Fisheries and Aquatic Sciences Program, School of Forest Resources and Conservation, University of Florida, Gainesville, Florida
6. Mark Peterson ’81 M.S., Professor, Department of Coastal Sciences and Gulf Coast Research Laboratory, University of Southern Mississippi, Ocean Springs, Mississippi
7. Patrick Pitts ’81 M.S. (right), Fish and Wildlife Biologist, Everglades Restoration, South Florida Ecological Services Field Office, U.S. Fish and Wildlife Service, Vero Beach, Florida with Douglas Scheldt
8. Jake Rennef ’77 M.S.
9. Tomena Scholze ’14, Biological Scientist I, Molluscan Fisheries Group, Fish and Wildlife Research Institute, Florida Fish and Wildlife Conservation Commission, Apalachicola, Florida, and Cheree Steward ’05 M.S., Fisheries Biologist, Florida Fish and Wildlife Conservation Commission, Bryan, Texas
Swanns Receive Philanthropy Award

Florida Tech Trustee
ELIZABETH J. SWANN
and her husband JIM
SWANN received the Bjorg and Bjornar
Hermansen Legacy Award for a lifetime of philanthropy at Florida Today’s Volunteer Recognition Awards on Nov. 16.

The award, in its inaugural year, is named in part for another Florida Tech trustee, Bjornar Hermansen, who passed away in 2015. It recognizes those who have demonstrated a lifetime of legacy giving, leadership and support of the Brevard County community.

Elizabeth Swann, known as Jonnie, was named a Florida Tech trustee in 2003. With Jim Swann, she has been instrumental in improving the university and the community for many years. Their numerous philanthropic accomplishments include helping to build the Brevard Zoo and supporting the United Way of Brevard and Cocoa Village Playhouse.

Grumman Retirees Honor Skurla, Florida Tech

Retirees from Grumman Aerospace gathered on campus in October to acknowledge the contributions of their former CEO, GEORGE SKURLA, and to honor Florida Tech. Led by Bob Watkins, retired Grumman vice president and assistant to Skurla, the retirees made several gifts to the university, including photographs and paintings chronicling the history of Grumman. One gift was a replica of the plaque that was left on the moon as part of the Apollo 11 mission. The retirees also gifted the university with $1,000 earmarked for the purchase of Grumman memorabilia to be displayed on campus.

Attending from the Skurla family were Marie Skurla, George Skurla’s widow, and sons George Jr., Marty, James and Tommy. The reception was held in Skurla Hall, named in honor of George Skurla, and home to the College of Aeronautics. Skurla was a longtime supporter of Florida Tech, serving on the board of trustees from 1979 until his passing in 2001.

Ask the Archivist

Did you know the Evans Library has six changing exhibit spaces and one permanent exhibit?

Displays are decided through an exhibit committee of library faculty and staff, with input from the rest of the library and through partnerships with the broader campus community. We try to plan roughly a year out but remain flexible to respond to contemporary topics of relevance and interest. Each exhibit has a theme, addresses a point of interest, ties into an event or library-supported initiative, showcases a collection, or highlights work produced by the campus or community. For the exhibits featuring archival material, some collection items lend themselves better to exhibition (items with more color, 3-D items or artifacts, photographs), while others may be more accessible in an online exhibit where people can take the time to explore the content and text of the items. The goal of our exhibits is not only to educate but to raise awareness and engage the viewer. We ask ourselves: is the exhibit interesting, relevant, visually appealing, well-researched? Did the viewer learn something new? Does it tell part of a story that needed to be told? Does it make the viewer think more deeply about the items or topic? We also try to include interactive or multimedia components that invite people to engage with the exhibits and collections in different ways. Fall semester exhibits in Evans Library all centered around sustainability, with the university archives exhibit showcasing the Hydrospace Technical Institute and Jensen Beach Campus featured in the Fall 2017 Special Edition of Florida Tech Today.
Mary Helen McCay Named NAI Fellow

Mary Helen McCay, university research professor, director of Florida Tech’s National Center for Hydrogen Research, NASA astronaut alternate and holder of two dozen patents, has been named a Fellow of the National Academy of Inventors (NAI).

McCay, the founding president of Florida Tech’s National Academy of Inventors local chapter and an inductee into the Florida Inventors Hall of Fame this year, joins a 2017 class of 155 others from top universities and research agencies worldwide, including CalTech, Massachusetts Institute of Technology, NASA Jet Propulsion Lab and Oak Ridge National Laboratory.

Election to NAI Fellow status is a high professional distinction accorded to academic inventors who have demonstrated a prolific spirit of innovation in creating or facilitating outstanding inventions that have made a tangible impact on quality of life, economic development and the welfare of society.

Mary Helen McCay

“...I am honored to be named a Fellow with such a distinguished group of women and men. Together the class of 2017 and all past NAI Fellows highlight the far-reaching and positive impact scientists and researchers can have, and I look forward to helping the next generation of pioneers continue to explore and illuminate our world in important ways.”

One to Watch: Zachary Eichholz

I want to help build policy to make cities and/or states, or even at the federal level, more sustainable and more resilient to climate change.

Zach Eichholz ’16, a master’s student in interdisciplinary science and intern with the City of Satellite Beach, is helping implement the city’s sustainability plan, a 49-page document featuring 20 green-achievement target goals for municipal operations over the next five years that he co-authored. Initiatives include solar panels powering City Hall, low-irrigation xeriscaping, electric vehicle charging stations and a community garden—something Eichholz spearheaded at Florida Tech in 2017.

Enriching Research

3-D Printed Ligaments for Injured Knees

Michael Fenn, assistant professor of biomedical engineering, and Vipuil Kishore, assistant professor of chemical engineering, are dual principal investigators on a new National Institutes of Health grant that aims to produce a BioGlass-based material called BioGIMs made by using Raman spectroscopy data translated into a 3-D printed construct that compositionally, mechanically and biologically mimics the ACL connective tissue, which ranges from ligament to bone.

Sharing Chemistry Research Across Continents

Chemistry Professor Nasri Nesnas was invited to give 10 lectures across multiple continents and 15 time zones this summer including destinations in Europe, the Middle East and China. Nesnas shared his work on topics such as how molecules can help explain the way humans think and see, and the ability of light to control brain function. His research on developing light responsive molecules for brain studies is funded by the National Institutes of Health (NIH).
PROTECTING FISHERIES WITH MARINE RESERVES

Five new federal reef fish spawning reserves were enacted from Florida through North Carolina this summer to protect economically important grouper and snapper fisheries. KEN LINDEMAN, professor of education and interdisciplinary studies, has spent 15 years on diverse federal and international advisory panels to design these and other reserves while co-authoring research articles to justify protection of spawning areas in the U.S. and Greater Caribbean.

A TOP GLOBAL UNIVERSITY

Florida Tech is in the top 3 percent of more than 27,700 degree-granting institutions of higher education worldwide, according to the 2017 World University Rankings. The comprehensive rankings from the Center for World University Rankings measure the quality of education and training of students as well as the prestige of the faculty members and the quality of their research—without relying on surveys and university data submissions.

EXPERT ADVICE: Lobster Season

Florida Spiny Lobster season runs Aug. 6 through March 31, so it’s not too late to make your catch. Lobster enthusiast John Brady, chemistry laboratory manager, offers these tips for bagging your bugs.

Find them.
You have to find lobster before you can catch them. Being primarily nocturnal, lobster normally hide under ledges during the day. With a good light, search carefully under the ledges, slowly panning the light to expose every nook and cranny. Lobster can hide in crevices only six inches tall. Look for the antennae of spiny lobster, as this is the easiest part to spot.

Choose a technique: Grab, Loop or Tickle.
Once you’ve spotted the lobster, decide how to capture it. If the ledge is very shallow, and you are absolutely sure the lobster can’t back out of reach, simply grasp the lobster anywhere from the base of the antennae to the tail. Never clutch at the antennae themselves, as they break off very easily and the lobster will likely escape. A lobster standing in the open may be snagged with a tail loop, while a tickle stick can be used to coax a lobster to move to where you want them.

Think about strategy.
Many ledges are so deep you can’t reach the lobster without a long tickle stick. When you see a lobster in a deep opening, study the ledge to decide where to move the bug to capture it more easily. Maneuver the curved end of the tickle stick behind the tail without touching the lobster, if possible. Move it forward slowly to touch the back of the tail, and the lobster should move forward. Try to do this without stirring up the bottom, or the bug may become hidden in the resulting murk. You can then attempt to move it to an area of the ledge where it will be easier to capture using one of the other techniques.

Confirm it’s a keeper.
All lobster must be checked on the underside of the abdomen for eggs and with a carapace gauge to ensure they meet the minimum legal size requirement immediately after catching them. Place small part of the gauge past the opening on it on the ridge between the eyes. The other end of the opening on the gauge must not extend past the edge of the carapace. If it does, the lobster is too small and must be released. Any bugs which have eggs or are undersized should be placed back under the ledge as carefully as possible to try to avoid injuring them.

Bag basics.
Once you’ve caught the lobster, keep a firm grip on it. Lobster are very strong for their size and can escape if you relax your grasp for an instant. After spending several minutes catching a lobster, it’s very annoying to lose it when trying to place it in the catch bag. If it is a large lobster, turn its legs away from you. Check the bag well before each trip to ensure it is in good condition. A lobster’s spines can poke holes in even the toughest material and may cause tears. The handles may also become bent severely enough to prevent them from being closed easily.

SHARK BIOLOGIST PROMOTES CONSERVATION

TOBY DALY-ENGEL, assistant professor of biological sciences, joined the College of Science faculty this fall from the University of West Florida in Pensacola to focus on research studying shark ecology and how they have changed over the 450 million years they’ve been on Earth. Through research and outreach, Daly-Engel hopes to raise awareness about these highly evolved animals and their important contribution to ocean ecology. Her expertise and enthusiasm for sharks of all kinds has led to partnerships with television shows produced by National Geographic and Discovery.
Making Mathematical Models for All Things Porous

Recently named a Fellow of the American Institute of Chemical Engineers, Manolis Tomadakis helps propel technology from fuel cells to textiles forward.

**MANOLIS TOMADAKIS**, head of the chemical engineering department, says the most satisfying part of his research is seeing other scientists and engineers use the mathematical models he created to make improvements to technology in many areas ranging from aerospace to biotechnology.

His work is the fundamental research that forms the underpinnings of applied research in, as he says, “anything porous.” And a lot more is porous than might first be imagined. Tomadakis, who was named a fellow of the American Institute of Chemical Engineers this summer, builds advanced computer code. He develops mathematical models, computer simulation methods and algorithms for estimating mass and energy transport, reaction and the nuclear magnetic resonance properties of porous, fibrous and composite materials. We encounter these in a variety of modern technology applications and biological systems.

Mathematical modeling helps to understand in more depth why something happens as it does. It creates the root of a process to guide researchers in the right direction for their experiments. “Most rewarding is when my work is applied in various R&D studies that contribute to technological advances and make a positive impact on our lives,” Tomadakis says.

Tomadakis has witnessed his models and simulations tested, validated and applied by many other scientists around the world. He has seen applications in the U.S. space program, automobile industry, geochemistry, radiation oncology, biology, medicine and biotechnology. The definitive honor for him is citations. When other scientists apply his research to their projects and credit his published work, he knows that “what we discovered on the computer is valuable and helps technology move forward.” Tomadakis has earned hundreds of citations from other researchers. He has had feedback from NASA, crediting him with positively affecting the properties of space shuttle tiles, made of fiber-reinforced composites.

His work has also advanced nuclear magnetic resonance applications in oil extraction—assessing in real-time the feasibility of extracting oil from porous rock. Creating reliable models saves time and money, eliminating the need for extensive experimentation. The ability to understand and predict the molecular transport and surface interactions in fibrous porous materials is valuable to the broader fields of textiles, filtration, paper, fuel cells and tissue engineering, for example.

Today, hundreds of fuel cell researchers, including General Motors, use Tomadakis’ models for the transport properties of fuel cell gas diffusion media in hybrid cars and other alternative energy systems. The models he and his graduate students create, however, can only be known and used if they are published. It is his challenge to make time for that, while also meeting the day-to-day demands of heading one of the university’s fastest-growing departments.

“As much as I love the educational and leadership aspects of my job, I cannot imagine my professional life without research.”

**Campus Highlights**

**LOW-DEBT LEADER**

Florida Tech is the top private university in Florida and among the highest ranked private institutions in the country for the low amount of federal loan debt accrued by its students, according to a new list from Forbes magazine.

**A FAST-GROWING U**

Robert Weaver, associate professor of ocean engineering (second from left), and his students perform physical model simulations of oyster reef breakwaters and revetments at Florida Tech’s Coastal Engineering Lab to establish the design and performance of the engineered structures. The reefs are made from long, aquaculture-grade mesh bags filled with real oyster shells that attract oyster larva to attach and make a home there.

Volunteers turn bags of oyster shells into a structure engineered by Florida Tech to lure oyster larva and serve as a barrier to shore erosion.

Last summer, volunteers placed the engineered breakwaters and revetments into the lagoon near the shoreline where they should collect enough living oysters and other creatures to help prevent further erosion along the banks. The oyster reefs work by dissipating incoming waves and diminishing the waves’ power to pull sediment from the shore.

“The installation was a great opportunity to see coastal engineering and community engagement in action,” said Weaver.
Remembering Harry Weber

HARRY WEBER, professor emeritus and longtime university advocate, passed away on Nov. 11, 2017.

He arrived at Florida Institute of Technology (then, Brevard Engineering College) in 1966 to head the department of electrical engineering. Among his numerous university accomplishments are winning accreditation for electrical engineering and acquiring a $250,000 National Science Foundation grant that enhanced laboratory and classroom space on campus. Within a decade of his arrival, he was serving as dean of both Florida Tech's graduate school and its School of Sciences and Engineering, and in 1980 he was named vice president of academic affairs.

“Harry Weber’s vision, intelligence and zeal contributed much to transforming a fledgling college into a world-class university,” said university historian GORDON PATTERSON.

After his retirement, Weber devoted countless hours of service to the university. He was the force behind the creation of the Florida Institute of Technology Professors Emeriti and worked tirelessly to preserve the university’s history. The Harry P. Weber University Archives, opened in 2014, was named in his honor.

“He was more than the namesake for the archives—he was an ally, an advocate and a friend. We will all miss him very much. His unfailing cheerfulness, his indomitable spirit and his passion for the history of Florida Tech will continue to inspire us as we work to preserve the memories he left us,” said university archivist ERIN MAHANEY.

Faculty Member Honors Wife with Study Abroad Endowment

WILLIAM GABRENYA, a professor in the School of Psychology, has established an endowment to support students wishing to study in Taiwan.

The Yue-Eng Gail Wang Study Abroad in Taiwan Fund honors Gabrenya’s wife, who passed away in 2011. It was established in hopes of increasing American students’ knowledge of Taiwan by encouraging them to study abroad there at any of several universities. Gabrenya said he hopes the fund will foster a greater appreciation of Taiwanese society and culture in its future beneficiaries while also providing them an opportunity to learn its languages and develop enduring friendships and connections.

“We are honored that Dr. Gabrenya has chosen to recognize his wife, a Florida Tech alumna, in this special way,” said PRESIDENT DWAYNE MCCAY. “What is particularly wonderful about this fund is that it builds on Florida Tech's place as a national leader in international education while also building on the university’s early connection with Taiwan that was established by our founding president, Jerome Keuper.”

Born in Taipei, Taiwan, YUE-ENG graduated first in her class in history at National Taiwan University in 1970. In 1979, she earned a Ph.D. in cultural anthropology from the University of Missouri–Columbia. She received a master’s degree in computer science from Florida Tech in 1987 and had a successful, 17-year career at Harris Corp. as a software engineer before retiring in 2010.

The Yue-Eng Gail Wang Study Abroad in Taiwan Fund will launch this year. Students interested in the program may contact Heather Wautlet, director of study abroad, at hcudmore@fit.edu.

Those interested in contributing to the fund may contact Gary Grant, vice president for development, at ggrant@fit.edu or visit give.fit.edu/panther-fund and designate the "Wang Taiwan Study Abroad Fund."
Panthers Pledge for Day of Giving

More than 1,700 Florida Tech alumni from around the world donated toward the university’s 3rd annual Day of Giving on Nov. 28.

Donors from 53 countries pledged more than $149,000 during the 24-hour fundraising event, held in conjunction with the international effort known as Giving Tuesday. Introduced in the United States in 2012, Giving Tuesday, which follows Black Friday and Cyber Monday, is a day of international philanthropy benefiting nonprofit organizations.

The leading recipient at Florida Tech was the Athletics Department, which had 821 donors and $78,000 in gifts. Other recipients included the university’s five colleges, the Panther Fund, Evans Library, WFIT FM-89.5, the Botanical Garden, University Museums and weVENTURE.

The money raised will support Florida Tech’s greatest needs, including financial aid, research and student activities.

The importance of participation goes beyond any particular amount of money raised. No matter the size of individual donations, the level of alumni participation overall is a key factor in how organizations, including the influential ranking publication U.S. News & World Report, perceive the success of a university and how they ultimately rank it.

“We asked our global network of Florida Tech Panthers to step up, and they did in a major way,” said BINO CAMPANINI, vice president of alumni affairs. “We are so thankful for their generosity and so proud to have alumni who value their alma mater and appreciate the impact it had on their lives and the impact it will have on so many future lives.”

Crossword Clue Reboot

Florida Tech yet again graced the New York Times crossword puzzle. Cited on the paper’s “Crosswords & Games” blog among the “Tricky Clues” section, the correct answer to 33 Across “University in Melbourne” did not involve the country of Australia, but our very own Florida Tech.
Florida Tech seniors Evan Enders and Jan Hlavica were named CoSIDA Second Team Academic All-Americans, becoming just the second and third men’s soccer players, and third and fourth male student-athletes to receive the honor. FIT has now produced eight Academic All-Americans in the school’s 60-year history. Enders holds a 3.93 GPA in electrical engineering, while Hlavica, a business administration and management major and a member of the Delta Mu Delta Business Honor Society, is one of 13 men’s soccer Academic All-Americans maintaining a perfect 4.0 GPA.

Florida Tech reached a historic milestone for the women’s soccer program, as the Panthers were crowned Sunshine State Conference Champions after a battle that endured until the shootouts. FIT clawed the title with a 4-2 victory over the Tampa Spartans. The win marked the program’s first-ever conference title and granted FIT an automatic bid to the NCAA Division II South Regional Tournament. It was the fifth NCAA appearance for the Crimson and Gray within the past 10 years.

After finishing fourth overall at the NCAA South/SE Super Regional, the FIT Men’s Golf team qualified for the NCAA National Championship for the first time in program history. Playing the national championship at the Reunion Resort in Kissimmee, Florida, the Panthers sat in fifth after three rounds of stroke play and earned the chance to compete for the NCAA Title in match play. The men’s golf team faced SSC rival Lynn in the quarterfinals of match play but was unable to knock off the eventual national runner-up, falling to the Fighting Knights 3-1-1. Two golfers, Max O’Hagan and Shanren Brienen, were recognized as All-Americans at the conclusion of the season.
Recent FIT graduate Brittany LaPadula had a remarkable run into and during the 2017 NCAA Women’s Golf Championships in spring 2017. The All-Sunshine State Conference First Team selection finished second overall at the NCAA South Super Regional Championship and earned a spot in the national championship at Findlay Country Club in Findlay, Ohio. Sitting at 20th on the leaderboard after the first two rounds of the championship, the senior posted the best score over the final two rounds and finished seventh overall. LaPadula was named a First Team All-American following the conclusion of the national championship.

As the No. 1 ranked team in the nation, Florida Tech took home both the Varsity Eight and Sunshine State Conference Team Championship. The Panthers completed the day with an accumulation of 16 points, besting their closest competitor by four. In the Varsity Eight event, the Panthers’ shell flew through the finish line with a time of 6:40.57, pacing at a comfortable 34 stokes per minute most of the way. With the victory, the Panthers earned their program’s sixth SSC Championship, with the last time occurring in 2005.

After recording a program-best 13-3 regular season record in 2017, the Florida Tech women’s lacrosse received its first-ever NCAA Tournament bid as the No. 6 team in the south region. Guided by SSC Coach of the Year, Corinne Desrosiers, the FIT picked up its first NCAA Tournament victory defeating No. 3 seed East Stroudsburg 17-10. After taking down the Warriors, the Panthers fell to No. 2 Florida Southern in the quarterfinals, ending their postseason run. After leading Florida Tech in its historic season, Sara Grenier and Allie Modica were named All-Americans. Grenier earned Second Team All-American honors, while Modica became the first player in program history to be named a First Team All-American.
Girls in Engineering, Mathematics & Science CAMP

Encouraging and inspiring the next generation of female STEM professionals

July 9–13, 2018

A HANDS-ON STEM SUMMER CAMP FOR:
Female students entering 7th–8th grade (Group 1) and 9th–12th grade (Group 2)

CAMP FEE:
• Commuters: $400
• Non-commuters: $1,200

Campers will be exposed to cutting-edge applied research in areas such as:
• Marine Science and Coastal Engineering
• Electrical and Computer Engineering
• Mechanical and Aerospace Engineering & Aviation
• Chemical Engineering and Systems Engineering
• Mathematics
• Applied Statistics and Mathematical Modeling

Students will engage with a broad range of STEM topics, including jet engines, programming, coastal sampling, graph theory, applied statistics and mathematical modeling, as well as lab experiments and field trips.

FOR MORE INFORMATION:
Munevver Mine Subasi, msubasi@fit.edu

camps.fit.edu/girls-stem
Do we need more leaders?

Maybe you have heard it. There is a shortage of leaders. The baby-boomer generation is retiring, and the younger generations are ill equipped to fill vacant leader positions. These reports imply that what companies need are a few superheroes to fill the top positions. However, we don’t need more leaders to fill top positions, what we DO need is more leadership throughout our organizations and within our communities.

Leadership is about behavior, regardless of a person’s title or where they fall in the company hierarchy. As organizations face new and unfamiliar challenges, success depends on increasing the frequency of leadership behavior from individuals and teams across the organization. So, instead of isolating a small group of superheroes, the challenge is to understand and unleash the largest source of leadership potential—the entire workforce of heroes.

Successful organizations do this by developing current employees rather than recruiting leaders from the outside. Companies can deploy a variety of approaches to increase the leadership skills of rising talent including proactive coaching and mentoring, seminars and skill development projects (aka “stretch” assignments). In fact, research shows that the most effective leadership development occurs from participating in challenging work assignments. Companies that are willing to absorb some risk by offering challenging on-the-job learning opportunities reap the benefits of leadership growth, employee engagement and retention of top performers.

Our research reveals some compelling numbers. We found that only 25 percent of respondents from over 200 organizations worldwide believe the overall quality of leadership in their organization is high. Leadership skills commonly identified as business critical by organizational leaders include retaining and developing talent, managing complexity, leading change, and having an entrepreneurial mind-set. In our research, we find that fewer than 50 percent of organizational members felt “very prepared” to address any of these challenges. Employees are not confident in their leadership skills. Even more compelling, women report significantly lower confidence in most leadership skills than do men.

Formal training and development programs start employees on the path to develop these skills, but on-the-job learning opportunities ultimately solidify and refine the skills. When combined with feedback, coaching and mentoring, on-the-job learning will activate and accelerate leadership potential in individuals and within teams. This will fill a company’s pipeline with “ready now” leaders.

The lessons are clear, successful organizations don’t hire a few superheroes to fill leadership positions, they unleash leadership heroes across their entire workforce through challenging job assignments coupled with feedback and coaching. We don’t need more leaders, we need more leadership!

Lisa A. Steelman is a professor of industrial/organizational psychology and senior associate dean in the College of Psychology & Liberal Arts. The college offers a master’s degree in organizational leadership. Her research interests include feedback processes, employee engagement and women’s leadership.
A Rocket Renaissance on the Space Coast

A renewed spirit of interstellar discovery is taking shape on the Space Coast—a growing energy toward commercial space innovation and entrepreneurialism that is being fueled in part by the work of Scott Henderson ’88 M.S., orbital launch director for Blue Origin. The private company is developing reusable rocket engines and launch vehicles that will dramatically lower the cost of access to space to support a vision where millions of people are living and working in space.

Beginning in 2014, Henderson led Blue Origin’s site search for its orbital launch complex, which would serve as the home to its orbital launch pad and a 21st-century manufacturing facility. After a two-year, multi-state evaluation process, the company landed on the Space Coast.

“There’s a certain cache about the Space Coast and its historical gravitas,” explains Henderson. “It’s where space happens in the U.S.”

Indeed, there’s something poetic about the next chapter of space innovation launching from the very foundations of its early explorers. Blue Origin’s New Glenn rocket, named for pioneering astronaut John Glenn, the first American to orbit the Earth, will launch from a pad erected at the site of three former Atlas launch pads at Cape Canaveral Air Force Station.

Blue Origin’s 750,000-square-foot rocket factory is located just outside the gates of the Kennedy Space Center (KSC) in Exploration Park. Production of New Glenn will take place in this state-of-the-art manufacturing facility, with a first launch targeted for 2020.

While other rockets that launch from Cape Canaveral are built elsewhere, Blue Origin’s orbital launch operations—everything from manufacturing to launch and recovery—are all on the Space Coast, producing, partnering and launching a new era of space commercialization in Brevard County.

“Similar to the way Silicon Valley is the core for all things internet, Brevard County could be the nexus for the future of commercial space,” says Henderson. “Where everybody goes because it’s where the talent is, it’s where the creativity is, it’s where modern manufacturing is taking hold, it’s where the regulatory environment is good, and it’s a place where people want to live.”

Henderson himself has enjoyed a prestigious, multi-sector career on the Space Coast. After earning his undergraduate degree in astronautical engineering from the U.S. Air Force Academy, he spent 26 years in the military. His stint culminated as the commander of the 45th Launch Group at Cape Canaveral Air Force Station where he led the team responsible for assembly, integration, test and launch of all Air Force and national security satellites. He transitioned that expertise into civilian space systems development at SpaceX and Raytheon before joining Blue Origin.

It was at KSC that Henderson learned about Florida Institute of Technology (FIT) and began his graduate studies in engineering management in the late ’80s.

“FIT is known for its high-quality technical education, and I chose the university because of that technical depth,” says Henderson. “Plus, there was a tight linkage between FIT and the Space Center, so it was kind of a natural choice.”

That technical prowess and industry connectivity has forged another natural collaboration between Henderson and Florida Tech. Through growing partnerships with FIT’s Center for Advanced Manufacturing and Innovative Design (CAMID) and other university programs, Blue Origin hopes to complement its workforce and technology development initiatives.

CAMID helps U.S. companies advance their capabilities in globally competitive manufacturing methods while ensuring students are exposed to next-generation technology and ideas. CAMID’s applied research initiatives include implementation of the Digital Twin, design for quality/cost in additive manufacturing, development of secure IOT communication and the incorporation of augmented/virtual reality into design and production processes.

“We’ve reached out to the university as a partner to ensure that we communicate to the best and brightest,” says Henderson. “I fully expect we’re going to have FIT interns at Blue Origin very soon.”

Henderson’s Panther pride also runs in his family. His son, Will, earned his undergraduate degree in chemistry in 2016 and is currently pursuing a Ph.D. in chemistry at the University of Florida. In his spare time, Henderson can be found at the Merritt Island Airport assisting his wife Sarah, a former Air Force pilot, who is building an experimental aircraft.

“It really feels like a new sense of energy,” he says. “Blue Origin is proud to help rekindle the excitement that was here back in the space heyday. If I can pass on that sense of wonder and pride of working in the space community to FIT students and graduates, then I am doing my part as an alumnus.”

—Christena Callahan
Aero Altruism
Alumni Collaborate for Puerto Rican Relief Efforts

In late September, Hurricane Maria hammered Puerto Rico at nearly Category 5 strength. With maximum sustained winds of 155 mph, it was the most powerful storm to strike the island since 1932. For more than 30 hours, the gales lashed the island—snapping trees, toppling buildings and destroying already battered and delicate infrastructure. It plowed ashore near the southeastern town of Yabucoa and traversed to the northwest, sparing nothing in its path.

In the face of such large-scale destruction, traditional logistics—interior roadways, the island’s two international airports and communication channels in general—were in chaos. MIGUEL ESTREHERA ’98, a native of Puerto Rico with many family members on the island, learned from JEFF CIARCIA ’11 that air traffic controllers in San Juan, among them former classmate TONY BAEZ, were living at the ATC facility because their homes were destroyed. Their generator had exploded, crippling an already precarious operation to safely navigate relief efforts into the area. And food and water were dwindling.

Determined to help bridge the gap and get resources and medical supplies to those in need, Estremera, a Newark-based United Airlines pilot, sparked a humanitarian effort that inspired not just the Florida Tech community but the larger Melbourne area as a whole.

The effort began by mobilizing his College of Aeronautics (COA) family.
FINDING AN AIRCRAFT

One of Estremera’s first calls was to friend and fellow alumna JO DAMATO ’97, who put him in touch with the PALS Sky Hope Disaster Relief Program. Damato was a founding member of Sky Hope, which formed in 2010 to help connect business aviation with humanitarian relief efforts. The organization had recently merged with PALS, or Patient AirLift Services, to form a more comprehensive network dedicated to providing support during emergencies and urgent situations.

“PALS Sky Hope had some assets they were trying to get to Puerto Rico, but they were in need of supplies to put on the airplane,” said Damato. “Miguel had a lot of supplies that needed transport, plus first-hand knowledge of the needs through his family and other personal contacts.”

Through her position with the National Business Aviation Association, Damato has many contacts in the industry.

“A lot of what I try to do is be a matchmaker,” said Damato. “In business aviation frequently, we have airplanes operating empty on one of their legs. Any time we can take advantage of an airplane that might have unused capacity and the owner/operator is willing, especially for charitable purposes, it’s really great to help people—who couldn’t find each other otherwise—be able to start collaborating and do amazing things, like what Miguel did.”

COORDINATING THE CARGO

With a Citation jet and pilot secured, through the partnership of PALS Sky Hope, Estremera got on the phone with more COA friends. MIKE ANTALFFY ’01, who lives in Houston, agreed to donate $30,000 toward the purchase of generators and supplies for the mission, but the team needed ground support.

Enter FIN BONSET ’96, ’99 M.S.A., College of Aeronautics Alumni Association (COAAA) president.

At daybreak on Sept. 27, while at the beach for an early morning surf, Bonset answered the call.

“Miguel said he had a flight coming in to Melbourne at 12:30 p.m., but we needed to get supplies to load up the plane,” said Bonset. “Can you rally the COAAA troops and see who can help?”

So Bonset alerted the COAAA network, through a combination of social media and a good old-fashioned phone tree, who responded in force.

“We all went and plundered Walmart at 9 a.m.,” said Bonset. “We had 10 carts full of supplies, from diapers to water to generators.”

The excitement was tangible; the benevolence contagious. Staff at Walmart donated a gift card toward the purchases, while other shoppers spontaneously pitched in too.

After a second stop at Causeway Mowers for more generators, the caravan arrived at Orlando Melbourne International Airport (MLB) with nearly 4,000 pounds of supplies. Loaded down and fueled up—with jet fuel donated by the Florida Tech College of Aeronautics—Estremera and pilot/aircraft owner Paul Weissman set course for San Juan.

With additional COAAA support—thanks to connections made by MILTON ALVIRA ’16 and MICHAEL SANTANA ’16, ’17 M.S.A.—they received the necessary ground clearance, a challenge for a civil flight in a disaster area, and arrived in San Juan by 3:30 p.m.

“This flight was crucial in the beginning of the overall Puerto Rico relief effort,” said Bonset. “By getting needed supplies to air traffic controllers in San Juan, they were able to maintain open airwaves for safely handling aircraft in and out of San Juan’s airspace.”

The support could not have come a moment too soon.

Estremera was shocked at the situation he encountered when he arrived.

“Buildings knocked down, hangars knocked down, the FBO itself looked like what I would describe as the fall of Saigon,” he said. “There were probably 250 people in a building designed to hold maybe 30 to 40. People just trying to get out. Families, children, the elderly—the line wrapped around the building.”

EXPANDING THE MISSION

As word spread about the success of the first mission out of Melbourne, Estremera

Continued on page 22
received a call a few days later from representatives for actor/comedian Tyler Perry, who wanted to donate his private jet toward the cause.

In the meantime, CARLOS CEREZO ’96, a JetBlue pilot who had weathered the storm at his home in Aguadilla in western Puerto Rico, had safely evacuated to Palm Bay the following week and had donated generously to the first mission, was eager to funnel additional relief to Aguadilla.

“I knew the local hospital was in dire need of supplies,” said Cerezo. “They were pretty much in shut-down mode.”

A friend, the president of the hospital’s board of directors, was able to put Cerezo in touch with the facility’s medical director who provided a list of needs.

The effort required a lot of phone calls and a little luck.

“Honestly, it was an ordeal to try to get ahold of them,” explained Cerezo. “Cell phones weren’t working. There was only one functioning landline at the hospital, in the ER. It was really a challenge. If they were close to the wifi antenna, I could reach them then.”

With his local connections, Cerezo assumed the role of Aguadilla ground coordinator, while Estremera managed the flight logistics and Bonset arranged another supply run in Melbourne.

Tyler Perry’s jet, an Embraer 190, 90-passenger converted private jet—a much larger aircraft than the Citation used on the first mission—was scheduled to arrive at MLB on Sept. 29. Bonset alerted GREG DONOVAN ’91, MLB executive director, who pledged the full support of his staff and facilities.

“Activities like this only happen in the College of Aeronautics,” Oyman says. “We are the only college on campus to have our own alumni association. Our alumni are very active.”

Assistant Dean VICTORIA DUNBAR ’15 Ph.D. concurs. “It sounds cheesy, but we are like a family,” she says. “It’s a culture, and our students see it. They see the faculty working together. They see the connection. When they graduate, they want to participate.”

And participate they do. Each member of the mission agrees.

“The really neat thing about the College of Aeronautics is it celebrates the multigenerational nature of our alumni legacy,” says Damato. “There’s nobody I’ve encountered—from back in the late ’70s graduates to now—who doesn’t feel like they’re a part of that thread.”

“Aviation professionals, who are also FIT alumni, are in key positions at major airlines, airports and other responsible roles necessary for completing
missions such as this,” says Donavan. “We all have a common thread—a quality education that taught us at the beginning of our careers to lead when called upon—and now we are putting it into action.”

The outcome has been as heartwarming for the volunteers as it was for the beneficiaries.

“I’m very proud to be a part of the alumni association, and I’m very thankful for these relief flights that helped my island,” says Cerezo, who returned to his home in Aguadilla two months after evacuating. He says things are getting better, slowly but surely. At the time of this writing, the local hospital was still operating at half-capacity due to the extensive storm damage, and Cerezo’s home was still without power.

“It was an honor and a privilege to help,” says Bonset. “The experience was incredible, and I just can’t thank people enough.”

**EVER-READY TO AID**

Since these initial missions, Estremera has coordinated several others, primarily out of West Palm Beach or the New England area. He has volunteered as PALS Sky Hope’s mission coordinator on a total of seven flights to aid Puerto Rico. As the pace of recovery has improved, ongoing missions have focused primarily on medical evacuation for critically ill Puerto Ricans.

While Estremera has no longer needed direct involvement from his COA family, he knows they are just a phone call away.

“If I called them up and said, ‘hey, a day from now, I’m running a mission out of Melbourne’ or ‘I need you to do x, y and z,’ they would do it without thinking twice,” he says. “I think that’s the important piece to the Florida Tech saga. The network is ongoing. Whatever it may be—from a hurricane relief effort to something much smaller—that aero network comes together to make it happen.”

Christena Callahan

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**Sept. 29**

**Morning**

Word spread through PALS Sky Hope of the success of the first Melbourne mission, prompting a call from Tyler Perry’s representatives offering his private jet.

**Evening**

Estremera alerts Bonset who alerts the COAAA network and coordinates a supply run to Sam’s Club.

**Sept. 30**

**2 p.m.**

Tyler Perry’s plane, an Embraer 190, 90-passenger converted private jet, arrives at MLB.

More than 100 volunteers—including President McCoy, COA faculty and staff, student groups and alumni—load more than 7,000 pounds of cargo.

The event is covered by Florida Today and CNN’s Anderson Cooper program.

**5 p.m.**

The second mission arrives safely in Aguadilla, a hard-hit community of the western side of Puerto Rico in dire need of medical supplies for the local hospital. The mission then continues to San Juan.
Seaworthy:
A Tale of Two Shipbuilders

Two ocean engineering majors, Mike Shawcross ’80 and Rolf Bartschi ’81, had friends in common when they were students at Florida Tech, but Shawcross, a rower, and Bartschi, a baseball player, never really crossed paths on campus. It wasn’t until they both had graduated and were in a Sears Roebuck store in Newport News, Virginia, that they recognized each other as fellow Panthers. They became roommates at the beginning of what would become long and impressive careers for both men building nuclear-powered submarines and aircraft carriers for the U.S. Navy at Newport News Shipbuilding.

Mike Shawcross

When it came time to choose a college, Mike Shawcross was certain he wanted to be a marine biologist. Growing up in Coventry, Connecticut, he was close to the water, and like many in his generation, he was inspired by the adventures of Jacques Cousteau. A friend showed him a brochure from Florida Tech, which offered a program in marine biology, and he was pretty much sold. But while touring the school, a student guide asked if Shawcross wanted to sit in on an ocean engineering class with Professor JACK SCHWALBE. A vision of being an underwater explorer was soon replaced by an interest in working in a shipyard.

Soon after graduation, Shawcross landed at Newport News Shipbuilding. His first job was in nuclear testing where he worked on the reactor and propulsion plant that brought the Navy’s Los Angeles class fast-attack submarines to life. While there, he became interested in the design of the components and working with vendors on various pieces such as turbines, engines and pumps.

“I really got hooked on that, and eventually I was sent to Washington for a special project that was the precursor to the Seawolf submarine,” he said.

He steadily moved into leadership roles in nearly every facet of the company from engineering and design to program management and business development.

Since 2005 he has been vice president in the Ford-class program. The Ford is the first ship in a new class of nuclear powered aircraft carries for the U.S. Navy. In this capacity, Shawcross has led the design, planning and construction efforts of these ships. His current role includes planning and construction of the CVN 80 and future ships.

“The CVN 80 is named the Enterprise, which is neat because it’s the namesake of the CVN 65, which was the first nuclear aircraft carrier that we built,” Shawcross said. “We just decommissioned it after over 50 years of service. Some of the steel from the CVN 65 will be melted down and reused for the new Enterprise 80, which is pretty cool.”

Shawcross credits rowing coach BILL JURGENS for developing the leadership skills he took with him to Newport News. He also thanks Professor Schwalbe, who “wanted nothing less than perfection. Seemed like a pain in the neck then, but he was instilling an engineering discipline I absolutely appreciate now. Florida Tech gave me a good foundation for the rest of my life.”

“The CVN 80 is named the Enterprise, which is neat because it’s the namesake of the CVN 65, which was the first nuclear aircraft carrier that we built.”

—Mike Shawcross
As a freshman from Lagrangeville, New York, Rolf Bartschi's first idea for a major at Florida Tech was oceanography. But just like Shawcross, his true calling was ocean engineering. By late summer in 1981, Bartschi was among the bustle of 30,000 other shipbuilders at Newport News Shipbuilding making nuclear-powered vessels.

“The shipyard offered field engineering jobs in the nuclear test department to new graduates like me, which provided great hands-on experience,” he said. “I really enjoyed it.”

Bartschi started as a mechanical test engineer in the Los Angeles class fast attack submarine division and held positions of increasing responsibility over the next 13 years. The nuclear submarine division was fast paced and submarines were delivered to the Navy every six months.

“A highlight at this point in my career was being on the sea trial test team,” Bartschi said. “Our team went on each sea trial to fully test these new submarines under fully operational conditions.”

He then transferred over to the new carrier construction division where he managed the nuclear construction of the entire Harry S. Truman aircraft carrier series. In a few years, he was promoted to vice president of the nuclear engineering division, where he led the engineering division through submarine construction, aircraft carrier construction and refueling and overhaul of in-service aircraft carriers.

He returned to the construction management division in 2010 to lead construction of the first class aircraft carrier, the Gerald R. Ford until he retired in 2017.

“Given the responsibility to construct, test and deliver the Gerald R. Ford was a great honor and a humbling experience,” Bartschi said. “Learning about President Ford, his leadership and legacy, building this ship named after him made our whole construction team very proud. Having the opportunity to meet and work with the ship’s sponsor, Susan Ford Bales, who supported so many of the ship’s construction events and the shipbuilders who built and tested the ship was incredible.”

Looking back at his Florida Tech education, which was the first step in becoming an ocean engineer, Bartschi said he appreciated the skills and support the university offered.

“All the professors I came across really provided a good, balanced education for us and were really insightful about how to approach a career.”

As for advice for students interested in shipbuilding, he said. “You really need to know the fundamentals of engineering. You can go into management or business aspects of shipbuilding, but you really need to know the technical side of the business first, and that’s the kind of foundation I got from FIT.”
So when it was time to start researching colleges, I went to the library and looked up technical majors that could help me achieve my goal of building real rockets—the ones that could reach the moon. I ended up picking FIT for its proximity to Cape Canaveral and started out my freshman year as a space technology major. I soon joined a fraternity, Pi Kappa Alpha, and from our fraternity house on the Indian River, you could see those very same rockets I wanted to build light up the night sky.

Unfortunately, the space program started a major downturn in the early 1970s with launches being canceled and the space shuttle program still years away. Space technology no longer seemed like a viable option for me, so I ended up changing my major to physics. I graduated on time, moved back to my hometown in New Jersey and took a job in an unrelated field—medical sales. I did not enjoy being a salesman, but there was one man I worked with who could sell anything to anyone. I asked him how he did it and he simply said, “Everybody is a salesman; you just haven’t found your product yet.”

I eventually started looking for a new field where I could apply the skills I learned from my degree at FIT. Nuclear power was a new and exciting field and it was being called the “fuel of the future.” I knew I wanted to get involved and applied to 54 different utilities. I remembered a Pi Kappa Alpha brother of mine, ROGER RYALL ’72, was working at a nuclear plant south of Miami and I reached out to him for advice. He told me it was a rewarding career and a great place to work. Four months later, I started working at Turkey Point Nuclear Plant in the Reactor Engineering Department as an engineer trainee.

On my first day of work, I was shown the control room and was immediately impressed by it. It was like being on the bridge in the Star Ship Enterprise. The first job I had to complete was to calculate the reactor power and calibrate the nuclear instruments that the operators use to control power in the plant. I used what I learned in thermodynamics classes to complete these tasks. My FIT education was brought to life.

I moved into management after roughly 10 years in engineering. Using the experiences and skills I learned at FIT, I was able to advance to the highest levels of management. In my 40-plus years in nuclear power, I have held almost every management position in the plant, including engineering director, plant manager and vice president. During my career, I worked at five different utilities and six nuclear plants across the country. One of the more interesting assignments I completed was to represent my plant and company at an international plant managers conference in Prague, Czech Republic. I had the opportunity to meet many plant managers from around the world and share ideas. Thinking back to my first post-graduation job in sales,
nuclear power became my product and I could sell it to anyone. In 2013, I retired as the vice president of the Perry Nuclear Power Plant just east of Cleveland, Ohio. Nuclear power has been a very rewarding career that I would recommend to anyone.

FIT has been an integral part of my life since I set foot on campus in the fall of 1969. In 1976, I met my wife Lynn in Melbourne, and we were married two years later in the Botanical Garden at FIT. Together, we have three adult children who have been visiting Melbourne since they were born. My son, John, has followed in my footsteps and works as a supervisor in nuclear power in Pittsburgh. My daughter, Kristine, is a physician living and practicing in Philadelphia. My youngest daughter, Carol, is a personal trainer based in New York City. My wife, who I shared 39 beautiful years with, passed away from cancer earlier this year. We spent our winters on the beach in Indialantic and our summers in Ohio boating on Lake Erie. I remain active as an FIT alumnus throughout the year and have maintained lifelong friendships with my Pi Kappa Alpha fraternity brothers.

FIT has been an integral part of my life since I set foot on campus in the fall of 1969. In 1976, I met my wife Lynn in Melbourne, and we were married two years later in the Botanical Garden at FIT. My wife, who I shared 39 beautiful years with, passed away from cancer earlier this year. We spent our winters on the beach in Indialantic and our summers in Ohio boating on Lake Erie.

—Vito Kaminskas
2017 Jerome P. Keuper Award Winner
Mr. Jim Thomas ’72

2017 Outstanding Alumnus –
College of Psychology & Liberal Arts
Mr. Hector Severeyn Garcia ’13

2017 Outstanding Alumnus –
College of Science
Dr. (Herbert) Hugh Thompson ’72

2017 Outstanding International Alumnus
Mr. Alvaro Fuster ’92
Spanish Power – Owner

AWARD WINNERS
2017 Outstanding Alumnus – College of Aeronautics
Mr. Huntley Lawrence ’85

2017 Outstanding Alumnus – College of Business
Mrs. Christine Deveney ’87

2017 Outstanding Alumnus – College of Engineering
Dr. Steven Atkin ’94, ’01

2017 Outstanding International Alumnus
Mr. Alvaro Fuster ’92

Spanish Power – Owner
5K RUN IN DOWNTOWN MELBOURNE

600+ runners
8,000 music fans

Estimated attendance

HOMECOMING FEST in Downtown Melbourne featuring THE FRATELLIS
DEAR ALUMNI, STUDENTS, PARENTS AND FRIENDS,

It’s a great time to be a Florida Tech Panther! This last year has set the bar yet even higher for events, accomplishments and activities. We are an awesome community dedicated to growth, exciting innovation, support and of course—fun!

My enthusiasm and Panther Pride continues to grow! I will say it again, Panther Pride is a real movement and participation is its own reward. 2017 Homecoming weekend was jam-packed with students, families and alumni in greater numbers than ever before. Our hearts swelled with gratitude on our all-time most successful Day of Giving in November. We celebrated at yet another fun-filled, standing room only, Grad Bash gathering. The Florida Tech Alumni Association (FTAA) continues to work on strategic activities that closely align alumni goals with those of the university. We strive to continually add value to the student experience and also contribute to the important culture of philanthropy.

Watching and participating in such impressive events makes it is clear that alumni and students alike are dedicated to elevating Florida Tech and our Panther community to new heights. We are collectively working to be raise that bar and the results show that individually we are displaying our personal best!

If you have not visited campus lately, I invite you to visit. It will be immediately apparent to you that we have cultivated a very high quality university experience. There is something in the air here, and it is exciting!

Plan your trip now! One of the best times to visit is during Homecoming. This year’s celebration will kick off with the Downtown Homecoming 5K on Thursday, October 11, followed by the Homecoming Fest on Friday—a free concert in beautiful Downtown Melbourne. Of course our big Homecoming 2018 football game is a huge crowd-pleaser and takes place on Saturday before our amazing Homecoming Gala. The gala celebrates our outstanding alumni from each college and the prestigious Jerome P. Keuper Distinguished Alumni Award honoree.

There are many ways to be active—please take a moment to like and follow our alumni Facebook page and share posts, join our LinkedIn alumni group, or donate. Our alumni newsletter is another source for updates and news. There are many ways to be active—please take a moment to like and follow our Alumni Facebook page and share posts, join our LinkedIn alumni group, or donate. Our alumni newsletter is another source for updates and news.

Committed to increasing the value of our degrees! #PantherPride

Go Panthers!
Andy Kirbach ’90
THOMAS WARD ’87 MBA has been selected to serve as the honorary chair of logistics studies at the U.S. Army Command and General Staff College. He has built a strong career as the associate professor of force projection and sustainment operations.

Leading the field in aquaculture, REBECCA LOCHMANN, Ph.D., ’88 M.S., has broken ground on the efficacy of alternative dietary additives for multiple species of farmed fish. Being recently named as one of five Arkansas Research Alliance Fellows, she is committed to finding better and more competitive fish rations for farmers across the globe.

After 44 years of service in the U.S. Coast Guard and as an executive at the Coast Guard Headquarters, CURTIS ODOM ’89 MBA is retiring. He is the recipient of two Legions of Merit and two Meritorious Service Medals.

1990s

JOHN AITKEN ’90 was recently appointed the new director of aviation at the San Jose International Airport, America’s fastest growing airport. He worked his way from refueling aircraft to an executive position over the course of 24 years.

CHRIS PAYNE ’91, a member of the 1988 National Championship soccer team and the Florida Tech Sports Hall of Fame, stopped by the Alumni House with his wife Sara and children Henry, 11, and Ruby, 10. Payne, who resides in Essex, England, is the chief financial officer for Equifinance Ltd., a specialist mortgage provider in London.

GABY LONGSWORTH ’92 is back in the Melbourne, FL, area after obtaining her Ph.D. in human genetics and molecular biology (’98) from Johns Hopkins University and her law degree from Georgetown (’03). She is a partner at the intellectual property specialty firm Sterne Kessler Goldstein & Fox PLLC, based in Washington, D.C., and is focused on patent law in the biopharma space and other industries.

Lifecyle Biotechnologies has named BRAD MORAVEC ’95 as business development manager where he will lead company-wide efforts to achieve goals set for 2018 and beyond. Lifecycle specializes in biopharmaceuticals, regenerative medicine and industrial energies.

After an illustrious and well-traveled career with the military, Major General CEDRIC T. WINS ’95 M.S. currently serves as the commanding general of the U.S. Army Research, Development and Engineering Command.

JOHAN CHRISTENSON ’95 M.S., CEO and founder of City Network, was recently elected as a member of the board at the OpenStack Foundation.

HEIDI BRAND ’99 works with Melbourne-based Applied Genetics Laboratories and manages product development and commercial production of Hybloc™ DNA as well as maintaining quality assurance and conducting client-mandated laboratory audits.

The National WWII Museum in New Orleans has named PETER CREAN ’99 M.S. as vice president for education and access. Crean leads the development effort for the museum’s Hall of Democracy, which will house new departments for education, research and outreach.

Continued on page 34

Submit your news:
alumni@fit.edu

SPECIAL EVENTS ON CAMPUS

Tastes Of The New Year 2018

Tastes Of The Season 2017
2000s

Col. RODNEY HONEYCUTT ’02 M.S. was recently named the commander of the 405th Army Field Support Brigade in Kaiserslautern, Germany. He is a graduate of the Command and General Staff College and the Quartermaster Advance Course.

JAMES HALLEY ’03 was recently recognized in Airport Business Magazine’s Top 40 Under 40.

Previously serving as the leader of Ernst & Young’s cyber threat management practice in the financial services sector, ANIL MARKOSE ’04 M.S. was recently named senior vice president leading cyber strategy and advanced analytics for the U.S. commercial business of Booz Allen Hamilton.

ERYCK DZOTSI ’05, a search marketing professional and author of the book How to Manage Remote Workers, met Dr. McCoy at a recent Founders Forum event.

JOEL WARHURST ’05 M.S. is adjusting to his new position as the 35th Commander of the Anniston Army Depot. He previously served as the chief of strategic readiness in the Army G-4.

OLAWALE ADEBIYI ’05 M.S. is the new CEO of Wecyclers, a company that aims to empower Africa to be the recycling leader of the world. He previously served as COO.

NICK EVANCHO ’06 was recently named vice president – aerospace, client engagement and industry for AIG. He joined the company in 2006 and has held positions of increasing responsibility within the underwriting team, most recently serving as aerospace zonal manager for the west zone. He will relocate to Atlanta, GA, in this new role.

MORGAN TWEDDIE WOODARD ’07 and JAMES WOODARD ’09 share that a new Panther has joined the FIT family.

ERYSTAN GARCIA ’07 ran the NYC marathon on Nov. 5, 2017, with Frank Rivera.

BYUNG JOON OH ’08 Ph.D. graduated in computer engineering, is currently living in Bellevue, WA, and is working for Samsung Electronics America Inc.

LOWELL HUNTINGTON ’10 joined the Air Force in 2012 and is now a Captain and B2 Stealth Bomber pilot who has just completed his mission qualification with the 509th Bomb Wing, Whiteman AFB, Missouri.

PIERRE BASTINGS ’14 recently joined Atlas Air as first officer on the Boeing 747-400 and 747-8 at only 23 years old.

ZEESHAN-UL-HASSAN USMANI ’09 Ph.D. recently won the October Kaggle Dataset Publishing Award for his collection of data of the last half-century of mass shootings in the United States. This work can be used to understand the epidemic of mass shootings occurring in the U.S.

WAINDIM MBU YOUPUGHU ’12 is the first Cameroonian with a Ph.D. in aerospace engineering.

Former FIT soccer player RYAN HAGERTY ’09 earned a podium finish at the 2017 World Master IBJJF-JITSU Championship.

GAEL LE BRIS ’11 M.S. was recently published in the scientific and engineering journal of the Transportation Research Board, the Transportation Research Record, concerning an innovative airfield safety signage developed with the FAA. He was also featured in the quarterly spotlight of TRB’s YMC – Aviation.

WAINDIM MBU YOUPUGHU ’12 is the first Cameroonian with a Ph.D. in aerospace engineering.

2010s

MURPHY WONSICK ’14 is working on the cutting edge of robotics as she devises ways astronauts and robots can work together in space. She is working on Northeastern’s NASA robot, Valkyrie, one of the world’s most advanced humanoid robots.

TIZIANO BERNARD ’15, ’16 M.S., received a medal of the Municipality of Trieste, Italy, his hometown, for his work and representing his city abroad. He is currently pursuing his Ph.D. at Florida Tech.
Alumni and guests joined President McCay for a special cookout and gathering hosted by trustee and alumnus, Randy Muns at his ranch.
Florida Tech extends its *High Tech with a Human Touch* approach with convenient, 100% online graduate and undergraduate programs with the same high-quality, real-world education you’d receive on campus, paired with regular peer collaboration and faculty interaction.

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Wild Florida Rescue

Matthew Buice ’15 harnessed his passion for wildlife by forming a service organization committed to wildlife rescue response.

I knew from a young age that I wanted to work with wildlife and growing up in Pennsylvania, I have always been drawn to the outdoors. Most days I could be found in the woods behind my home catching frogs, snakes, salamanders and anything else I could get my hands on. As my passion and admiration grew, I began gaining hands-on experience anywhere I could. Through college, I spent time volunteering at Brevard Zoo and working for a local exotic pet store.

After college, I volunteered at a local wildlife hospital where I met my business partner Heather Pepe-Dillon. I co-founded Wild Florida Rescue Corp. (WFR) one year ago when we realized the need for a wildlife first response service. WFR is a 501(c)(3) nonprofit wildlife ambulance service dedicated to the rapid capture, stabilization and transport of sick, injured and abandoned wildlife.

Our organization operates 24/7 to help those with wildlife emergencies throughout Brevard County. We work closely with wildlife rehabilitators, Fish and Wildlife, and Sheriff’s Animal Services to ensure that wildlife calls are handled as quickly as possible. Since the start, we have received over 2,500 calls and driven over 30,000 miles in our mission to save wildlife. From a raccoon with a jar on his head to a snake trapped in a garage door, WFR has helped not only rescue animals, but educated the public on ways to reduce unfortunate run-ins between people and wildlife and ways to live safely with the animals we share our planet with.

Days can be long and nights can be longer, but the reward of a safe and successful capture makes it all worth it. As we establish a presence in Brevard County, we hope to continue growth, extending to surrounding counties as we expand to someday serve all of Florida. Wild Florida Rescue operates on the professional care of committed well-trained volunteers. As we continue to grow and our call volume continues to rise, we invite anyone with a love for wildlife to join our team and help save the animals that call Florida home.
The task force has developed the (Cross-cultural) certificate to include academic courses, study abroad experiences and on-campus activities.

The cross-cultural noncredit certificate is an exciting new credential undergraduate students at Florida Tech can achieve. Given the international environment of Florida Tech, this certificate takes advantage of this diverse environment and helps leverage it into a credential that is valued in today’s global workplace.

Growing out of the initial efforts of the Internationalizing the Campus Committee led by Mary Beth Kenkel from 2009 to 2015, the idea of a certificate program was presented to SACSCOC, our regional accrediting body, as part of our accreditation reaffirmation in 2015. Monica Baloga, senior vice president for academics and provost, says, “The cross-cultural certificate requires students to participate in a variety of cross-cultural, global activities from academic courses to events on campus. We hope this participation gives students opportunities to meet students from other cultures and increase students’ confidence in interacting with people from other backgrounds.”

She appointed a task force to oversee the implementation of the certificate. The task force has developed the certificate to include academic courses, study abroad experiences and on-campus activities. Full details can be found at http://411.fit.edu/goglobal.

One of the components of the certificate requirements is participation in the 3C (cross-cultural competence) workshop. This three-hour workshop is facilitated by staff and students from the Institute for Cross-Cultural Management. The institute led by Richard Griffith, a professor in the School of Psychology and a member of the task force, provides consulting and training to organizations facing the challenges of operating in a global environment. Griffith says, “The institute is happy to support the certificate by facilitating the workshops that introduce participants to cultural awareness through presentations and role play.” Mina Milosevic, also a member of the task force as well as a psychology doctoral student affiliated with the institute concurs. “Our participants report that the workshop opens their eyes to appreciating and understanding cultural differences.”

Students in the University Experience course, a course designed to provide incoming students with the resources and skills to succeed in college and beyond, receive an introduction to cross-cultural competency skills. Kimberly Adkins, an advisor in the First-Year Experience Office and a member of the task force, remarks, “Students are introduced to the importance of being able to work, play and live in a global environment. In class, we encourage their participation in attaining the certificate. Many students are excited about this opportunity to put this portfolio together.”

Students who complete all required components will receive a designation on their transcripts recognizing the attainment of this certificate. Deborah Matta, manager of international student programs and a task force member, comments, “This official recognition lends credence to the program and is useful for the student as they develop their résumés to apply for jobs or graduate school.”

As the convener of the task force, I’m excited to work with such dedicated members. We’re looking forward to offering this opportunity to our students.
Reserve your tickets now, before they're sold out!

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15th Annual
CHOPPER DROPPER

Friday, March 16, 2018
Suntree Country Club

For a donation of $100, you can have a BALL and a chance to win $50,000!

We’ll be flying high when we drop 2,000 numbered balls from a helicopter. The closest ball to the pin wins $50,000! 2nd closest to pin wins $10,000, and 15 lucky people win $1,000 each!

GRAND PRIZE $50,000

Each ticket allows ONE PERSON to enjoy food and beverages at the Sporting Affair Cocktail Reception!

Friday, March 16, 2018 • 5:30 p.m. (ball drop 6:30 p.m.) • Suntree Country Club (1 Country Club Dr., Melbourne, FL 32940) Winners will be announced immediately following the Chopper Dropper reception. Need not be present to win. A Florida Tech representative will contact winners if not present. Proceeds benefit Panther Athletic Scholarships. $5 of the ticket price will be donated to the General Scholarship Fund. Suggested donation: no purchase or donation necessary • Fair market value $20.
Homecoming Raft Race

During the late '70s and early '80s, an annual homecoming week event was the raft race down Crane Creek. Students built their own vessels—using anything from empty milk cartons and fiberboard to rope and barrels—and floated from campus to Melbourne Harbor. Do you remember this wet and wild tradition?