FLORIDA TECH MAGAZINE

FALL 2025

An Eater's Guide to Mars

PLUS:

WFIT AT 50

HOMECOMING, RECHARGED

In This Issue

Fall 2025 • Volume 24, Issue 2

PSFB Instructional Site Opens

Florida Tech celebrated the launch of its new Patrick Space Force Base instructional site with a ribbon-cutting ceremony June 11. Beginning this fall, the university will offer four graduate programs through this strategic partnership tailored to meet the needs of both Space Force Guardian and civilian personnel.

"This is a great day for community partnership. Florida Tech is pleased to bring these educational offerings to Patrick Space Force Base," said President John Nicklow at the event. "Helping those who serve our nation to realize their educational dreams is indeed a privilege. We look forward to many years of meaningful collaboration."

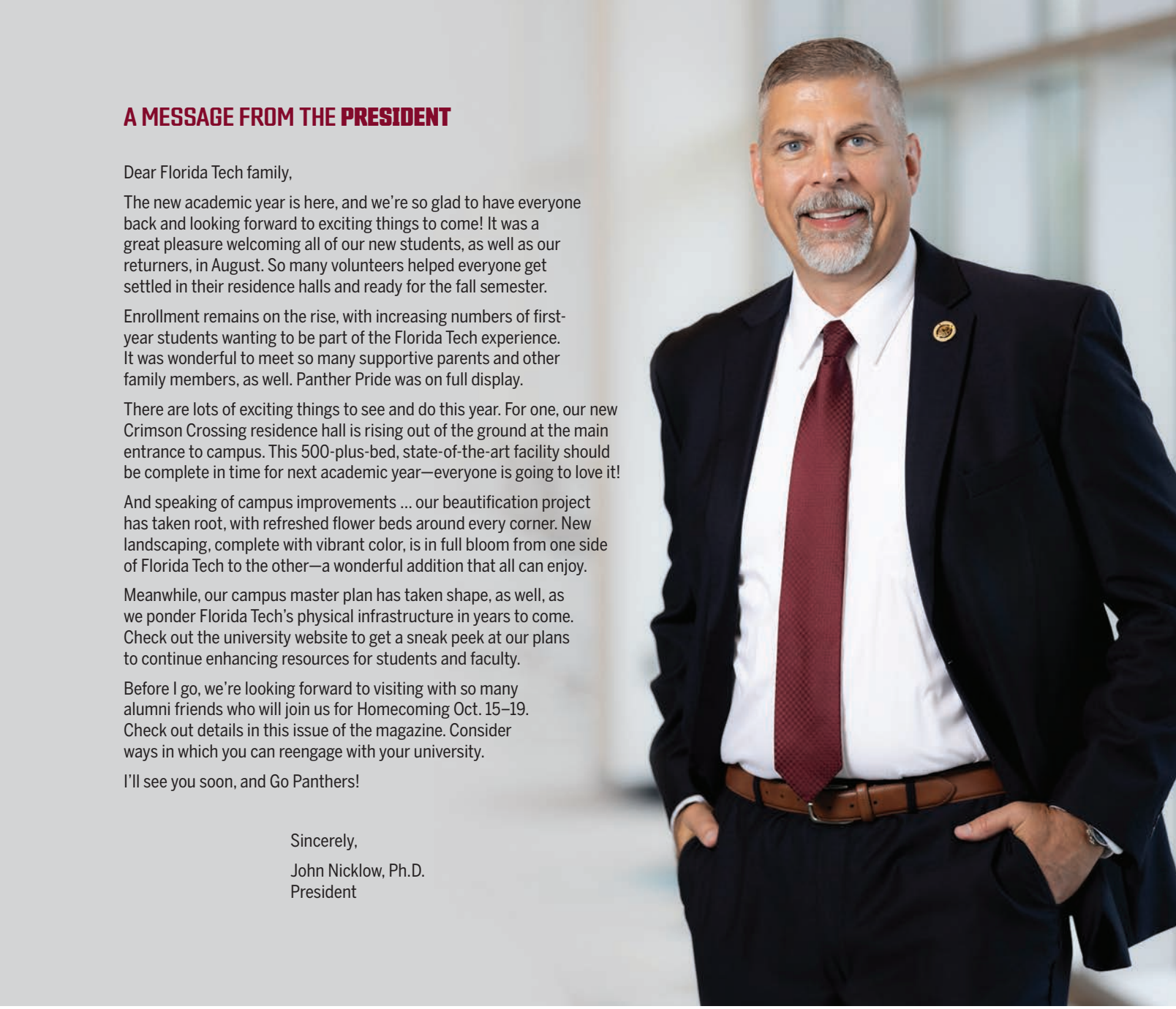
CAMPUS NEWS

ALUMNI NEWS

FEATURES

CORRECTION: In the spring 2025 issue of *Florida Tech Magazine*, the article "The Professor Who Changed My Life" incorrectly listed John Hennon as the professor who left a profound impact on **KEVIN HYLTON** '79. The influential professor was Jim Hannon, former marine sciences faculty at Florida Tech's Jensen Beach campus.

A MESSAGE FROM THE **PRESIDENT**



Dear Florida Tech family,

The new academic year is here, and we're so glad to have everyone back and looking forward to exciting things to come! It was a great pleasure welcoming all of our new students, as well as our returners, in August. So many volunteers helped everyone get settled in their residence halls and ready for the fall semester.

Enrollment remains on the rise, with increasing numbers of first-year students wanting to be part of the Florida Tech experience. It was wonderful to meet so many supportive parents and other family members, as well. Panther Pride was on full display.

There are lots of exciting things to see and do this year. For one, our new Crimson Crossing residence hall is rising out of the ground at the main entrance to campus. This 500-plus-bed, state-of-the-art facility should be complete in time for next academic year—everyone is going to love it!

And speaking of campus improvements … our beautification project has taken root, with refreshed flower beds around every corner. New landscaping, complete with vibrant color, is in full bloom from one side of Florida Tech to the other—a wonderful addition that all can enjoy.

Meanwhile, our campus master plan has taken shape, as well, as we ponder Florida Tech's physical infrastructure in years to come. Check out the university website to get a sneak peek at our plans to continue enhancing resources for students and faculty.

Before I go, we're looking forward to visiting with so many alumni friends who will join us for Homecoming Oct. 15–19. Check out details in this issue of the magazine. Consider ways in which you can reengage with your university.

I'll see you soon, and Go Panthers!

Sincerely,

John Nicklow, Ph.D.
President

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Women's Rowing Thrives as Club Sport

As dawn breaks over the Indian River Lagoon, the rhythmic splash of oars cuts through the still water—calm yet powerful, steady yet relentless and, for **SYDNEY FREIBERGER** '25, deeply familiar.

Until her graduation this spring, the aerospace engineering graduate was the unshakable core of the women's rowing team—a crew that refused to fade.

In 2022, Florida Tech reclassified women's rowing from varsity to club status, a move that reshaped the program overnight. While many chose to walk away, Freiberger stayed. She was the only returning varsity athlete to remain with the team after the transition.

"I stayed because I really liked my coaches and the location—there aren't many places where you can row year-round like here," Freiberger said. "I'm really glad I stayed because I love my teammates."

The following season, three freshmen—Ashton Clark, Brynn Romberger and McKenna Barr—joined her, forming the nucleus of a revitalized squad.

The quartet became the Varsity 4+—the main boat for the past three years—and together, they helped the program not just survive but thrive.

During the 2024–2025 season, the team racked up podium finishes and defeated programs nationwide. Highlights included medaling in four events at the Florida Intercollegiate Rowing Association Championship Regatta, earning gold and silver at the Southern Intercollegiate Rowing Association Championship Regatta, capturing the Margaret McNiff Trophy at the Dad Vail Regatta and winning gold at the American Collegiate Rowing Association Championship Regatta.

For Freiberger, finishing her collegiate career on top was the perfect send-off.

"Winning gold in my last race meant a lot to me because I wanted to maintain the momentum we'd been building all season," Freiberger said. "Since it was my last race, I just wanted us to perform as well as we could and finish strong."

Freiberger's rowing journey is far from over. After her standout college career, she was invited to spend the summer training with the Advanced Rowing Initiative of the Northeast (ARION) program in Saratoga Springs, New York, a training ground for Olympic hopefuls.

"ARION is one of the best training programs in the country for women, so I'm really excited about the opportunity," Freiberger said. "My ultimate goal is to compete in the Olympics someday."

Now seniors, Romberger, Clark and Barr are ready to lead the program forward.

"I'm excited for the upcoming year, when I'll be leading the team as president," said Romberger, a civil engineering senior. "My main goals are to grow our team roster, continue building a strong and inclusive team culture and maintain our competitive performance. I want to encourage more Florida Tech students, especially those new to rowing, to give it a try.

Our team has proven that success comes from effort and teamwork, not just experience. I also hope to strengthen our connection with alumni and supporters who have helped keep the program alive. With continued dedication, I believe we can expand our reach and leave a lasting legacy for future rowers at Florida Tech."

By the Numbers

9

SUNSHINE STATE CONFERENCE WOMEN'S ROWING CHAMPIONSHIPS

1

SECOND-PLACE FINISH IN THE NCAA DIVISION II NATIONAL CHAMPIONSHIP

15

MEMBERS ON THE 2024–2025 TEAM, MORE THAN DOUBLING ITS PREVIOUS-SEASON MEMBERSHIP

Student Design at Sea

Ocean engineering seniors Jake Elston, Jaidyn Lodens, Dylan Alvarez and Alexander Ketchen tested their student design project, a coral reef block deployment system, on June's Marine Field Projects cruise. They created a scalable, single-point hydraulic lift system to lift and position concrete artificial coral reef blocks for associate professor Robert Weaver's ongoing coastal engineering initiative, ReefStarter. On board, the group tested the system by lifting, positioning and interlocking 1/3-scale blocks with the boat's overhead crane.

"We run these tests to make sure that, on the smaller scale, we have a functional product and that everything works as intended in concept," Alvarez said.

Honoring Robert Taylor: A Legacy of Commitment and Collaboration

At the end of the spring semester, Florida Tech said farewell to one of its most visionary and valued professors: Robert Taylor.

Taylor retired after nearly three decades of service with Florida Tech and the College of Psychology and Liberal Arts, having impacted the academic culture of the university and numerous students and colleagues.

During his career, he served as professor, department chair and dean, earning awards for his teaching skills and changing the organization of the university.

"For 25 years, Dr. Taylor has been a dedicated pillar of our faculty, deeply committed to the success of both students and colleagues," COPLA Interim Dean Lisa Steelman said. "His support, leadership and friendship have left an indelible mark on our college, and he will be greatly missed."

Other faculty, including Heidi Hatfield Edwards, head of the School of Arts and Communication (SAC) and associate dean of the college, commended Taylor's leadership during challenging times, including the COVID-19 pandemic.

"His willingness to work across disciplines—both within the school and across campus— fostered a collaborative community of scholars," Hatfield Edwards said.

"Bob is much, much more than a colleague," said Florida Tech historian and longtime history professor Gordon Patterson. "He is a wellspring of talent, insightful wisdom and an unwavering source of collegial inspiration. He possesses a rare dedication and commitment to excellence that permeates everything he does, and in doing so, he invariably makes a difference in the lives of those around him."

Taylor is a teacher at heart and loves being with students in the classroom. Even while serving in the labor-intensive position of dean, he still taught at least one class each semester—a move several colleagues questioned. But he felt spending time in the classroom was essential.

His passion and dedication to teaching earned him the Teaching Excellence Award, a moment he fondly remembers as a highlight of his career.

"That made me really feel good because that's my peers here, at the university, saying, 'Hey, you're doing a pretty good job,'" he said.

Throughout his career, he took on leadership roles and helped reshape COPLA structure. One of his proudest accomplishments is the role he played in growing the humanities and communication department and advocating for its transition to the SAC.

Taylor is optimistic about Florida Tech's future, growing as a successful STEM university with integral and active liberal arts programs.

"There is an energy on this campus that you don't find in a lot of places," he said.

> "His willingness to work across disciplines—both within the school and across campus—fostered a collaborative community of scholars."
>
> —Heidi Hatfield Edwards, speaking about Robert Taylor's impact on campus

Even in retirement, Taylor plans to remain engaged with Florida Tech.

"There are people on campus who have retired from other disciplines that have been a model for me. These people are still involved, still engaged and still contribute. That's how I would like to be," Taylor said.

Since he joined the university in 1996, some things have changed; some things have stayed the same. But in short, he said:

"It's been a wild, wonderful ride."

Read more: link.fit.edu/taylor-retires

Chemical Engineering Professor Whitlow Retires After 36 Years

Jonathan Whitlow, an accomplished chemical engineer who brought industry expertise to his distinguished teaching career, retired in May after 36 years at Florida Tech.

After earning both his master's degree and Ph.D. in chemical engineering from Vanderbilt University, Whitlow joined the Florida Tech faculty in 1989 as an assistant professor of chemical engineering. This followed six years in industry as both a process engineer and a production engineer.

With research focused primarily on reactor performance and design, process modeling and simulation, and process control, Whitlow's work has included the development of modeling and simulation software in support of NASA's mission to Mars. Whitlow worked with NASA-Kennedy Space Center a total of six times over his career. His externally funded research projects while at Florida Tech exceeded $1.4 million.

> Most things that are worth doing in life are going to be hard. Make those goals big anyway. Allow yourself imagination for every outcome and courage to create that possibility.
>
> —Mike Moses '91 M.S.

Virgin Galactic human spaceflight program president **MIKE MOSES** '91 M.S. served as keynote speaker at Florida Tech's three spring commencement ceremonies in May. Moses shared three lessons from his distinguished career: Imagine every possible outcome; rockets don't get us to space, people do; your goals should not be big—they should be enormous.

Florida Tech Wins Big at the*gamehers Awards

Esports director Danielle Sirekis and assistant director Anna Patterson were recently honored by the*gamehers, a leading organization of women gamers, for their achievements and success at Florida Tech and in the gaming industry.

Sirekis was awarded the Esports Excellence Award, which acknowledges the people who shine in competitive gaming. An established leader in collegiate esports, she has created a supportive, competitive community that fosters growth and excellence. Her dynamic leadership and commitment to student development have elevated Panther esports teams to new heights.

"This recognition reflects my efforts and the collective commitment we've made to building something meaningful at Florida Tech," Sirekis said. "Over the past year and a half, we've focused on shaping the program to be centered on student development, academic achievement and community engagement."

Patterson won the Rising Star Award, which spotlights noteworthy newcomers who are, according to the*gamehers, "making waves in gaming." In Patterson's inaugural year, she led Florida Tech's first Overwatch team to an undefeated season, concluding with victory at the National Esports Collegiate Conference (NECC) Navigators Mideast Championship.

"To have my accomplishments highlighted by such an incredible organization is truly amazing," Patterson said.

FAMILIAR FACES:

Sarah Irizarry

A SERIES CATCHING UP WITH THE CAMPUS FIGURES WHO MADE YOUR TIME AT FLORIDA TECH MEMORABLE

> "I always say, the Clemente Center is the first place a student comes when they check in for orientation and then, the last place they leave on campus after graduation. How cool is that?"
>
> —Sarah Irizarry

For over 14 years, **SARAH IRIZARRY** '10, '12 MBA, has brought energy, dedication and Panther Pride to campus. She began her journey at Florida Tech as a student, earning both her bachelor's and master's degrees in business, and is now a leader shaping the student experience through athletics and events as assistant athletic director for facilities services. We caught up with her to learn more about her journey and what keeps her inspired.

How long have you worked at Florida Tech? What's the secret to that kind of longevity?

I have worked at Florida Tech for 14 years. The secret is to truly embrace the "why" of Florida Tech. I love coming to work every day, hoping to help be a small part of a student's success story.

When did you first join Florida Tech, and what have you done throughout the years?

I first joined Florida Tech as a student and received both my bachelor's and master's degrees in business before becoming a staff member full time. I have been a part of managing the Clemente Center from a facilities/operations perspective, and now I oversee all athletic facilities. My goal is to make it a great experience for every student, faculty, staff and external user.

What do you love about your job?

Two words: the students! They are not only why we are all here but give us such an opportunity to learn from them, and also, mentor them to help them be successful once they graduate. Helping students get their dream jobs by just being a small part in their journey is an awesome opportunity.

What is your favorite Florida Tech memory?

I really enjoy being a part of commencement every year. Nothing beats seeing the excitement of students and their families/support systems on that day. The energy in the Clemente Center is incredible. Seeing students graduate is awesome! I always say, the Clemente Center is the first place a student comes when they check in for orientation and then, the last place they leave on campus after graduation. How cool is that?

How would you describe your relationship with the students? Are there any student success stories that resonate with you?

I would describe my relationship with the students as fun! Supervising student workers at Clemente really helps me get to know the students, as well as help them gain work experience for their post-grad plans. The best part is when former student workers return to campus and visit and talk about their time working at the Clemente Center and how much they enjoyed their experience.

How have you seen the university (and/or your department) grow/change over the years?

The university has grown a lot over the years in the advancement of academia, as well as in other areas. Florida Tech, over time, has shown that it isn't Florida's best-kept secret. The drive of the campus community will continue this growth, and I am excited to be a small part of it.

Florida Tech Aviation Purchases Powerful Flight Training Devices

Made possible by a $1 million grant from the Emil Buehler Perpetual Trust, Florida Tech Aviation has purchased two cutting-edge flight simulators that will supercharge student training on its new fleet of Piper Pilot 100i aircraft. The ALSIM AL100i is designed to Flight Training Device (FTD) Level 5 standards, with a full-size flight deck replica, a semi-enclosed instructor station, active control loading and a specific flight model based on aircraft flight characteristics.

ONES TO WATCH

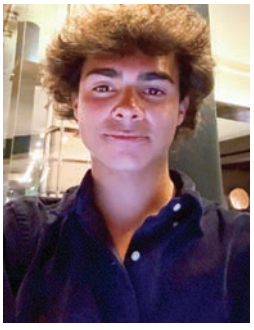
Farmer Scholars

Florida Tech has named Alexa Garofalo and Jake Martin 2025 Phillip W. Farmer Scholars. These outstanding high school graduates, who started at Florida Tech in the fall 2025 semester, have demonstrated exceptional academic achievement, leadership and dedication to their communities.

Garofalo graduated from the Academy for Innovative Education Charter School in Miami Springs, Florida, and is pursuing a biomedical engineering degree. She will also join Florida Tech's varsity softball team.

Martin graduated from Gulliver Preparatory School in Miami and is majoring in mechanical engineering. He looks forward to joining Florida Tech's Formula SAE Motorsports team, as well.

Alexa Garofalo



Jake Martin

Astronaut Scholars

The Astronaut Scholarship Foundation has named seniors Peyton Hay and Sloan Hatter 2025 Astronaut Scholars.

While pursuing a bachelor's degree in computer science with minors in computational mathematics and philosophy, Hatter has tutored elementary school students, worked as a robotics lab technician and completed several engineering internships. She is president of Florida Tech's Institute of Electrical and Electronics Engineers (IEEE) branch and Phi Eta Sigma chapter.

After nine years in the U.S. Marine Corps, Hay is pursuing a bachelor's degree in electrical engineering. As a student, Hay has been selected for the NASA Pathways internship program at Kennedy Space Center, has worked as a research assistant and is president of Florida Tech's SCUBA Club.

Sloan Hatter

Peyton Hay

Panther Spirit Squad Wins Milestone Victory

Panther Spirit Squad—the university's student-run cheerleading and dance teams—celebrated milestone achievements at The College Classic's 2025 nationals. The cheer team won the national championship in the All-Girl Cheer Game-Day Spirit Showdown at the April event. The dance team placed ninth in the Division II Jazz category.

The organization was also named Recreational Organization of the Year for the third year in a row and earned a Silver Campus Service Award at the university's Student Leader Awards.

The Future Starts Now:

Murphy and Raley-Ross Ready to Lead Panther Basketball

By Jerry Durney

A new chapter in Panther basketball officially began April 15, as Florida Tech introduced Will Murphy as the 12th-ever men's basketball head coach. Joining him was Ashley Raley-Ross, who takes the reins of the women's basketball program as its third head coach, succeeding the legendary John Reynolds.

Both Murphy and Raley-Ross arrived in Melbourne from Spartanburg, South Carolina, where they served as assistant coaches at Wofford College.

During his eight-year tenure at Wofford, Murphy helped guide the Terriers to two NCAA Tournament appearances, a pair of Southern Conference regular season and tournament titles, and a national top 20 ranking following the 2018–2019 season.

Raley-Ross was part of a Wofford staff that amassed 39 wins over three seasons, highlighted by the program's first-ever conference regular season championship and a historic debut in the 2023 Women's National Invitation Tournament (WNIT) postseason tournament.

We caught up with Florida Tech's new basketball leaders to learn more about their coaching philosophies, what motivates them and what Panther fans can look forward to at the Clemente Center in the seasons ahead.

Q: How would you describe your coaching philosophy, both on the court and away from it?

RALEY-ROSS: I think everything's connected, and if I don't know the player off the court, then I definitely can't get to them on the court. I think my purpose is to help build strong young women; that's the reason I coach. I think the bigger thing is that it's bigger than basketball, and the world needs strong young women. So, that is my main goal. I think that translates to the court with them understanding that they're a part of something that's bigger than themselves, and it takes a team in order to achieve success.

MURPHY: What I love about coaching is the teaching. I think basketball is extremely overcoached and undertaught. I love the "why" of things. I'm a little bit of a nerd that way. Why do we screen like this? Why do we move like this? Why is it important to get off the top here? I never get offended when players ask those questions. I live for those moments because I'm very convicted in what we're doing, basketball-wise. When they understand the "why," that's when you start to get buy-in.

Q: What stands out to you about the quality of the Sunshine State Conference?

RALEY-ROSS: It's competitive, and I am so excited about it being competitive. Every single night that we play and we put on the uniform and our girls take the floor, there's going to be nothing easy. Everything's going to be earned.

MURPHY: It's high-level. It's better than several low-major Division I leagues, and that's part of the excitement. I love competing, and when you look at [defending national champion] Nova Southeastern, and people say they have a top-five coach in college basketball, I want to compete against that guy. I want to compete against the Florida Southerns, the Tampas.

Q: Do you have any specific goals in mind for year one?

RALEY-ROSS: I don't want to put a number on it or say I want to win 15–20 games, because I really am a firm believer in, as a player and as a coach, that if we do the little things, those numbers are going to take care of themselves. I want them to focus on the small things every single day because we

have some work to do, and I don't want to cap our success. I think all of those things will lead to us being better than what we were last year.

MURPHY: We're going to judge every season—starting next season—as a success or failure, whether we play in the NCAA Tournament. That doesn't mean we're going to do it next year, but if we don't next year, then there's no amount of success that would make me happy.

Q: Having been part of a successful midmajor Division I program, what are some qualities that you think can also work at the Division II level?

RALEY-ROSS: I think basketball is basketball, no matter where you are, and young people are young people everywhere around the world. But at Wofford, I just think our team really, really enjoyed playing with each other all three years that I was there, and I think that came from Coach [Jimmy] Garrity, with the team bonding that we did and within the locker room. He gave them the ability to be themselves with certain things inside that locker room. I want to take that and add my own little twist to it.

MURPHY: For me, I think it started with Coach [Mike] Young. He would talk about playing "the Wofford Way," and he talked about Wofford basketball with such respect, and it'll be the same thing for me with Florida Tech basketball. I'm going to take a lot of pride in the way Florida Tech basketball plays. We're going to talk about winning, and we're going to talk about Florida Tech basketball. If you get the right group of guys, they buy into that, and then it's a self-perpetuating source of pride.

Q: What can you tell us about your coaching staff?

RALEY-ROSS: Tia McMillan, my assistant, played at the AAU level for me, and so it's been nice because there's a lot of loyalty. There's a lot of trust there, and she knows how my brain works before I'm able to say what I'm thinking. As a head coach, being able to say that I 100% trust who I'm working with is a great feeling.

MURPHY: My associate head coach, Zack Freesman, is a guy I've got a lot of respect for, having actually competed against him. We were in the same league when I was at Wofford and he was at Western Carolina. They did a great job at Western Carolina, turning around a program in a tough league. I've been really, really impressed with **MEKHII NOBLE** '23 in the short amount of time I've gotten to know him. He's a former Panther player, and he has a lot of pride for this place. I think that's important. He was an excellent player here. He has that level of respect with the guys, and in recruiting, he's someone we can point to and say, 'Here's a guy who did it here.'

Q: It seems as if there are many different ways to win in college basketball these days with regard to roster construction. What approach do you want to bring to your programs?

RALEY-ROSS: Well, at Wofford, it was a little different because Wofford doesn't have a grad school, so it was really tough playing in the portal. But I think here, I'm open to transfer-portal freshmen. I think this year might look a little different recruiting-wise than it will in the future. But you know, I just think the most important thing is that we are coaching good young women.

MURPHY: I can be adaptable. I pride myself on whatever your model is, it has to fit the school and what the school recruits. Because what I do care about is retention, and retention is an issue everywhere—but there needs to be a hook. I want kids who want to come play basketball at Florida Tech, but there needs to be another reason they're here, too. Now that could be the education or the location or whatever, but it has to be something else. Because if the only reason you're going to a school is because of the basketball program, then there's always a shinier option.

Q: What takes up your time away from basketball?

RALEY-ROSS: Well, I will say there's not much time away from the game for me. My husband [Brandis] plays professionally overseas, so I spend a lot of time watching his games. Away from basketball, I really like to shop, and I enjoy going to the beach. That has been a huge plus here, at Florida Tech. But basketball is life for me, and it's been that way since I was 4, so I love it.

MURPHY: "I don't unwind" is the short and probably honest answer. I think anybody who knows me knows I'm always moving. It's not 24/7 basketball either. I love to golf; I mess around with the guitar. I'm a huge pacer; I'm always walking. You'll rarely find me—unless I'm watching film—just sitting at my desk.

"I think my purpose is to help build strong young women; that's the reason I coach."

—Ashley Raley-Ross

"What I love about coaching is the teaching."

—Will Murphy

STEVEN LAZARUS

From Data Desert to Climate Action: Strengthening Space Coast Resilience

Like many coastal regions, Florida's Space Coast faces significant climate resilience challenges and risks.

According to the National Oceanic and Atmospheric Administration (NOAA), Florida has over 8,000 miles of shoreline, more than any other state in the contiguous U.S. In addition, the 2020 census indicates that that there are 21 million Florida residents, 75-80% of whom live in coastal counties. This makes our state particularly vulnerable to rising sea levels, which are directly responsible for a host of coastal impacts, such as saltwater intrusion, sunny-day (high-tide) flooding, worsening surge, etc.

There is growing evidence that storms are becoming wetter as the atmosphere warms—increasing the threat associated with compound flooding, which involves the combined effects of storm surge, rainfall, tides and river flow.

Inland flooding events are also increasing due to overdevelopment, heavy precipitation and aging and/or inadequate infrastructure. The economic ramifications of these problems are quite evident, as area residents are confronted with the rising costs of their homeowners and flood insurance policies.

As the principal investigator on a recently funded Department of Energy grant, Space Coast ReSCUE (Resilience Solutions for Climate, Urbanization, and Environment), I am working with Argonne National Laboratory, Florida Tech colleagues, community organizations and local government to improve our climate resilience in East Central Florida.

It is remarkable that, despite its importance for risk management, urban planning and evaluating the environmental impacts of runoff, official data regarding local flooding is virtually nonexistent!

Working alongside a local nonprofit, we have installed 10 automated weather stations and manual rain gauges in what was previously a "data desert" east of the Florida Tech campus: one at Stone Magnet Middle School and others at local homes.

> "We think that a 'best methods' approach is proactive, informed and cost-effective. The foundation of good decision-making, assessment and planning is built on data (model and observations), which are critical to adequately addressing the impact of climate on our communities."
>
> Steven Lazarus
> *meteorology professor*

Data from these stations are available, in real-time, from two national networks: CoCoRaHS and Weather Underground. The citizen science initiative involving the rain gauge measurements is designed to document flooding in a neighborhood with limited resources.

In addition to helping residents make informed choices, these data will also provide a means by which we can evaluate our flood models that will be used to create highly detailed flood maps of the neighborhood.

We are working with two historic extreme-precipitation events: Hurricane Irma (2017) and Tropical Storm Fay (2008)—both of which produced excessive flooding in the area. What might the local flooding look like, in the future, as storms become wetter? To find out, we plan to simulate these two storms in both present-day and future climate conditions.

What will heat stress, a combination of temperature and humidity, feel like in the future? What impact will this have on energy consumption?

The station data will also be used to develop and test building energy-efficiency tools designed to help the community identify affordable ways to reduce energy consumption, as well as to produce high-precision urban heat island (heat stress) maps that account for the impact of individual buildings. The heat island and building energy modeling will be complemented by a drone equipped with an infrared camera, which will provide an observation baseline.

We think that a "best methods" approach is proactive, informed and cost-effective. The foundation of good decision-making, assessment and planning is built on data (model and observations), which are critical to adequately addressing the impact of climate on our communities.

STEVEN LAZARUS is a meteorology professor in the ocean engineering and marine sciences department. His current research interests include electrical phenomena referred to as gigantic jets, surface-layer meteorology (winds), wave radar (currents), climate resilience and aviation weather.

The 'Oscars of Science': Hohlmann, Das Win Breakthrough Prize in Fundamental Physics

Over their years in academia, Marcus Hohlmann and Souvik Das have earned many titles, from graduate assistant to doctor to postdoctoral researcher to faculty member.

Their distinguished work in high energy physics has now earned them a new title that far fewer share: laureate.

For their contributions to "the exploration of nature at the shortest distances and most extreme conditions at CERN's Large Hadron Collider," as noted in the citation, they and Ph.D. candidate Erick Yanes have been recognized with the 2025 Breakthrough Prize in Fundamental Physics along with a large number of other physicists, engineers and technicians involved in the global effort.

Considered the "Oscars of science," the award was presented at a flashy, celebrity-attended gala in Los Angeles in April. It went to several groups comprising thousands of people who were involved in the discovery of the Higgs boson, which is an elementary particle whose existence confirms much of the Standard Model of particle physics that governs the world around us.

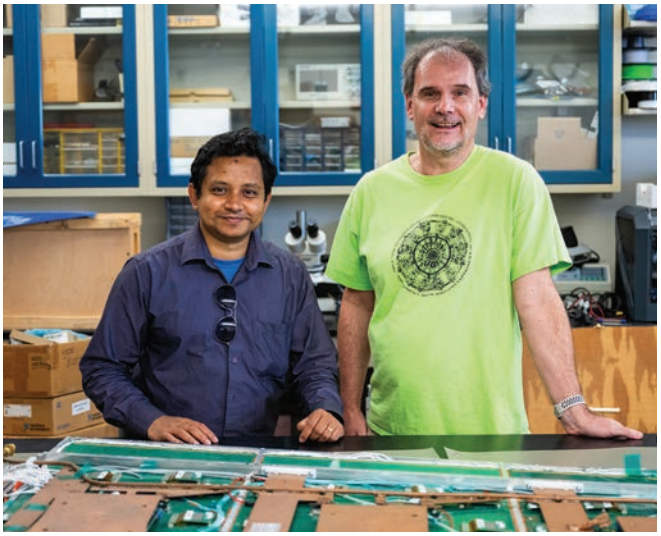
The Florida Tech team and about 4,500 others have spent years working on one of two massive particle detectors located at the Large Hadron Collider (LHC) particle accelerator near Geneva, Switzerland: the 15,400-ton Compact Muon Solenoid (CMS) experiment.

According to the prize's full citation, one-third of the $3 million Breakthrough Prize went to the CMS Collaboration "for detailed measurements of Higgs boson properties confirming the symmetry-breaking mechanism of mass generation, the discovery of new strongly interacting particles, the study of rare processes and matter-antimatter asymmetry, and the exploration of nature at the shortest distances and most extreme conditions at CERN's Large Hadron Collider" using data it collected from 2015 to 2018.

Hardware built on Florida Tech's campus by the High Energy Particle Physics group is installed in the CMS experiment. These gas electron multiplier (GEM) detector modules, and many identical modules produced by other CMS groups in Belgium, Germany, India, Italy and at CERN, detect and precisely measure muons, which are elementary particles and heavier cousins of the familiar electron. This capability is critical to the measurement that the collaboration was cited for by the Breakthrough Prize Foundation.

"I wanted to be on an LHC experiment as a young assistant professor," said Hohlmann, a particle physicist who came to Florida Tech in 2002 in part because of the pending launch of CMS-related research. "I thought it was going to be exciting, which it was."

Das started on the CMS project in 2006 as a graduate student at Cornell University, and he worked on the Pixel Detector of the experiment at CERN from 2007 to 2011. After earning his Ph.D., he took up a postdoctoral position with the University of Florida based at the Fermi National Accelerator Laboratory. A year later, based on this work and the work of many others, the CMS collaboration declared discovery of the Higgs boson.



From left: Souvik Das and Marcus Hohlmann

"I made small contributions to a big analysis," Das said.

He has now established a testing and troubleshooting lab at Florida Tech for thousands of silicon detector elements that are being assembled around the world and will be used to upgrade the CMS Inner Tracker for the High-Luminosity LHC. His lab has also developed a database and grading web application for these detector elements that is used around the world.

In addition to their work on the detectors, the team also helps operate the detector. Falling primarily to students, this duty centers on monitoring the data as they come out of the CMS detector to make sure they are accurate. That mainly means looking at plots—graphical representations of data—to ensure there are no anomalies.

And when the same anomaly is picked up by multiple detectors, that may mean it's time to get really excited. That was the case with the Higgs boson.

"Like a crime scene with converging evidence, you've got to see it everywhere," Das said.

Both men agree their part in the Higgs discovery is the pinnacle of their work so far in the CMS group. But their curiosity propels them forward, seeking more answers to these extremely complicated but fundamental questions about the world around us.

"It's ultimately, how does the world work at the smallest distances, the most fundamental level?" Hohlmann said.

Read more: link.fit.edu/breakthrough-prize

Benthic BioBlitz: A Speedy Survey of Local Biodiversity

Professor emeritus Richard Turner joined several Florida Tech alumni and dozens of other scientists from academia, government and the private sector for June's 2025 Ocean DNA Benthic BioBlitz: a 10-day burst of intense species discovery in the Indian River Lagoon.

Scientists catalogued roughly 1,800 specimens from 32 sites across the Smithsonian Marine Station in Fort Pierce. Their collection will add invaluable data to the marine station's DNA reference libraries.

National Geographic defines a bioblitz as "an event that focuses on finding and identifying as many species as possible in a specific area over a short period of time." But what might a bioblitz look like?

Gather

Participants gather in a local, natural area. A group can include scientists and community members who want to learn about species in their environment.

Collect

Over a short period of time, participants collect sampling off boats or by wading. Some have specialties that guide their focus, such as Turner, who focused on echinoderms.

Process

Once collected, samples are sent to a lab. Since a bioblitz happens fast, a different group is often responsible for simultaneously processing the samples.

Tally

Specialists then receive the samples and identify each at the species level to create a tally of species found, organized by taxonomic group.

Analyze

The samples may be sent for further DNA analysis. At the June event, specimens were collected for deposition in museum collections.

Alumni involved in the 2025 Ocean DNA Benthic BioBlitz included:

- **HOLLY SWEAT**, '10 M.S., '16 Ph.D., bioblitz co-organizer, marine community ecologist and head of the Benthic Ecology Program at the Smithsonian Marine Station
- **DAVID KARLEN** '91, '93 M.S., Ph.D., general manager and Benthic Monitoring Section supervisor at the Environmental Protection Commission of Hillsborough County
- **MATTHEW SCRIPTER**, '01, '06 M.S., '15 Ph.D., senior scientist at Ecological Associates Inc. in Jensen Beach

Researchers to Help Define Trustworthiness in Autonomous Systems

A Florida Tech-led group of researchers was selected to help NASA solve challenges in aviation through its University Leadership Initiative (ULI) program. Associate professor of computer science and software engineering Siddhartha Bhattacharyya and professor of aviation human factors **MEREDITH CARROLL** '03 M.S. will spend three years developing their project, "Trustworthy Resilient Autonomous Agents for Safe City Transportation in the Evolving New Decade" (TRANSCEND).

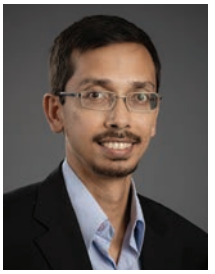
TRANSCEND aims to establish a common framework for software engineers and human operators when assessing the trustworthiness of machine-learning-enabled autonomous aviation safety systems. Autonomous systems perform independent tasks without requiring human control and are expected to improve with intelligence gained from machine learning. Intelligence-based software is expected to increase in the airline industry.

Human operators monitor the software systems and associated data, intervening when those systems fail. They must rely on systems to make critical decisions, such as how to avoid a traffic conflict. They must also trust the software to alert them before it fails.

"We are looking at how we can integrate trust from different communities," Bhattacharyya said. "How do we convey assumptions for trust, from design time to operation, as the intelligent systems are being deployed, so that we can trust them and know when they're going to fail?"

Bhattacharyya and Carroll's framework will integrate principles and practices of the airline industry, providing recommendations and suggested safety measures for engineers to reference when designing "trustworthy," learning-enabled autonomous systems.

"The goal is to combine all our research capabilities and pull together a unified story that outputs unified products to the industry," Carroll said. "We want products for the industry to utilize when implementing learning-enabled autonomy for more effective safety management systems."



Siddhartha Bhattacharyya

Meredith Carroll

Prime is a quantity.
Unique, a product unachievable by any two other numbers. *2, 3, 5 …*

Prime is a quality.
Excellent, of the highest caliber. *Outstanding, Choice, Top-Notch …*

In both quantity and quality, this column features Prime Examples of what makes us Florida Tech.

PRIME EXAMPLES *of* GROWTH

To grow is to increase—in size or amount, but also in value, importance. Whether it's a sprouting plant, a maturing child, a developing idea or an expanding venture, growth requires nurturing. Care, support and persistence beget progress, evolution, transformation. Big or small, fast or slow—for better or worse, growth is change. And what you plant matters. Bury seeds, harvest flowers. Cultivate diligence, breed success. Foster values, gain trust, integrity, respect.

You reap what you sow—and at Florida Tech, we're growing greatness.

Here are a few prime examples.

3 EXPERIENCE UPGRADES

1 AI Undergraduate Certificate

Beginning this fall, students can enroll in our new artificial intelligence undergraduate certificate program—a seven-course curriculum offering fundamental knowledge and practical skills in AI applications, ethical considerations and specialized AI topics.

2 Aviation Meteorology Minor

The College of Aeronautics (COA) has launched a new aviation meteorology minor developed to deepen students' understanding of weather's impact on aviation operations. The minor covers topics including meteorological codes, charts and aviation bulletins; identification of potentially hazardous in-flight weather conditions; basic prediction techniques for flight planning; seasonal weather patterns; and the principles of atmospheric circulation, stability, convection, moisture, air masses and fronts.

3 Steps to Success

As the university's Quality Enhancement Plan (QEP), Steps to Success through Transformative Advising, heads into its second year, 19 professional advisors staff the Office of Student Advising to help students succeed and support them in their timely progression to graduation. Evans Library's second-floor renovation into a new Student Advising Center is well underway —aiming to be completed this fall semester— and more face-to-face events, including a new Grad School Expo, are on deck as we continue to improve the university experience and increase mentoring opportunities for students.

2 CAMPUS IMPROVEMENTS

Crimson Crossing

The first phase of Crimson Crossing is well underway, with foundational work, utility infrastructure and vertical construction making strong progress. Over the next few months, crews will continue framing, and the building will rapidly take shape. We're on track and moving steadily through the core construction phase, targeting readiness for student occupancy in fall 2026.

Project ASCEND

Exciting progress is being made on the second floor of Vertex Applied Innovation Hub, with construction in full swing for Project ASCEND, a 30,000-square-foot, state-of-the-art space dedicated to additive manufacturing, composites, electronics manufacturing and materials testing. Phase One, a lab designed to support hands-on innovation, prototyping and advanced research and development focused on drones and autonomous systems, is on track to be completed this semester. The space will house an array of top-of-the-line instruments and equipment, including the Bruker X4 POSEIDON Benchtop X-Ray microscope—making Vertex the first customer globally to acquire this groundbreaking system.

5 "GROWING" RESEARCH VENTURES

1 SEAGRASS CULTIVATION

Since the Indian River Lagoon lost about 75% of its previously abundant seagrass coverage between 2009 and 2021, researchers, including assistant professor **AUSTIN FOX** '15 Ph.D., have been studying seagrass growth and its potential impediments, such as declining water quality and increased use of herbicides. In his recent paper, Fox investigated the effects of the herbicide glyphosate on local seagrass, concluding that when used at recommended application rates, glyphosate's acute toxicity is less likely to harm seagrass growth than eutrophication, degraded water quality and harmful algal blooms.

2 MATURING MONKEY

Remember Mateo? The spider monkey who was confiscated from Texas wildlife traffickers in 2020 was brought to Brevard Zoo, where Florida Tech researchers, including assistant professor Catherine Talbot and associate professor Darby Proctor, helped rehome and integrate him into the troop at the spider monkey complex. After some initial struggles, today, Mateo is not only fully integrated, but he has risen from refugee to alpha male of the spider monkey community—an unexpected twist that highlights both his resilience and the powerful impact of our partnership with Brevard Zoo in supporting victims of wildlife trafficking.

3 MARTIAN MEALS

Can we grow food on Mars? Student and faculty experts, including associate professors Andrew Palmer and Toufiq Reza, are researching ways to cultivate crops in regolith—the dusty, poisonous substance that covers the Martian surface. Take an in-depth looks at their projects and more on page 22.

4 TISSUE REPAIR AND REGENERATION

In his Functional Biomaterials and Tissue Engineering Lab, professor Vipuil Kishore and his students create biomaterial scaffolds that mimic the native tissue in terms of composition, mechanics and structure, then add cells to create a graft. Their goal is to develop different kinds of scaffolds to control and direct cell function for specific purposes, like replacing a diseased or damaged site in bone or repairing common injuries, such as a torn ACL.

5 UNDERWATER ORGANISMS

In her research, associate professor **KELLI HUNSUCKER** '07 M.S., '13 Ph.D., studies plant and animal growth on underwater surfaces—preventing it on certain spaces (biofouling) and promoting it on others (ecological engineering). The Office of Naval Research currently funds her research evaluating different ship hull coatings and ultraviolet light to test their efficacy in preventing biofouling accumulation. She also partners with local communities to create "living docks," which promote the growth of filter-feeding organisms to aid in improving the Indian River Lagoon.

Birth Of A Radio Station Brings To Fruitation Work Since 1968

By HUBERT GRIGGS

MELBOURNE — The first strains of music from Brevard County's first noncommercial, educational FM radio station already are being heard at 91.5 megacycles on the radio dial, and full-scale operation is expected to begin on Tuesday.

Gary Bowie, student at Florida Institute of Technology and general manager of WFIT radio, said the 10 watt station currently is testing its equipment from 1 a.m. to 4 a.m. daily, pending final approval, "hopefully Tuesday" by the Federal Communications Commission.

THE BIRTH of the station, and grand opening ceremonies held Thursday at the studio in Roberts Hall at the college campus, bring to reality an effort that began in 1968.

"A number of students got interested in the idea back then," Bowie, a 30-year-old marine science major from Red Bank, N.J., said. "The organization of the effort was a little informal, and we don't have all the names of all the people who worked for this, but we'd like them to know it finally happened."

Bowie shares the top jobs at the student station with Program Director Jeff Fleming, 19, an air commerce major from Bethesda, Md., and Chief Engineer Rich Kapushinski, 20, of New Britain, Conn., who

...tive Radio.'" Bowie said. "We plan to present all types of music in planned programming, ranging from classical to progressive rock, something we don't feel radio listeners are getting now.

"We've had a lot of requests," he added, "so we're planning on being heavy on classical."

Music isn't the whole WFIT story, Bowie stressed. Plans call for transcribed programming, including such shows as the Concert from Interlochen, the international music camp; programs from overseas such as "Music of the Netherlands," and comedy shows such as the "National Lampoon Radio Hour," the "Crawdaddy Gazette of the Air," and "News Blimps."

WHEN FINANCIAL backing permits, he added, "We want to bring back some of the old radio series, such as "The Shadow" and some of the 'camp' classics."

There will be a local product, too, be noted, such as panel discussions; news, weather and sports; and possibly lecturers from both FIT and Brevard Community College on topics of high interest, such as ecology and economics.

Bowie said there is plenty of manpower to do the job. "We have more than 100 people," he enthused, "all volunteers and all students, including approximately 30 Deejays (disk jockeys). We will work two men to a shift, to boost student participation in the station.

BOWIE, AS GENERAL manager, will receive the same partial tuition remission the leaders of the student newspaper and student government get. All students participating, he noted, will receive one liberal arts credit per quarter.

"We have," he stated, "the largest student organization on campus."

The 1968 effort, Bowie said, grew into planning and initial paperwork and lining up equipment, and in 1973 the paperwork "package" was submitted to the FCC.

"IN 1974 we got our construction permit," he said, "and in 1975 we go on the air."

Currently, those who stay up late enough will hear only recorded music and periodic identification announcements. When the FCC sends a telegram stating its certification of the station will follow, Bowie said, WFIT will swing into its "Program Test Authority" phase, operating normal programming.

Programming will begin at 7 p.m.

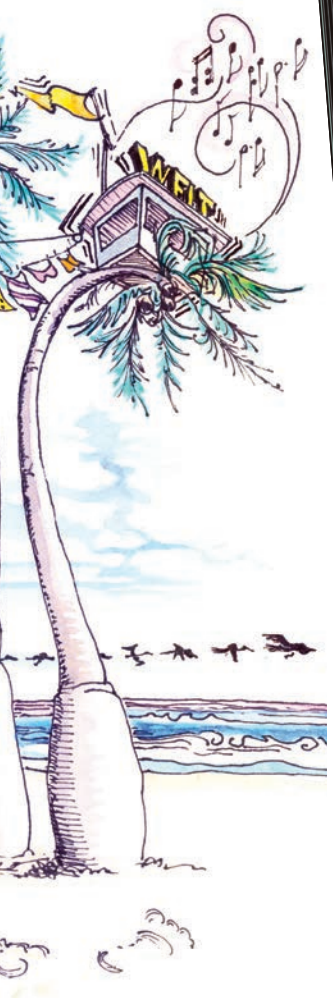
...and continue to sign-off at 1 a.m. on Monday through Thursday. On Friday at 7 p.m. broadcasting will resume, to continue through each weekend, 24 hours until 1 a.m. Monday.

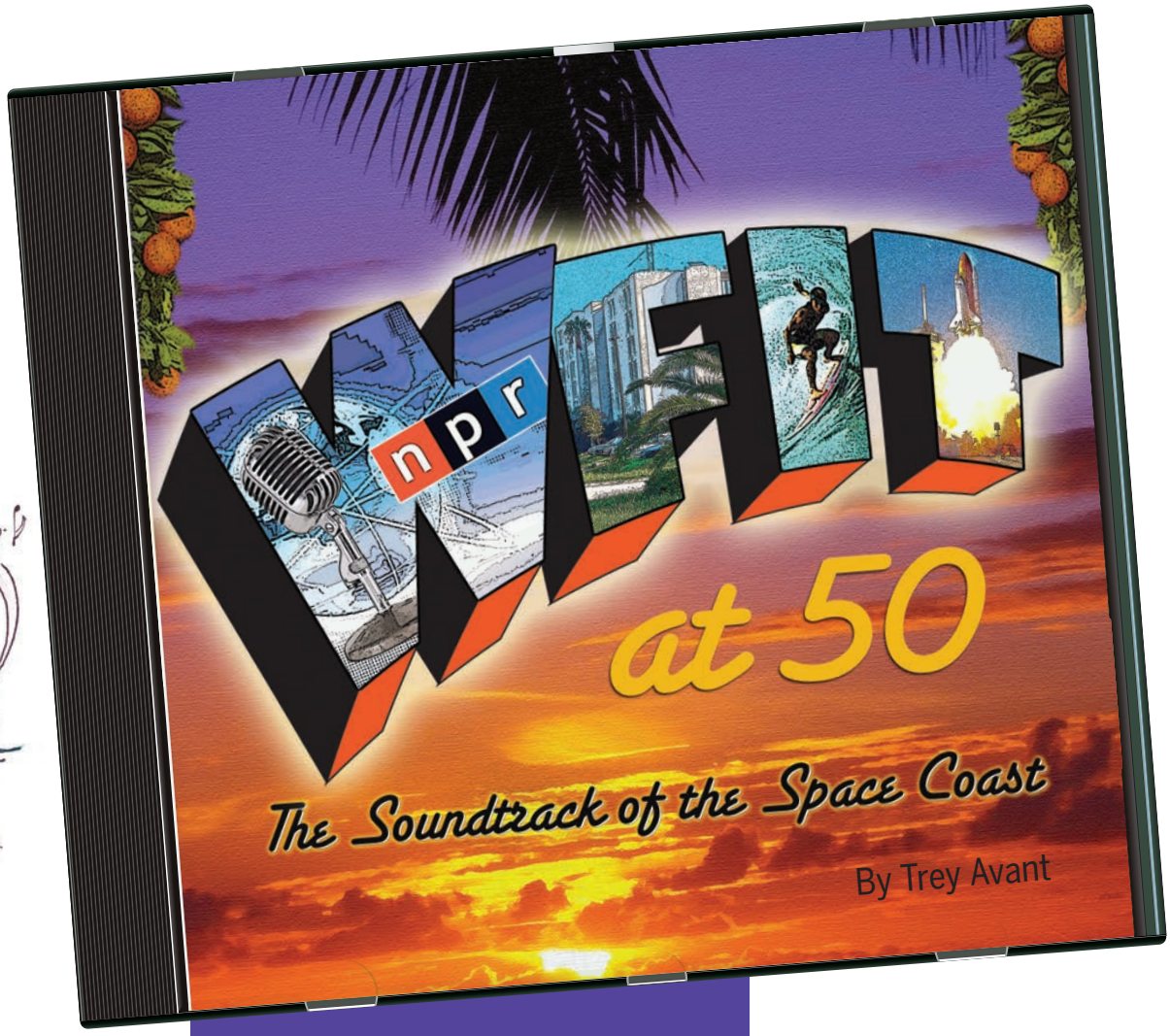
THE 10 WATTS of power give the station a theoretical range of 10 miles, Bowie said, noting the station has been picked up, faintly, on auto radios at Cocoa and Sebastian Inlet.

A good home receiver, he said, should bring it in better.

"Ultimately," Bowie said, "we hope to expand to 24 hours, seven days a week. We plan to make (Alternative Radio) a really educational and enjoyable part of Brevard life."

Top, left: WFIT broadcast center, opened in 2013; top, right: Local band 23 Treez performs in WFIT's studios in 2010, pictured with "Sound Waves" host Todd Kennedy (right); top, small image: "FM Odyssey" host Fred Migliore; center, far right: WFIT beach illustration by Steve Beeching; center, far left: 1986 staff; center, news clip: announcement of station opening in 1975; center, left: "The Pop Underground" host Hannah Burgett; center, right: Rob Selkow, Terri Wright and Brenda Harris hold a banner during a 5K run to benefit WFIT in 1994; bottom, left: WFIT studio in 1980; bottom, right: Mikey Holland and Steve Keller.





On any given day along Florida's Space Coast, the sun rises over the Atlantic, rocket plumes carve white arcs into the sky and music drifts from radios tuned to WFIT 89.5 FM.

For 50 years, WFIT has been more than just a station on the dial. It's been a cultural touchstone, a bridge between Florida Institute of Technology and the community—and a place where music, news and connection thrive.

"WFIT is a unifying force for musicians, music lovers and people who want to stay informed," says Stephen Yasko, WFIT's general manager. "Our mission is to bring the community onto Florida Tech's campus and to be a home for those who find inspiration through music that's not played anywhere else."

As WFIT marks its 50th anniversary, those words ring truer than ever. What began in 1975 as a student-run radio station has evolved into a nationally recognized, noncommercial public radio outlet, blending National Public Radio (NPR) news with a signature swirl of music genres, local voices and community service. And while its history is rich, the story of WFIT today—and its role in shaping tomorrow—is perhaps even more compelling.

continued on page 20

"WFIT is a unifying force for musicians, music lovers and people who want to stay informed. Our mission is to bring the community onto Florida Tech's campus and to be a home for those who find inspiration through music that's not played anywhere else."

—Stephen Yasko

continued from page 19

1975

1979

1982

1992

2000

Current

A Station Like No Other

It's easy to romanticize humble beginnings, but WFIT's earliest days were, quite literally, underground. For decades, the station broadcast from the basement of Roberts Hall. Volunteers helped build walls, hang acoustic foam and wrestle with stubborn equipment. The space frequently flooded, and mold was a constant battle. The station's 10-watt transmitter barely reached beyond campus.

"We started as a student-run station, just students doing music," recalls Terri Wright, who began her WFIT career as a volunteer DJ in the early 1990s before becoming general manager from 1998 to 2023. "Then, we added news and became the first station in Brevard County to have HD broadcasting. So, we've certainly evolved."

Today, WFIT broadcasts from a modern 4,100-square-foot facility complete with six studios, a performance space and state-of-the-art equipment. The station runs at 4,700 watts, its signal stretching across most of Brevard County and into parts of Indian River County. Its mixed format blends locally produced shows, NPR news and a music library so deep it defies commercial radio norms.

Voices That Make a Difference

While WFIT has adapted to technological change, it remains proudly old-school in at least one way: The music is still handpicked by the people who care most.

For Fred Migliore, host of "FM Odyssey," that creative freedom is everything. For more than three decades, his Sunday morning program, a thoughtful blend of storytelling and music, has featured hundreds of interviews with famous names such Billy Joel, Jackson Browne and Dan Fogelberg and has touched countless lives.

"Listeners keep tuning in because it feels like a conversation," Migliore says. "It's not just the music—it's the voices, the stories and the discoveries."

Despite this, Migliore insists his most profound moments have been with his audience. He recounts a listener who once called him, trembling, to say a song he played saved her life during a moment of crisis.

"When you hear stories like that, it's just amazing. That's when I was reminded how powerful music is. It's one of the few things left that still unites us," he says.

Radio With a Pulse

WFIT's commitment to local music isn't just talk—it's woven into the station's identity. Shows like "Keller Radio," hosted by program director Steven Keller, regularly feature local and touring artists performing live in the studio. It's an approach that resonates deeply with newer hosts such as Hannah Burgett, host of WFIT's only live late-night program, "The Pop Underground."

"WFIT is a beacon of the Space Coast's cultural scene," Burgett says. "There are so many people in this area with different backgrounds and musical interests, but WFIT's uniquely varied programming brings everyone together under the banner of community radio."

Burgett's show, centered on 'pop but underground,' illustrates how WFIT thrives on originality and personal connection.

"The coolest thing about WFIT is that you don't just get the songs—you get the experience, expertise and personality of the hosts," Burgett says. "Your streaming service can recommend a song you might like, but can it tell you about the time it met the artist at a show or suggest similar tracks that aren't on streaming platforms? WFIT won't replace your streaming service, but if you need something a little more human in your routine, WFIT has a high-quality show for everyone."

From blues to reggae, world music to indie pop, WFIT's sound is anything but uniform. The station's diverse programming reflects the region's eclectic tastes and the passions of its hosts.

"The format changed from alternative punk music to straight-ahead jazz, then smooth jazz, then a combination of both. And eventually, we became Triple A, which is 'adult album alternative,'" Wright says.

Through each evolution, one thing remained constant: WFIT's sense of place.

"There are no other locally owned radio stations in Brevard County anymore," Wright says. "If you compare it with what's on the dial right now, most stations are part of conglomerates. If you go from one station to another, you might hear the exact same music because it's all programmed nationwide. We're a great asset because we live in this community; we know what's going on, and we can share that with people."

Bridging Campus and Community

Spend any time listening to WFIT, and one truth becomes clear: It's a station deeply rooted in its community. From local nonprofits to the environment, WFIT's airwaves serve as a stage for voices often overlooked.

WES SUMNER '18 DBA, Florida Tech's vice president for external affairs, sees WFIT as a powerful storytelling platform for the university.

"WFIT is one of the jewels of Florida Tech," Sumner says. "The institution has a great resource in WFIT in that it is an outlet to share the good news of Florida Tech—its research, its people—with the larger community in a way that is very accessible to them."

His own show, "Inside Florida Tech," is a brief segment spotlighting faculty research, student successes and university initiatives. "It's one of the neatest things I've been able to do because I get a front-row seat to what members of the university community are doing," Sumner says. "It's a privilege to share that good work with a larger audience."

One of WFIT's signature programs, "Coastal Connection," hosted by Wright, shines a light on Brevard County's nonprofits and grassroots efforts.

"Radio is about community—your neighborhood, your friends, everyone tuning in together. WFIT is a pillar of the community."

—Jonathan Adams '04, former WFIT volunteer

"I reach out to nonprofits that are doing amazing things in our community," she says. "It's wonderful because there's a lot in the community I don't know about, and it's my opportunity to share that with people who hopefully get involved."

"WFIT is about being tied to the community much more strongly than other radio stations," Yasko says. "It's not about how much money you have in your advertising budget; it's about how much good work you're doing to fulfill your mission in Brevard County."

Environmental coverage is a hallmark of WFIT's mission, and segments such as "Lagoon Minute" keep listeners informed about one of Florida's most fragile ecosystems.

"The Indian River Lagoon is a huge issue," Wright says. "There are a lot of different organizations working to improve it, and I have an opportunity to speak with many of them and highlight improvements, challenges and things that are happening there."

While WFIT provides national context through NPR news programs, including "Morning Edition" and "All Things Considered," it firmly prioritizes local news coverage delivered by staff and volunteers who live in the area.

A Place to Learn and Grow

For Florida Tech students, WFIT offers a rare chance to gain real-world broadcasting experience. Joshua Mearig, a multiplatform journalism senior, first discovered WFIT through his audio journalism class and soon began helping cover newscasts when staff were away.

"Getting into the studio and feeling comfortable talking behind a mic was something I probably never would've built just by being in class," Mearig says. "I was able to build a whole lot more skills by being in the studio every day, twice a day, for two or three weeks at a time."

Mearig hopes to stay connected to radio after graduation.

"Radio always seemed like a cool thing and something I'd like to be involved with," he says. "Journalism and music are two things radio blends together. So, being a part of the radio station really reinforced for me that that is something I would really like to do moving forward."

Student volunteers like Mearig are part of a long tradition. **JONATHAN ADAMS** '04, a former volunteer, remembers WFIT as a place that shaped his confidence and career path.

"I had an idea, and even without much education in radio, WFIT was very supportive and allowed me to do something different and share what brought me joy," he recalls. "I wasn't learning anything about music or audio in school—I was studying computer science—and they taught me the board. It was like a whole other education I was getting outside of my classes."

Adams, who hosted "Tuesday Night Jazz with a Groove" in the early 2000s, has since spent nearly two decades working in audio development, blending his passion for technology and music. But he never forgot the lessons he learned behind the board in the basement of Roberts Hall.

"Radio is about community—your neighborhood, your friends, everyone tuning in together," Adams says. "WFIT is a pillar of the community. When you're listening to a commercial radio station, and it's just the same feed being broadcast in California or Ohio, you don't get a sense of place. But with WFIT, it's the people in your backyard."

A Vision for the Future

Though WFIT remains deeply connected to its roots, its eyes are fixed firmly on the future. New technology, digital platforms and shifting audience habits present both challenges and opportunities.

"We're kind of becoming dinosaurs because most people don't listen to radio anymore, especially kids," Wright says. "There's streaming, satellite and on-demand programming, so radio is kind of old school. The only thing we have that streaming doesn't is the fact that we're right here, in Brevard County, and we can tell people about what's happening here."

Yasko agrees, acknowledging the changing media landscape.

"We just installed a new state-of-the-art automation system. It's the backbone of the radio station and has streamlined our operations," he says. "I'm excited about bringing more local news to the air, as well as bringing the essence of WFIT into more digital platforms, like our website, TikTok and Facebook, so that we are always where our listeners are."

The Heart of the Space Coast

Fifty years after its first broadcast crackled out of Roberts Hall, WFIT remains an irreplaceable soundtrack to life on the Space Coast. Its blend of diverse music, trusted news and genuine community connection ensures that listeners tuning in will always find something that speaks to them—whether it's a rare pop gem, a local news brief or the gentle encouragement of a familiar DJ's voice.

For five decades, WFIT has proven that local radio isn't just surviving. It's thriving, because it has never lost sight of what matters most: the community that keeps listening.

This is WFIT at 50: locally owned, fiercely independent and still making waves.

Support WFIT

Recently, federal and state funding have been eliminated for public radio and television stations. Sadly, this new reality translates to an extensive budget reduction for WFIT.

Although we have been diligent in raising additional funds and economizing where we can, to meet this shortfall, we have had to eliminate three staff positions. While these changes affect some programming and fundraising, we are resolute in our commitment to Brevard County and the Space Coast and will continue exploring cost-effective ways to realign our programming with the current economic reality.

It remains our privilege to serve this community. That said, we could use your generous support now more than ever. Scan here to learn how you can contribute:

—Stephen Yasko, WFIT general manager

An Eater's Guide to Mars

AS HUMANITY SETS ITS SIGHTS ON MARS, SCIENTISTS ARE HUNGRY TO ANSWER AN ESSENTIAL QUESTION:

HOW WILL OUR INTERPLANETARY TRAVELERS EAT?

STUDENT AND FACULTY EXPERTS AT FLORIDA TECH SUGGEST THAT LEARNING TO CULTIVATE CROPS IN REGOLITH—THE DUSTY, POISONOUS SUBSTANCE THAT COVERS THE MARTIAN SURFACE—MIGHT BE A KEY TO FEEDING FUTURE EXPLORERS.

BY ERIN PETERSON

NASA predicts it will send its first astronauts to Mars in the 2030s. SpaceX's Elon Musk dreams of creating a self-sustaining settlement on the red planet by 2050. And research stations and habitat prototypes are already being tested in remote areas of Earth to simulate what life might be like for these intrepid explorers.

There will be plenty of challenges facing these adventurers, and a big one is what and how they'll be able to eat.

While there are a range of options, if there is one thing that associate professor Andrew Palmer feels confident about, it is this: Man cannot live on freeze-dried astronaut ice cream alone.

"There are some [experts] who think we can send prepackaged foods to Mars for [astronauts] to live off of, but it's a very limited diet, and it's not that healthy," he says.

One potential, if complicated, solution is growing food inside a biohabitat using Martian regolith—the gritty material that blankets the planet.

It's a tall order. Regolith lacks nutrients and is laced with toxic chemicals. Still, many researchers at Florida Tech see potential in coaxing life from Martian terrain. Palmer is helping lead the charge not just at Florida Tech, but nationally, where the university has attracted significant notice from NASA, corporations and other schools advancing space-linked research.

"We have the distinction of being a very precise lab—we think about the physical and chemical properties, the mineralogy and the nature of the substrate," Palmer says, listing off some of the lab's strengths. "We take a very technical view of the subject, and we're at the [cutting-] edge of a growing field," he says.

In the pages that follow, we look at their efforts to turn barren land into a fertile ground—and build a foundation for a self-sustaining future on Mars.

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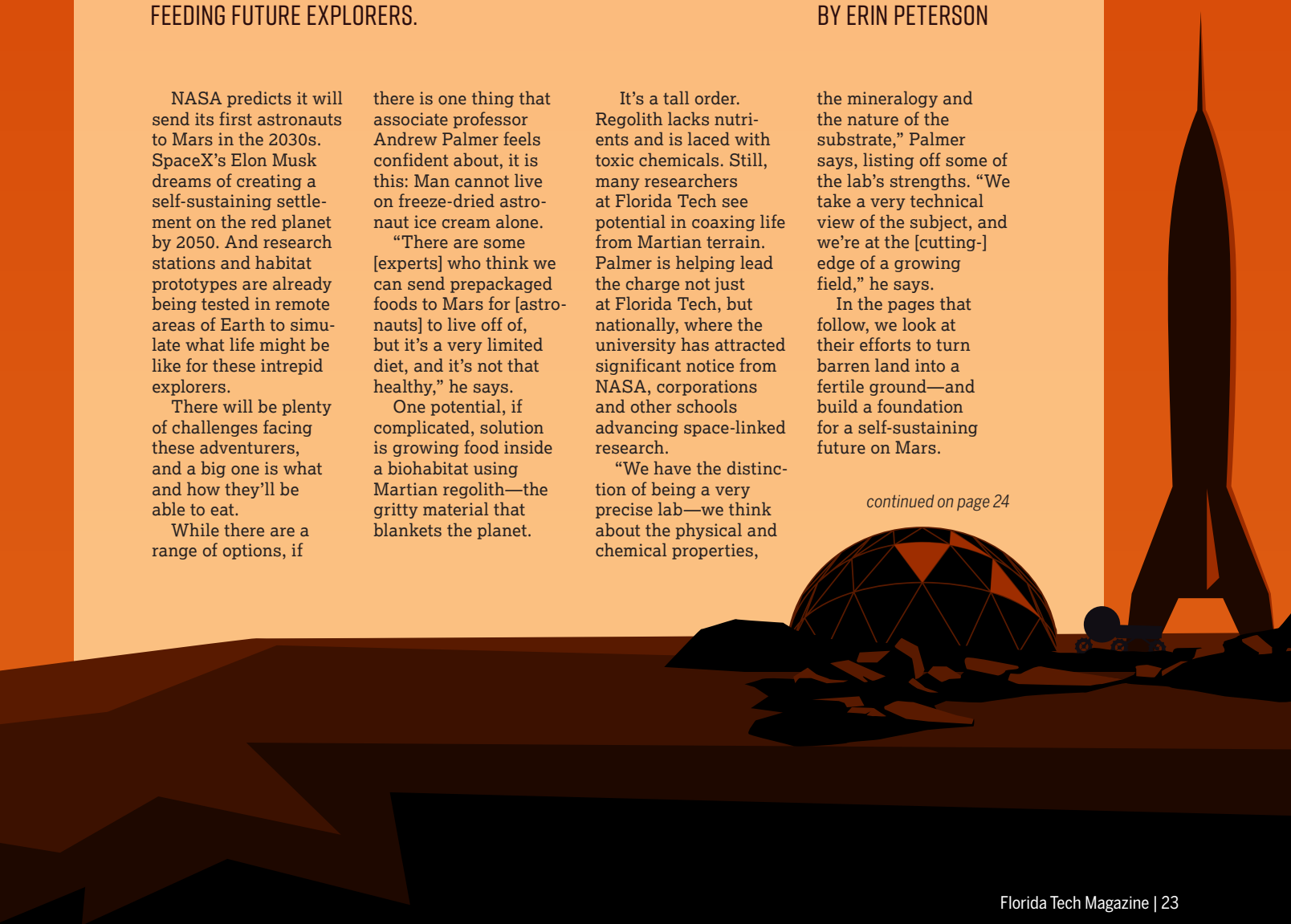

FLORIDA TECH'S OWN SPACE BIOLOGY STARS

TRENT CAUSEY '25 earned a B.S. in astrobiology; he is working on a master's degree in ecology in Palmer's lab.

ROBERT CHEATHAM '24 earned a B.S. in chemical engineering with a minor in nanotechnology and nanoscience; he is now pursuing a Ph.D. in chemical engineering.

FRANNIE EDMONSON '23, a third-year Ph.D. student in Palmer's lab, earned her undergraduate degree in astrobiology.

HAYLEY ERNEST '22, '25 M.S., earned a B.S. in astrobiology and a master's degree in ecology.

HALEY MURPHY '24 earned a B.S. in astrobiology and is pursuing an M.S. in ecology.

ANDREW PALMER is an associate professor in the department of ocean engineering and marine sciences. He leads the Palmer Lab of Chemical Ecology and Space Biology.

TOUFIQ REZA is an associate professor of chemistry and chemical engineering.

EMILY SOUCY '25 earned B.S. degrees in astrobiology and biochemistry. She is a microbiology lab technician at Bausch + Lomb.

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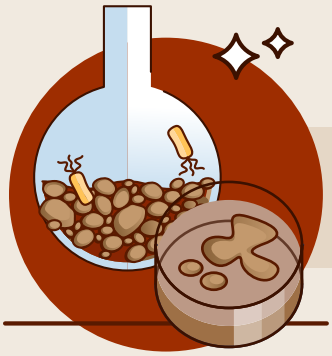
FIRST THINGS FIRST: GET TO KNOW REGOLITH

REGOLITH IS OFTEN COMPARED TO SOIL, BUT THE TWO ARE (QUITE LITERALLY) WORLDS APART.

Soil is a living ecosystem with microbes, organic matter and a structure that supports water, air and nutrient flow; Mars regolith is a mix of rock and dust, containing lots of toxic materials and no life at all.



WE DON'T HAVE ACCESS TO REAL REGOLITH.

Mars rovers haven't brought any regolith home with them, but thanks to gas chromatography, mass spectrometry and laser spectrometry analysis, scientists do have a detailed sense of its composition. That said, Mars regolith is not uniform.

"If you go from Florida to California, the soil varies significantly," says Toufiq Reza. "On Mars, the regolith varies as well."

Florida Tech does much of its testing on a lab-developed regolith simulant known as "Mars Global."

SPENDING ON SIMULANT

MARS REGOLITH SIMULANT VARIATIONS COST BETWEEN $30 AND $50 PER KILOGRAM; FLORIDA TECH SPENDS ABOUT $3,000 ON SIMULANT FOR ITS RESEARCH ANNUALLY.

TO USE REGOLITH FOR EXTRA-TERRESTRIAL AGRICULTURE, WE'LL HAVE TO...

STRIP OUT THE TOXIC CHEMICALS

ESPECIALLY PERCHLORATE ...

Perchlorate is by far the biggest baddie as we think about growing food on Mars. It's so dangerous that Earth-manufactured simulants do not contain it because it is linked to cognitive impairment, respiratory problems and a range of different cancers. (Researchers who want to study it in the simulant must add it in separately under highly controlled conditions.) In a collaboration with researchers from Arizona State University, **FRANNIE EDMONSON** '23 is studying if plants can be grown successfully in regolith that has been infused with perchlorates and then treated to neutralize them.

"It's almost like we're domesticating it," says Edmonson. "[Regolith] is really wild and elemental, and we're trying to get it into a more familiar form."

... AS WELL AS ZINC, CHROMIUM, AND MANGANESE (AMONG OTHER THINGS).

EMILY SOUCY '25 has found one offbeat solution: bladderworts, carnivorous plants that can grow in nitrogen-poor environments and absorb metals into their tissues.

INTRODUCE CHEMICALS THAT PLANTS WILL NEED TO THRIVE

LIKE NITROGEN ...

One possible option to introduce nitrogen into the regolith is through cyanobacteria—an organism known as an "extremophile" that can thrive even in harsh environments. In her experiments growing cyanobacteria in simulant, **HALEY MURPHY** '24 found that the organism could likely convert Mars' atmospheric nitrogen into a usable form for agricultural life.

"On Earth, we use these species of cyanobacteria to generate fertilizer from materials in the surrounding environment," she says. "If we can replicate this on the Moon and Mars, it will limit the amount of materials we have to ship and make extraterrestrial farming more feasible."

... AND CARBON.

To introduce carbon into regolith, Toufiq Reza and **ROBERT CHEATHAM** '24 are experimenting with biochar, a carbon-rich material that could be developed by heating organic material—like the inedible parts of plants—at temperatures of up to 600 degrees Celsius. Biochar has an added benefit, says Reza: It can help with water retention, another challenge of regolith.

MAKE THE REGOLITH BEHAVE LIKE SOIL

Regolith is typically light and dusty—but once water is added, its texture and cohesion is similar to clay. To support plant growth, the mix needs to be well-aerated so air, water and nutrients can circulate. **TRENT CAUSEY** '25 has found that ground-up peanut shells—fibrous and slow to degrade—could be mixed into regolith to support a soil-like structure. Peanuts, he says, offer a tantalizing twofer: The hardy crop, which grows in some regolith simulants, would also be a good source of protein and fat for Mars residents.

TAKE A DIY APPROACH

Why such a big focus on creating soil from scratch? Experts estimate that it costs about $100,000 to bring a single pound of material to Mars, so they're focused on in-situ resource utilization—developing and using materials on-site, rather than bringing them from Earth. **HAYLEY ERNEST** '22, '25 M.S., has conducted research zeroing in on the potential of clover, which can be grown in regolith and paired with its symbiotic bacteria, rhizobia, to draw nitrogen from the atmosphere and convert it into nutrients. Once dehydrated and tilled back into the soil, the clover enriches the regolith, creating a stronger, more fertile substrate for future growth. It's a tiny system that can be expanded: The rhizobia bacteria can be transported to Mars in a small, self-watering cord. That's led Ernest and her labmates to suggest that astronauts could potentially "take a pack of clover seed and a shoelace full of bacteria to Mars, and you will have dirt."

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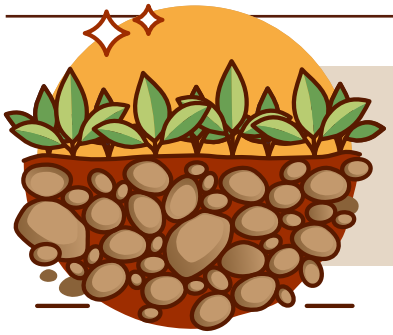
SO, LOOKING AT THE BIG PICTURE ...



THE FIRST CROPS FOR HUMAN CONSUMPTION WILL LIKELY BE QUICK TO GROW, EASY TO MANAGE AND ENTIRELY EDIBLE—THINK LETTUCE AND BASIL.

COULD KETCHUP BE ON THE MENU?

AS PART OF A TWO-YEAR COLLABORATION STARTING IN 2019, PALMER WORKED WITH HEINZ TO GROW SOME 450 KETCHUP TOMATO PLANTS IN REGOLITH SIMULANT. THE TOMATOES WERE TRANSFORMED INTO A LIMITED-RUN PROTOTYPE "MARZ EDITION" KETCHUP.

SOME EARTH-BASED FOODS MIGHT NEVER APPEAR ON THE RED PLANET.

"Agricultural economics look very different on Mars," Palmer says. Water-intensive crops, like almonds and acai berries, are likely a no-go.

CULTIVATING FOOD ON MARS WILL HELP IT FEEL LIKE HOME.

It's one thing to travel to a place and eat prepackaged food. It's another to literally put down roots and grow your own, Palmer says.

"I think we'll feel more like we're vacationing—or just on Mars for work—until we're growing food there."

COULD MATT DAMON'S MARK WATNEY REALLY HAVE GROWN POTATOES IN THE REGOLITH HE MODIFIED, AS HE DID IN THE OSCAR-NOMINATED FILM "THE MARTIAN"?

PALMER HAS HIS DOUBTS ABOUT THE PROCESS SHOWN IN THE MOVIE (PERCHLORATES ARE ONE REASON), BUT HE HOLDS HIS FIRE.

"I LOVE 'THE MARTIAN' BECAUSE IT'S INSPIRATIONAL," HE SAYS. "IT REALLY PROVIDES PEOPLE AN OPPORTUNITY TO THINK ABOUT WHAT COULD BE."

WE CAN APPLY THE LESSONS FROM THIS RESEARCH TO OUR HOME PLANET.

The work that Florida Tech researchers have done has plenty of applications closer to home: It can help communities with poor soil conditions or in extreme environments increase their agricultural yields. It can also help remediate soil around mines or industrial areas.

"We are taking the most challenging scenario and trying to solve that one," Reza says of their work on Martian regolith. "If we can solve that one, everything else will be easier. We'll learn so many things along the way."

"We are taking the most challenging scenario and trying to solve that one. If we can solve that one, everything else will be easier. We'll learn so many things along the way."

—Toufiq Reza

MARS-STRUCK

When **ROBERT CHEATHAM** '24 arrived at Florida Tech, he planned to get a chemical engineering degree and go into industry. But when Toufiq Reza offered him the chance to do regolith research as an undergraduate, he made a big pivot. Though he had worked on farms growing up, the idea of growing food on another planet felt like a mind-bending shift.

"I was like, 'I can work with Mars dirt?' It was awesome. I called my mom, I was so excited."

Now, he's in the first year of his Ph.D. research studying biochar's possibilities in regolith.

"I never in a million years thought I would get to work on something even remotely space-related. I fell in love with research."

Robert Cheatham '24
Ph.D. student

Florida Tech Homecoming, Recharged:

WHERE TRADITION MEETS TOMORROW

By Erin Alvarado '16

For decades, Florida Tech Homecoming has been a cherished tradition that brings together alumni, students, faculty and the local community in celebration of Panther Pride.

From parades and pep rallies to reunions and award ceremonies, Homecoming has honored the university's history and the people who have helped shape it.

These events have created lasting memories, fostered lifelong connections and celebrated the achievements of our diverse and accomplished alumni network.

This year, we're embracing that legacy while reimagining Homecoming for a new generation.

With fresh energy and a modern approach, we're revamping the experience to include more interactive, inclusive and engaging events that reflect the evolving spirit of our university.

While we continue to honor the traditions that define us, we're introducing new programming that invites even more Panthers to connect, celebrate and create new memories.

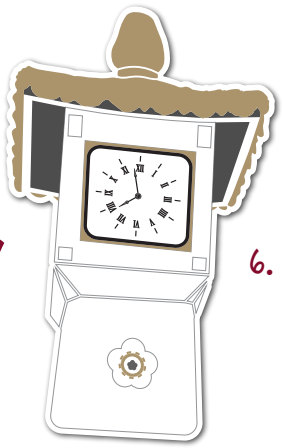
It's the Homecoming you know and love—elevated for today and tomorrow.

Think you know Florida Tech's Homecoming history?

Whether you're an alumnus reminiscing about your student days or a current Panther curious about the past, there's always something new (or old!) to discover.

Put your Panther Pride to the test with our HOCO History Quiz: a fun, interactive way to explore the milestones, memories and quirks that have defined this beloved tradition—and get the details for this year's event that you won't want to miss! »

HOCO History Quiz



1. **What year did Florida Tech celebrate its first official Homecoming?**

   A. 1958
   B. 1972
   C. 1966
   D. 1980

2. **Which Florida Tech facility frequently hosts the Alumni Awards Gala?**

   A. Panther Dining Hall
   B. Gleason Performing Arts Center
   C. Clemente Center
   D. Panther Aquatic Center

3. **Historically, what was the big-ticket sporting event for Homecoming?**

   A. Football
   B. Baseball
   C. Rowing
   D. Basketball

4. **How long was the Homecoming raft racecourse from the late '70s and early '80s?**

   A. 1.8 miles
   B. 1 mile
   C. 0.5 mile
   D. 3 miles

5. **In what year did the first Homecoming Fest take place?**

   A. 2005
   B. 2010
   C. 2012
   D. 2015

6. **What is the official name of the highest honor presented to an alumnus by the Florida Tech Alumni Association during the Alumni Awards Gala?**

   A. Panther Alumni Achievement Award
   B. Jerome P. Keuper Distinguished Alumni Award
   C. Florida Tech Lifetime Service Award
   D. Ad Astra Alumni Award

7. **Florida Tech Homecoming is traditionally held at the same time as which other major campus event, encouraging both alumni and loved ones to celebrate together?**

   A. Founders Day
   B. Day of Giving
   C. Family Weekend
   D. Spring Fling

8. **During Florida Tech's 50th anniversary Homecoming in 2008, which distinguished alumnus and U.S. Air Force captain delivered a lecture as part of the Homecoming festivities?**

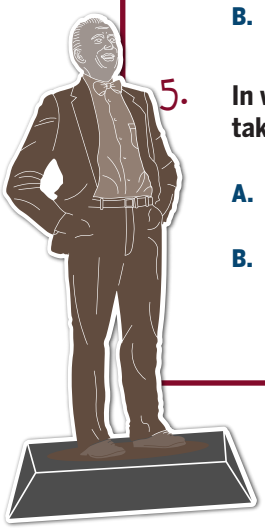
   A. Mike Moses '91 M.S.
   B. Joan Higginbotham '92 M.S., '96 M.S.
   C. Julian Field '84, '84
   D. Christopher Hanson '00

9. **Where is Florida Tech's traditional Homecoming Mass and Pancake Breakfast usually held each year?**

   A. All Faiths Center
   B. Gleason Performing Arts Center
   C. Hartley Room
   D. Clemente Center

10. **Which of the following has never been a Florida Tech Alumni Awards Gala theme?**

    A. Tropical Nights
    B. Night of Elegance
    C. Hollywood Glamour
    D. Innovation in Bloom



Turn the page for quiz answers and HOCO 2025 details!

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Answers

1. **B. 1972**

Florida Tech's first Homecoming was in 1972, 14 years after the university's founding in 1958.

THIS YEAR: October 2025 will be our 52nd year hosting Homecoming (minus one gap year due to the COVID-19 pandemic).

2. **C. Clemente Center**

Florida Tech's Alumni Awards Gala is traditionally held in the Clemente Center, transforming the athletic facility into an elegant venue for one of the university's most anticipated annual events. With its spacious layout and central campus location, the Clemente Center provides the perfect backdrop for an evening of celebration, recognition and #PantherPride.

THIS YEAR: Sticking to tradition, the Clemente Center will again host the gala—mark your calendar: **OCT. 17**!

3. **D. Basketball**

Before the university had a football team, Homecoming wasn't in October, as it is this year. It was usually scheduled in January or February to coincide with National Science and Engineering Week and featured basketball as the big-ticket sports attraction.

THIS YEAR: Panthers are encouraged to cheer on the **WOMEN'S SOCCER** team at **7 P.M. OCT. 18** as the signature athletics event.

4. **A. 1.8 miles**

One of the most enjoyable homecoming events during the late 1970s and early '80s was the annual raft race down a 1.8-mile stretch of Crane Creek. Students would build their vessels and float from campus to Melbourne Harbor.

THIS YEAR: Looking for a race? Instead of floating, run through campus during the **HOCO 2-MILER AT 5:30 P.M. OCT. 16**. You can run or walk through the university as an individual or compete as a team. Enjoy views of our beautiful campus and receive a signature race shirt.

5. **C. 2012**

One of the most anticipated events each year is Homecoming Fest, the annual street party in Downtown Melbourne with food and drinks, street vendors and a free concert featuring bands like Cold War Kids, SOJA, Wyclef Jean and the Plain White T's.

THIS YEAR: We're reimaging Homecoming Fest and bringing it to Crawford Green. Picture Grad Bash but with food, live music and activities for the whole family. **"PARTY ON THE GREEN" WILL BE 4 P.M. TO 7 P.M. OCT. 18.**

6. **B. Jerome P. Keuper Distinguished Alumni Award**

Named after the university's founder and first president, the JPK Award recognizes alumni who have achieved exceptional distinction in their field, demonstrated outstanding service at local, national or international levels, and made significant contributions to the advancement and continued excellence of Florida Tech.

THIS YEAR: The 2025 JPK award will be presented to **DUANE DEFREESE** '81 M.S., '88 Ph.D. Read more about him in the next issue of *Florida Tech Magazine*.

7. **C. Family Weekend**

Family Weekend is a cherished tradition during which families reconnect with their Florida Tech student(s), participate in Homecoming events, meet other Panther families and engage with our vibrant campus and local community.

THIS YEAR: HOCO and Family Weekend coincide once again **OCT. 15–19**—don't miss it!

8. **D. Christopher Hanson**

Florida Tech's Homecoming Lecture Series is a cornerstone of Homecoming Week, blending intellectual engagement with #PantherPride. Hosted in Gleason Performing Arts Center, the event usually features distinguished alumni, accomplished faculty or industry leaders who share thought-provoking insights.

THIS YEAR: The featured lecturer is Sam Goodwin, an entrepreneur, bestselling author and international keynote speaker celebrated for his thought leadership on embracing uncertainty. A former Division I hockey player, Goodwin co-founded a tech company and a nongovernmental organization (NGO) in Singapore and is one of the few people who have traveled to all 193 countries. His memoir, *Saving Sam*, recounts his harrowing experience as a hostage in Syria and the miraculous family-led rescue that followed.

9. **A. All Faiths Center**

The All Faiths Center at Florida Tech is a welcoming, interfaith space designed to foster spiritual wellness for students of all backgrounds. The facility includes a small chapel, a large chapel with seating for up to 140 people and a recently renovated Fellowship Hall, offering flexible configurations for events and gatherings.

THIS YEAR: The university will host its Homecoming Mass and Panther Family Brunch: **MUFFINS, MIMOSAS & MEMORIES OCT. 19**. Brunch will be served from **9 A.M. TO 2 P.M.** in Panther Dining Hall.

FLORIDA TECH HOCO 2025

10. **D. Innovation in Bloom**

This has never been an Alumni Awards Gala theme—until NOW!

THIS YEAR: "Innovation in Bloom" celebrates Florida Tech's spirit of growth, creativity and global impact.

Lush floral arrangements, elegant table settings and décor that blends natural beauty with modern design elements like map accents and subtle international touches will transform the Clemente Center for the event, which will feature a cocktail reception and three-course dinner with beer and wine, followed by live music, dancing and the prestigious Alumni Awards program.

CHECK OUT THE FULL EVENT SCHEDULE:

A MESSAGE FROM THE FLORIDA TECH ALUMNI ASSOCIATION

Hello Panthers,

I hope you enjoyed your summer activities and vacations with your families!

This is always an exciting time of year at Florida Tech, as we kick off the new school year and welcome Panthers new and old back to campus.

For me, this year is especially exciting, as I also sent my daughter off to start her college experience. I have a whole new perspective on the process as the parent of a student entering her first year.

We're all in this together!

At spring 2025 commencement, I had the opportunity and privilege to personally welcome our new alumni into the Florida Tech Alumni Association (FTAA) at one of the three ceremonies. It was an honor to hand them their Panther4Life pin and see the joy in their eyes as they realized their dreams and hard work, graduating with their degrees.

I'm also looking forward to this year's Homecoming festivities returning in the fall!

The Alumni Awards Gala will be Friday, Oct. 17. This event allows us to celebrate alumni who have made amazing achievements and reconnect with friends from over the years. Make sure you purchase your tickets to attend! It is a huge celebration filled with live music, dancing, good food and a whole lot of fun with #PantherPride.

We will also have our biannual, in-person FTAA board meeting during Homecoming week. We welcome anyone who is interested in serving on the board or who just wants to learn more about the FTAA to attend. Email alumni@fit.edu for more details.

We love to hear from our alumni and want to see what you're up to. Follow us on Facebook, Instagram and X. Join our Florida Tech Alumni LinkedIn group and make an account on Florida Tech Connect. There are lots of ways to stay connected!

Yours,

Sherry Acanfora-Ruohomaki
'93, '00, '05 M.S.
FTAA President

YOUR ALUMNI ASSOCIATION OFFICERS

Sherry Acanfora-Ruohomaki
'93, '00, '05 M.S.
President | Melbourne, FL
sherry@facetscg.com

Ameen Sarkees '89
Vice President | Merritt Island, FL
aysarkees@yahoo.com

Warren Pittorie '15, '18 M.S., '22 Ph.D.
Treasurer | Melbourne, FL
wpittorie2012@fit.edu

John Robertson '13
Secretary | San Juan Capistrano, CA
jtrobertson2009@gmail.com

Chris Fernando '02
Member-at-Large | Raleigh, NC
cfernando@gmail.com

Fin Bonset '96, '99 MSA
Past President | Indialantic, FL
fbonset@vhb.com

Sailing Team Endowment

On April 14, Florida Tech sailing club members joined university leadership, faculty, staff and alumni at Mertens Marine Center to honor and thank **DAN MACHOWSKI** '76 and his wife, **LIISA MACHOWSKI** '75, for establishing the Robert Dunlap Sailing Endowment. At the commemoration, Dan, who was commodore of the 1975 Florida Tech sailing team, donated his letter—the first sailing sports letter at the university—to the Evans Library Special Collections & Archives. The Machowskis also supported letters for sailing club seniors who graduated in spring.

SUBMIT YOUR NEWS TO
alumnotes@fit.edu

1970s

1 **BRIAN KEENE** '77 A.S., '79, following his retirement from the airline industry, has established a new business venture, AVPro Designs, specializing in the creation of model airports in 1:400 scale.

1980s

GERALD ZADIKOFF '82 is a certified diplomate of forensic engineering (National Academy of Forensic Engineers), a diplomate of coastal engineering (ACOPNE) and a fellow of the American Society of Civil Engineers. His company, GM Selby, is relocating to newly acquired offices at Tower Center One in Dadeland, a neighborhood in Miami.

2 **RETIRED COL. MICHAEL DONOVAN** '84 was inducted into the U.S. Army Ordnance Corps Hall of Fame May 5, recognizing his achievements during 30 years of combined and reserve service. The Hall of Fame was established in 1969 to recognize and memorialize people who have made a positive, significant contribution to the corps.

GARY CRUMP '86 relocated to Maryland after he graduated from Florida Tech and began a career with the Aircraft Owners and Pilots Association (AOPA). He just completed his 38th year as director of medical certification in the Pilot Information Center.

JEFFREY HOEL '87, '89 M.S., retired from the U.S. Navy after 20 years of active duty service and an additional 20 years as a senior civilian. At his retirement ceremony, he was presented the Navy Superior Civilian Service Award. Hoel and his wife now reside in South Carolina.

3 **PAMELA NABORS** '89 M.S., CareerSource Central Florida president and CEO, was named the 2025 Toni Jennings Workforce Development Professional of the Year by the Florida Economic Development Council.

1990s

4 **PIERRE LÉGER** '90 M.S.has been appointed the regional director of SUEZ Consulting, a company ensuring the resilience of regions to the effects of climate change. In this role, he imagines and brings to life the cities and industrial sites of tomorrow, building efficient and sustainable infrastructure that contributes to the attractiveness of regions and provides sustainable access to essential services.

JACQUELINE MALTRY '90 has started a new forensic business as a 21-year member of the Association of Certified Fraud Examiners (ACFE).

5 **PAULETTE KING-MORIN** '94 was inducted into the Space Coast Hall of Fame May 24.

TOD SCHUCK '95 M.S. was awarded his third U.S. patent (20250208285-A1) June 26 while working at Lockheed Martin Rotary and Mission

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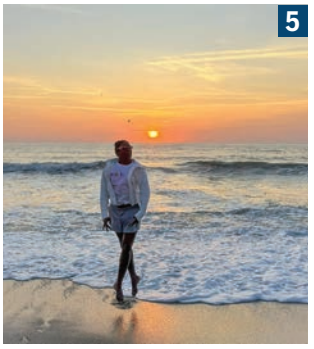

SPOTLIGHT ON

Julianna Walsh

FLORIDA TECH CONNECTION: '17 M.S. Industrial/Organizational Psychology, '19 Ph.D. Industrial/Organizational Psychology

THREE WOMEN WHO INSPIRE YOU: Jacinda Ardern (former prime minister of New Zealand), Malala Yousafzai (activist) and Michelle Obama (attorney and former U.S. first lady)

FAVORITE QUOTE: "Do the best you can until you know better. Then, when you know better, do better." —Maya Angelou

IDEAL SUPERPOWER: Be able to make people believe in themselves

In 2023, **JULIANNA WALSH** '17 M.S., '19 Ph.D., created LeadHerself, a platform with a mission to support emerging women professionals looking to fulfill their leadership potential and own their careers.

After graduating from Florida Tech with her degrees in industrial-organizational psychology, Walsh moved to London, where she worked as a leadership consultant building assessment and development programs for large corporations.

But she quickly decided that the career path she was on didn't align with her passions, and she left the corporate world to work at a small technology startup.

"It was amazing because it was innovative," Walsh says. "I was able to challenge assumptions and try to figure out if there were different ways we could build something, and I learned a lot about myself."

As a result, Walsh started laying the groundwork for LeadHerself outside of business hours.

"A large part of my research while studying at Florida Tech was identifying common barriers to leadership in the workplace and how they impact career trajectories," Walsh says. "And then, a few years into my career, I found myself experiencing the biases I studied, and decided I needed to do something about it."

Soon thereafter, Walsh and her team were laid off from the tech startup—the push she needed to make her platform a reality.

"I'm grateful that my previous role was deemed redundant because it led me into this, and I knew in my gut that this was the right thing for me to be doing now," she says.

Walsh took the skills she learned from consulting and the tech skills she had gained at her previous role to launch LeadHerself.

The platform and its soon-to-launch mobile app will help empower young women and others facing common workplace obstacles, such as discrimination, to overcome them and take charge of their careers.

"At LeadHerself, we're working to create a community of women committed to owning their careers with confidence and courage," she says. "Building leaders today to change the face of leadership tomorrow."

Through LeadHerself, Walsh hosts a London event series featuring guest speakers and networking opportunities to help her audience build confidence in professional settings.

"I used to hate networking and would just want to hide in the bathroom the whole time," Walsh says. "And now, I'm hosting those same events to help other women who feel the same way."

Visit leadherself.com or follow @the_leadherself_lemur on Instagram to learn more.

—Erin Alvarado '16

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Systems. It is titled "*Methods and Systems for Determining the Tumbling State of a Moving Object.*"

BRIAN FISCHER '97 has been promoted to engineering manager at Innovative Power Products on Long Island, New York. He will lead a group of RF/microwave engineers in the design and development of wide-band, high-power, passive RF components used in military and industrial applications.

2000s

RONALD "EDDIE" MYERS '06 has been named the chief growth officer at Critical Frequency Design, a leader in next-generation aerospace and defense photonics technologies. Myers will lead the enterprise growth strategy, directing business development, government relations and marketing initiatives, while elevating Critical Frequency Design's brand visibility across the defense, aerospace and intelligence sectors.

6 KASSANDRA CRIMI '08 has stepped into the role of morning meteorologist on WFTV Channel 9 in Orlando, Florida.

2010s

7 SARA BIENVENU WRIGHT '15 and her husband, Florida Tech Aviation A&P/avionics technician Ben Wright, welcomed their son, Wesley, in August 2024.

8 OZ WASSERMAN '16 recently announced a $7 million seed round for his company, Opsin Security. The round was led by institutional investors and supports Opsin's mission to help enterprises adopt generative AI securely.

9 NOMATHEMBA MAFICO '17, '20 MBA, and her husband, **SHAYNE INNISS** '16, '19 MSA,

welcomed their son, Shawn, in October 2024.

JALEN MCCALLA '17, '18 M.S., began college at 16 years old, eight hours from home. He completed his undergraduate degree in accounting and was the first to graduate with a master's in forensic accounting at 20 years old. Today, he works as a project manager in financial planning and analysis at Microsoft.

10 DANIEL RASSOUL '17, '19 MBA, works at Nike's World Headquarters in Beaverton, Oregon, managing its NA Men's FW and Apparel business in the marketplace. Pictured here in the gray tank top, he recently participated in the company's Just Do It Day celebrations, during which all employees have the day off to have fun with sports on the campus.

11 VAISHALI SELVARAJ '17 works as a global talent acquisition specialist, contributing to building diverse and dynamic teams across the world. One of her proudest moments since graduating from Florida Tech was working as a human resources recruiter for her dream company, Google.

12 DAVID SALDANHA '19, '20 MBA, completed a three-month, life-changing solo backpacking trip across Southeast Asia. On the trip, he met many new people, tried amazing food and witnessed the natural beauty of the region.

2020s

13 AMANDA FADELY '20 is founder/CEO of KeeperSpace, a space tech startup. KeeperSpace is focused on defining the next generation of space situational awareness technology to ensure space remains a resource for generations to come.

14 CHARANJIT "CJ" SUMAN '20 MBA, '23 M.S., is a strategic digital marketing professional specializing in performance marketing. He has worked with agencies in both the U.S. and Canada, supporting 30-plus clients in industries

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SPOTLIGHT ON

Thomas Larkin

ALTERNATE CAREER: Professional hockey player

WHEN WOULD YOU TIME TRAVEL TO: Being a kid again

LAST TV SHOW YOU BINGED: "Yellowstone"

BUCKET LIST ITEM: Scuba dive the Great Barrier Reef

DREAM DINNER COMPANION: Daniel Craig, actor

THOMAS LARKIN is the president and founder of NanTenna, an innovative antenna company headquartered in Melbourne, Florida.

Larkin stands as a pioneering force at the forefront of driving innovative communication capabilities within the U.S. Department of Defense and collaborating with partner forces.

But what compelled a business alumnus to get into the antenna industry?

"In my previous roles, I kept hearing customers complain about the antennas they use in their day-to-day roles," Larkin says. "They break too often; they don't perform how they would like them to; or the technology, in general, hasn't changed in years."

He realized that no one in the market was focused on antennas, and NanTenna was born.

Using the skills he had learned in his business classes at Florida Tech with faculty such as instructor Tim Muth and professor Brian (Andrew) Cudmore, Larkin took a problem and created a solution.

Established in 2020, NanTenna began with a bold vision to redefine military satellite communications (SATCOM) with groundbreaking antenna technology.

Five years later, the company has five products and clients spanning over nine countries and every time zone.

"The most challenging part of starting my own business was the self-doubt," Larkin says. "But there's a lot to be said about being uncomfortable and trying new things."

Within his role, Larkin spends much of his time traveling for trade shows, where he oversees the marketing and sales strategies of the company.

During his travels, Larkin has learned firsthand that no matter how far he is from Melbourne, the Florida Tech Panthers are never too distant.

"In October 2024, I attended the largest Army trade show in the world, which was being hosted in Washington, D.C.," Larkin says. "At this event, I connected with another antenna company located in Norway, and it turns out that the company's representative had a daughter on Florida Tech's women's soccer team who I went to school with!"

Through their Florida Tech connection, Larkin has gained a new business contact.

"Everyone always talks about how Florida Tech is a smaller university and has a more tight-knit atmosphere, but I've learned being in the outside world that we're a small school with some seriously big reach."

When he's not working, Larkin likes to spend quality time with his wife and fellow Panther **DEVON LARKIN** '17, '18 M.S., and their young son, as well as their two dogs, Chloe and Marley.

—Erin Alvarado '16

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like health care, tourism and e-commerce. Currently, he works at DirectiveGroup, a Florida-based digital agency.

15 **SAVANNAH BRENNAN** '21, '22 M.S., and **ETHAN KENNEDY** '21 are happily engaged! The couple met at Florida Tech their freshman year as members of the university's swim teams. They swam at Florida Tech for four years and have been together ever since.

JOAN JUNKALA-BROWN '21 MPA became the City of Melbourne's deputy city manager in May. Previously, she served as deputy city manager for the City of Palm Bay, where she supervised the city's development departments.

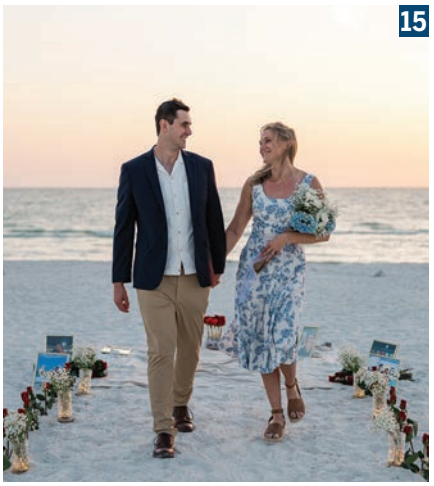
16 **JAMIE MOHNEY** '21 is a proud graduate of Florida Tech's online degree program and encourages her professional team members to also further their education as Panthers. She recently celebrated the graduation of her direct report, **LYNETTE MARTINOW** '25, from Florida Tech at Universal Studios.

17 **CHRISTINA "TINA" LEIGHTY** '22 MBA was named president of the National Space Club Florida Committee for 2025, overseeing almost 60 board members, multiple committees, 12 events and close to 300 members.

18 **WHITNEY ELLIS** '23 works as a project engineer at Universal Studios, where she helps upgrade ride control systems to comply with current industry standards and ensure that they can operate safely for longer periods. Ellis recently led a multimillion-dollar charge to renovate an attraction with a team in Osaka, Japan.

JOCK BOTOS '24 started a job at the American Bureau of Shipping as an aspire rotational engineer in July of 2024.

STEPHEN DANSKY '24 DBA had four papers accepted for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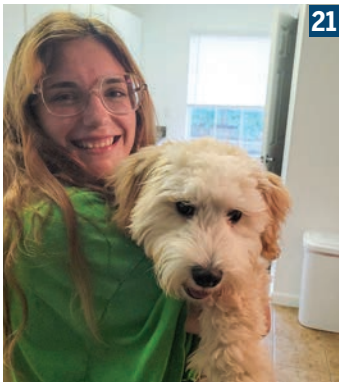
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publication this year. Two of those papers, co-authored with Florida Tech professors Brian (Andrew) Cudmore and Amitabh Dutta, were accepted by two different journals on the same day.

19 **RUCHIR GUPTA** '24 M.S. was featured in *Miami Wire*, in which he detailed his journey through the creative field, from his time at Florida Tech to his current work in design and innovation. Gupta is the prototype lab industrial designer at Groundswell Startups and plays a vital role in directing the processes from beginning to end.

20 **GABRIELA RODEZNO** '24 is a hydrographic survey technician in the Pacific and Arctic oceans on the National Oceanic and Atmospheric Administration (NOAA) ship Fairweather. Her team works with the U.S. Office of Coast Survey to create nautical charts for safe maritime navigation off the coasts of Alaska.

21 **ERIN VANTRE** '25 started working full time for The Scott Center for Autism Treatment as a registered behavioral technician after graduation. She is continuing her education with Florida Tech as a part of the applied behavior analysis M.S. program.

Welcomed a Panther Cub?

Contact us for a free infant T-shirt or onesie. Then, send a photo of your cub in his/her Panther swag with an AlumNote about yourself, and it may appear in the magazine.

For details: **alumni@fit.edu**

50-Year Reunion The Florida Tech Alumni Association was honored to welcome former FTAA board member **ALEXIS LOO** '75 and **STEVEN WEBER** '75, '80 M.S., '81 Psy.D., back to campus during spring commencement May 10 to celebrate a full-circle moment: the 50th anniversary of their own graduation from Florida Tech. After being recognized during the morning ceremony, Loo and Weber enjoyed lunch at Panther Dining Hall, where they visited with President John Nicklow and other members of executive leadership.

ALFRED YEE LITT '73, '74 M.S., passed away peacefully June 24 after a long career in computing, engineering and aeronautics at several leading technology companies, including NASA-Kennedy Space Center, Medtronic, Aero Systems Engineering, Hewlett-Packard, Fisher Rosemount and Honeywell. An avid traveler, he and his wife, **NANCY YEE LITT** '75, had achieved the rare feat of visiting all seven continents—a testament to his intrepid spirit and insatiable curiosity about the world.

CLAUDE "GENE" ARNOLD '89 M.S. passed away March 25, at age 78. He was a computer programmer and mathematician with the U.S. Department of Defense from 1969 until he retired in 2004.

DONALD BARTLETT FAY JR. '01 M.S. passed away April 30 in Huntsville, Alabama. Throughout his professional career, Fay worked on many space and technology projects, such as the shaker testing system for the Saturn V rockets, a backup system for the space shuttle program and Blackhawk Helicopter testing systems. In retirement, he volunteered as a docent at the U.S. Space and Rocket Center and was a member of the U.S. Coast Guard Auxiliary.

FACES OF GREATNESS

Robert Emiliano Rodriguez

By Erin Alvarado '16

FLORIDA TECH CONNECTION: '22 A.S. flight operations and dispatch, '22 A.S. air traffic control, '22 B.S. aeronautical science, '23 MSA aviation safety

GUILTY PLEASURE: Rita's Italian Ice & Frozen Custard

IF YOU WENT TO THE OLYMPICS, IN WHAT SPORT WOULD YOU COMPETE: Martial arts

BEST GIFT YOU EVER RECEIVED: Free education

THREE MOST USED APPS ON YOUR PHONE: LinkedIn, Instagram and Impulse

GO-TO KARAOKE SONG: "Love" by Keyshia Cole

Become a fighter pilot. Train to be an astronaut. Start an aerospace company. **ROBERT EMILIANO RODRIGUEZ** '22 A.S., '22 A.S., '22, '23 MSA, has always had goals as high as the stars he hopes to explore one day.

"The biggest factor for me in choosing a college to help achieve my dreams was my parent giving me their GI Bill, so I needed to find a Yellow Ribbon school," Rodriguez says. "When I saw that Florida Tech was not only a Yellow Ribbon institution but also a private university with a strong reputation—especially with astronauts among its alumni—it checked every box."

While he attended Florida Tech, Rodriguez was a research assistant for the College of Aeronautics and completed two internships with NASA.

"My first internship was with NASA's Micro-g NExT [Neutral Buoyancy Experiment Design Team] program in Houston, Texas, which focused on solving real-world challenges related to lunar missions," Rodriguez says. "NASA issued a challenge to colleges across the country, and my role was to coordinate with the selected teams, ensuring they had everything they needed when they came to NASA to test their prototypes."

Through that experience, Rodriguez worked closely with NASA's public relations and education departments, which led to his second internship in program and partnership management, where he supported NASA's collaborative initiatives for a full semester.

Now, just three years after graduating from Florida Tech, Rodriguez has supported national defense and space exploration efforts, conducting electronic warfare testing with the U.S. Army and serving as a mission controller on NASA's Crew Health and Performance Exploration Analog (CHAPEA) mission.

"I knew that if I wanted to be a fighter pilot, the best fighter jets out there are at Lockheed Martin—the F-22, the F-16, the F-35," Rodriguez says. "So, I applied over 100 times, got one interview and finally got my job where I work now, and that was just persistence."

Today, Rodriguez is on the ground working as a senior systems engineer at Lockheed Martin on the F-35 program.

"In my role supporting the F-35 program, I focus on developing advanced training systems that replicate the aircraft digitally, what we call a 'digital twin,'" Rodriguez says. "This allows us to train both pilots and maintainers on how to operate and sustain the jet using realistic, immersive simulations. It's like giving the aircraft a brain and embedding that intelligence into various training devices."

Beyond his professional work, Rodriguez serves as the vice president of program management for a nonprofit dedicated to leadership development and has also volunteered with Cochise County Search and Rescue, supporting the sheriff's office in emergency missions throughout southern Arizona.

"Florida Tech gave me a lot of hands-on experiences while I was a student, and I think that it was those experiences that have helped me continue to be a trailblazer in my field."

FLORIDA TECH

Office of Marketing and Communications

Florida Institute of Technology
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Melbourne, FL 32901-6975

THE BIG, FUN FLORIDA TECH ALUMNI SURVEY

IT'S BACK! THE 2025 BIG, FUN FLORIDA TECH ALUMNI SURVEY IS LIVE.

It's back—and this year, it's all about food!

Florida Tech's Big, Fun Alumni Survey returns for its third year, and after covering big-picture topics in the past, we're digging into something everyone can relate to: what we eat, how we eat it and all the little quirks that go along with it. We've loved learning more about our alumni through these surveys—and hearing how much you enjoy learning about each other. Take a few minutes, have some fun and add your flavor to the mix!

*All participants may enter to win a Florida Tech prize pack worth $250!

floridatech.edu/
big-fun-survey