

Florida Tech **TODAY**

A magazine for Alumni and Friends of Florida Institute of Technology

SPRING 2014



Lagoon Life **In Peril**

RESEARCHERS FIND NEW SOLUTIONS FOR
THE INDIAN RIVER LAGOON'S WATER WOES

ONE BIG QUESTION "CAN WE HAVE PRIVACY AND SECURITY?" p. 15

PI KAPPA ALPHA CAPS 45 YEARS AT FIT p. 33



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GO GREEN, GET ONLINE!

Find expanded coverage, photos and videos at:

today.fit.edu

COVER PHOTO: Sunrise on the Indian River Lagoon with the Kennedy Space Center Vehicle Assembly Building in the background. *Photo by Charles Tintera.*

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Look for this symbol for content appearing only online at today.fit.edu

In this issue: Extreme Close-Up: Behind the Scanning Electron Microscope Photos
Creative Writing Institute: A Participant's Perspective

Plus galleries from: PTC Gift, Spring Events, Pike Reunion

"April in Paris," the opening night celebration of the 2nd Annual French Film Festival at the Foosaner Art Museum, transformed EGAD Square into a Parisian wonderland. Festivities included live gypsy jazz, petanque, art activities and a French pop-up street café. Then, once the sun set, movie buffs found a cozy spot in the park to watch "La Belle et La Bête" under the stars.

Florida Tech TODAY <http://today.fit.edu>

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PRESIDENT'S PERSPECTIVE



Dear Florida Tech Alumni and Friends,
 As we conclude this 55th anniversary academic year, I think it's a great time to reflect on the spirit of Florida Tech, so energetically represented in our alumni, faculty, staff, students and supporters.
 That "can do" attitude, dating back to 1958 and embodied by Founding President Dr. Jerry Keuper and his colleagues, infuses all we do today. Work hard.

Discover something new. Meet the challenge that confronts you. Make the world a better place than you found it.

Our supporters did that again this spring, as we had a banner year for our Sporting Affair/Chopper Dropper and Evening of Hope fundraisers. The money we collected for athletic student scholarships and autism programs, respectively, will continue to make an important difference in this community.

We also welcomed a \$24.1 million gift from global technology company PTC that will give our students access to the latest software and high-tech learning experiences. It's a great milestone in our \$100 million Create the Future campaign to support the university's future needs.

As we look ahead, we stand on the shoulders of giants, to paraphrase Sir Isaac Newton. But what we make of our future—and how we choose to build upon our proud past—will define our success. Thanks for all you do for Florida Tech.

Sincerely yours,

A.J. Catanese, Ph.D., FAICP
 President & Chief Executive Officer



President Catanese displays the \$50,000 grand prize winning ball at the 2014 Chopper Dropper event, which grossed \$500,000 for athletic scholarships.



President Anthony Catanese and FTAA Executive Director Bino Campanini will attend "A Night at the Ballpark," which will include a private reception for alumni. MiLB.com, the official website of Minor League Baseball, has named the Trenton Thunder, Double-A affiliate of the New York Yankees, "Team of the Year." The Thunder, who are part owned by alumnus Joe Caruso '73, were the champions of the Eastern League after earning the East Division Wild Card during the regular season. The title is the franchise's third in its 20 seasons in Trenton. For more information about the alumni event, see page 38.



President Catanese with Mike and Rashmi Shah who hosted The Scott Center's An Evening of Hope VI: Night of Wishes event at their home on April 5.



President Catanese presents a plaque to Harry Weber upon announcing the naming of the new Harry P. Weber University Archives in the Evans Library.

Feedback From Our Readers

We welcome your input on the magazine. You asked for bigger photos, expanded campus coverage and more Alumni News, and we listened. **Have a comment about something you've read? Want to share a memory about your FIT days? Email us at fltechtoday@fit.edu.**

BIRTH OF THE BORK

"I saw the article 55 Things We Love About FIT and noticed that The BORK was on the list. As much as I love and cherish the BORK, I would like to point out that it was not created by DDT. Although there was a Delta Delta Tau brother involved, most of the BORKer appearances were due to the organization SQUAMISH. We still treasure the BORK and its many meanings and say it to each other every day. It would be greatly appreciated if credit was given where it is due, especially considering that SQUAMISH is another unique feature of Florida Tech that has been around for over 45 years. According to a number of accounts, SQUAMISH also played an integral role in the foundation of Greek Life on our campus."
 —Victoria Benjamin, Grand Poohbab, SQUAMISH

#WOMENINSCIENCE

"Nice to see my alma mater, Florida Institute of Technology, 'appreciating the female factor' in science...' in the alumni mag! They offer a STEM education major and 'Many have chosen to mentor younger STEM-inclined students of either gender, both formally and informally.' Awesome :)"
 —@Sharkhugger
 (Hannah Medd '02)



LEEDING THE WAY

In January, the Rochester School, led by **JUAN PABLO ALJURE '09** M.S. and featured in the spring 2013 issue of *Florida Tech Today*, achieved LEED Gold certification by the U.S. Green Building Council. The school is the first in Latin America to earn the distinction.

HOMETOWN HOCKEY

"As a donor to FIT (through fundraising drives on WFIT), I recently received a copy of *Florida Tech Today* and discovered (somewhat to my surprise) while thumbing through the issue that Florida Tech has a hockey team! Coming from Canada as we do, this pricked my wife's and my curiosity. So I am writing to ask if you'd be kind enough to send us what information you may have about FIT's hockey programme. Specifically, when and where does the team play?"
 —Tony Hillman

Editor's Note: For detailed information about Florida Tech's hockey team, including news, rosters and game schedules, visit <http://hockey.fit.edu>.

THE ONE-PERCENT

In the fall of 1968, women were the 1% at Florida Tech.
GENE BLAETTLER '72, management science, sent us the stats: "1,200 full-time students, 12 girls (the Dirty Dozen on the second floor of Brownlie Hall)."



STUDENTS LIVE TO INSPIRE

Chatting over lunch last fall, sophomores **JORDAN SAMUELS** and **CURTIS MARSH** discovered they were working on similar projects—preparing video testimonials about their FIT experience to share with potential students in their native Jamaica. The two decided to combine forces and, in the process, launched a campuswide movement of inspiration that was publicly endorsed by **PRESIDENT ANTHONY J. CATANESE**.

“We were saying, why just one video? Why not make this a continuous thing and send more and more inspirational videos back home to inspire people? We also expanded it to the university,” said Marsh, an aerospace engineering major.

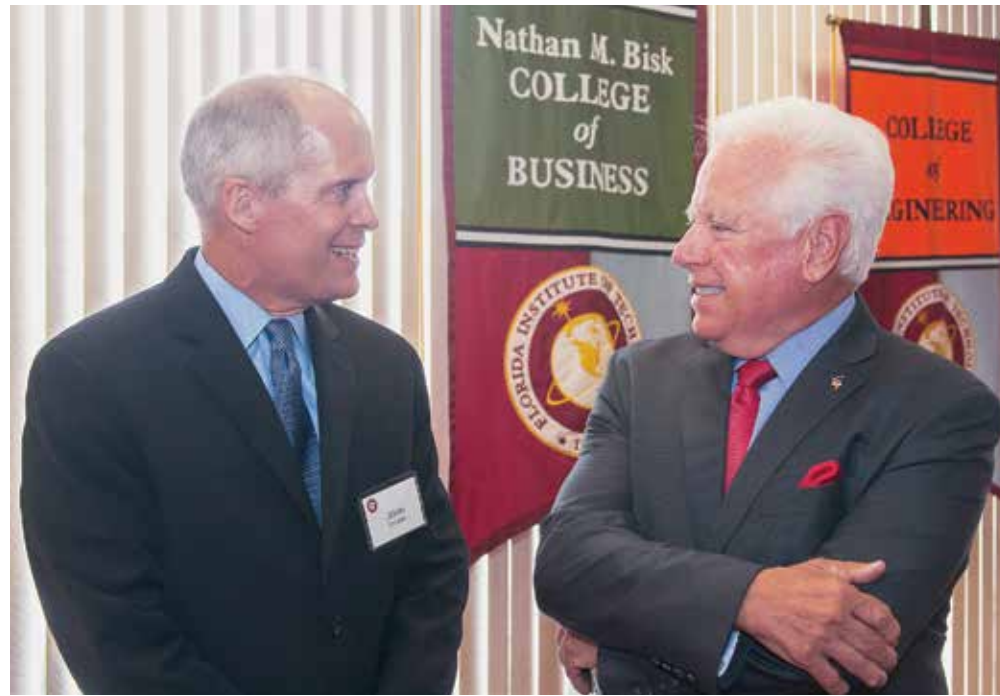
One video blossomed into a series and two students expanded into 30.

The group produces and shares inspirational videos through social media about the role of faith in their lives. Their positivity was contagious.

“It started to catch people’s attention all around campus. People would see our shirts and request [their own]. So now we sell shirts as well,” said Samuels, an aeronautical science major.

Going forward, Samuels and Marsh plan to develop more projects to inspire young people and expand their line of Live to Inspire merchandise so other students can be associated with the movement.

—Christena Callahan



“Manufacturers want people who understand all aspects of smart, connected product design to help them make smarter decisions to build better products.”

—John Stuart, senior vice president, global education, PTC, pictured with President Catanesse

PTC’s leadership gift to the Create the Future campaign is valued at \$24.1 million.

This gift will foster collaborative educational experiences between Florida Tech’s Nathan M. Bisk College of Business and the College of Engineering.

PTC donated PTC Windchill® software for product lifestyle management process requirements and PTC Creo® software for CAD design to provide an environment for students to design, test and simulate the entire lifecycle associated with bringing new products to market. The PTC donation will form the core of Florida Tech’s Center for Lifecycle and Innovation Management and will be integrated into the management information systems curriculum.

Additionally, PTC is providing 20 scholarships for students who want to develop expertise in PTC Creo and PTC Windchill business and system administration.

Photo gallery at today.fit.edu



The Slosh Effect

The “SPHERES Slosh” study, designed by Florida Tech scientists, NASA’s Kennedy Space Center engineers and researchers at MIT, is dedicated to providing benchmark data of liquid slosh behavior in microgravity from simulated upper-stage maneuvers.

Since their arrival at the International Space Station in February aboard the Orbital-1 cargo resupply mission, ISS astronauts have successfully assembled and verified the experimental rig, pictured below, which is comprised of two soccer-ball-sized SPHERES robots, in red and blue, attached to opposite ends of a metal frame holding a transparent tank with green-colored water. Experiments and data collection during the science sessions are coordinated in real time from the control room within Florida Tech’s Aerospace Systems

And Propulsion (ASAP) Laboratory. The data collected from this experiment will ultimately be used for improved mission planning in orbital missions and to design safer and more efficient launch vehicles and spacecraft. “We are very excited to be operating Florida Tech’s first experiment on the ISS from the ASAP Laboratory. It has also provided excellent research opportunities to several of our students,” said **HECTOR GUTIERREZ**, a Florida Tech principal investigator and co-director of the ASAP Laboratory.

Student participation included mechanical design and fabrication of the experimental rig, electrical and electronic design of the avionics payload that connects Florida Tech’s experiment to MIT’s SPHERES robots, software development for the corresponding hardware platforms during the experiment, development of simulations (both kinematic and fluid dynamics), development of test plans (both for ground testing and ISS operations), and preparation of documentation.

—CC



NASA



UNCOMMON THREADS

At this year’s annual textiles symposium Uncommon Threads: Tying the Knot, held at the Ruth Funk Center for Textile Arts, guests enjoyed a champagne reception, luncheon, silent auction and an unforgettable presentation, “Wedding in Red, Tying the Knot in Traditional China,” by internationally recognized curator and scholar John Vollmer.

Vollmer is a scholar in the fields of Asian art and textiles who has acted as project manager and exhibit planner for major international exhibitions. In addition to specialized work with collections of textiles and decorative arts, his Vollmer Cultural Consultants Inc. specializes in strategic planning and practical program development for not-for-profit, public and private sector clients in the fields of museum education and arts and culture in the U.S., Canada and Asia.

Enriching Research

SIMULATING ESTUARY STORM SURGE

Funded by a NOAA grant of \$453,144 over three years, **STEVEN LAZARUS** and **ROBERT WEAVER**, marine and environmental systems, will work with the local National Weather Service Forecast Office and National Centers for Environmental Prediction to improve local hydrodynamic model simulations for estuaries, lagoons and similar bodies of water in an effort to expand the scope of high impact weather forecasts.



ILLUSTRATING LIGHTNING’S INCEPTION

NINGYU LIU, **JOSEPH DWYER** and **HAMID RASSOUL**, physics and space sciences, will continue their long-established lightning research under a National Science Foundation grant of \$566,732 over four years. The work will center on developing an efficient, fully three-dimensional and physics-based lightning model designed to reveal the mystery of lightning initiation and propagation.

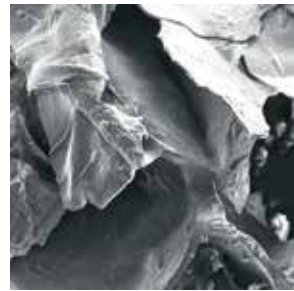


STUDYING ALGAE SUPERBLOOM

Professors **JOHN H. TREFRY** and **ASHOK PANDIT**, in collaboration with Jonathan B. Martin of the University of Florida, were awarded a contract for \$865,000 from the St. Johns River Water Management District for sediment and groundwater studies in the Indian River Lagoon. The group will investigate inputs of the nutrient elements nitrogen and phosphorus to the lagoon via the sediments.

PRESTIGIOUS NSF SITE IN MATHEMATICS

UGUR ABDULLA, newly appointed head of mathematical sciences, was awarded a \$258,667 NSF grant to establish a Research Experience for Undergraduates (REU) Site on Partial Differential Equations and Dynamical Systems at Florida Tech. Each summer, from 2014 to 2016, nine selected students from various U.S. universities will participate in innovative research, while applying modern tools of mathematical and numerical analysis.



EXTREME CLOSE-UP

Under 750x magnification, it's not hard to see the crunch factor in one of Florida Tech's favorite breakfast cereals. **CINNAMON TOAST CRUNCH** (above). The university's newest scanning electron microscope, housed in the Link Building, can create images of details much smaller than a standard light microscope and employs X-ray analysis to reveal the elements making up the sample. To read more about the process behind the pictures, go to today.fit.edu.



ONLINE EXTRA



Middle: Scales from wings of a moth
Bottom: Coral skeleton, which once lived in Panther Dining Hall aquarium. L. Holly Sweat photos

Vero's Lifelong Learning

When it comes to Brevard County's southern neighbor, Indian River County, pristine coastal waters, uncrowded county beaches and the beauty and serenity of the Indian River Lagoon are the cornerstones of recreational activities for residents and visitors. Just like neighbors to their north, Indian River County residents have become increasingly concerned about the health of this precious natural resource.

This concern, and a desire to learn more about the science behind restoring the health of Florida's water ways drew Vero Beach residents to Florida Tech's recent Lifelong Scholar Society presentations at the Disney Vero Beach Resort. The Vero series of four lectures is an offshoot of Florida Tech's Lifelong Scholar Society, which offers intellectually stimulating educational experiences to residents and visitors.

The Vero Beach series featured four events led by faculty whose scientific research and expertise informs the issues affecting the Indian River Lagoon. Renowned scientist, author and angler **AARON ADAMS** drew anglers as well as conservationists to his presentation on *Using Science to Enhance Sport Fishing*. Adams is a research associate professor of biological sciences at FIT and director of the nonprofit, science-based Bonefish and Tarpon Trust.

Fishing informs Adams' science. He studies the behavior of bonefish in the Bahamas and as an angler, he advises his guests to "think like a fish—understand their life cycle." As the inflow of water and the plankton blooms produced by fertilizer runoff kill sea grass, the habitat for the juvenile snook's food source is degraded. As the fish go, so goes the lagoon.

Today's problems in the Indian River Lagoon have evolved through a complex set of interrelated issues that have led to the decline of lagoon health. "The framing of the problems and the solutions must be informed by science," he emphasized. "Science informs policy."

The other faculty who presented at the Vero Beach Lifelong Scholar Society included **RICHARD ARONSON**, head of the biological sciences department; **JONATHAN SHENKER**, professor of biological sciences; and **JUNDA LIN**, professor of biological sciences and director of the Institute for Marine Research.

For a list of upcoming programs and more information on the Lifelong Scholar Society in Melbourne or Vero Beach, visit www.fit.edu/lifelong-scholar-society.

—Sara Smith



VERO BEACH MARINE LAB

Aaron Adams is based out of the Vero Beach Marine Lab, which is a unique waterfront facility for residents of Indian River County who wish to learn more about their area's water resources. The 4-acre oceanfront site provides access to some of the purest seawater of any southeastern marine research center.

An envisioned refurbishment of the lab will provide research opportunities unmatched by any other marine research facility in the southeast United States. The center will include a 20,000-sq-ft research building, an advanced instrumentation tower, indoor and outdoor marine tank arrays, a mesocosm facility, and an education and outreach center. It will produce the highest quality research in aquaculture, fisheries, marine biology and biological oceanography.

Spring Events

- Chopper Dropper**
1,300 attendees, 152 golfers
Grossed **\$500,000** for athletic scholarships, supports **22** sports, **550** student-athletes.
- Evening of Hope**
350+ attendees, **1,000 WISHES** (DAYS OF SCHOLARSHIP/SERVICES)
Grossed **\$300,000**
- Botanical Fest**
6,000 visitors, 115 volunteers
11,997 plants for sale. Will be celebrating 10th anniversary in 2015
- International Fest**
2,000 visitors, 21 cultural displays
8 food vendors, **20** performances

ONLINE EXTRA VISIT TODAY.FIT.EDU FOR PHOTO GALLERIES OF THESE EVENTS

STUDENT ORG SPOTLIGHT:

Student Investment Club

Novice investors interested in exploring investment methods and market strategies can find a home with the newly formed Student Investment Club,

which meets weekly to enjoy presentations, discussions and real-world investing.

The club manages a brokerage account of \$5,000 and aims to beat the returns of the S&P 500 each semester. So far, earnings have remained in the account.

"Of course, we may consider pulling some money out when we have returned enough to

purchase the College of Business a new building," says **JOHN KINNEY**, club president.

An inactive operation of the Nathan M. Bisk College of Business for the last five years, the club gained momentum and official student org status this semester thanks to Kinney's efforts. Membership is open to all majors, and many students join with little to no knowledge of the market at their first meeting.

"The best thing about the Student Investment Club is the ability to experience capitalism and

business firsthand. We have the freedom and ability to invest real money and purchase shares in real companies," says Kinney.

His advice to inexperienced investors: only invest money after doing the proper research. "You need to have the confidence in the investments you make to be confident your decisions will be profitable."

Find the Student Investment Club on Mondays at 6 p.m. at Florida Tech's Student Business Incubator.

—CC



PIKE LEADERSHIP SUMMIT

Florida Tech's Pi Kappa Alpha chapter sent 18 men to the PIKE University Leadership Summit in Atlanta in February. Five brothers earned Garnet-level certification for participation in three events. Also, the chapter was recognized for 100 percent participation in the Phi Phi Kappa Alpha Club, which funds the chapter's PIKE University Scholarship Fund, and awarded most man miles of all chapters present, signifying the total distance traveled to attend the summit. See additional PIKE coverage on page 33.

SUMMER CAMP HQ

Florida Tech offers more than 30 summer camps for kids ages 3 to 18. From aviation to engineering and soccer to sculpture, camp offerings are available in academics, arts and sports. Learn more at camps.fit.edu.



OUT OF THIS WORLD

Florida Tech professor **ERIC PERLMAN** was the lead investigator on the recent Hubble observations of spiral galaxy NGC 5793, which is over 150 million light-years away and has, at its center, a supermassive black hole billions of times the size of the sun. Read more at <http://bit.ly/QBQQJ>.

CREATIVE WRITING INSTITUTE

Author John Dufresne headlined Florida Tech's Creative Writing Institute and filled a classroom for his novel writing workshop. Poetess Terri Witek, nonfiction writer Ira Sukrungruang and essayist Audrey Colombe filled out the faculty roster. Held at the Foosaner, the institute featured author readings, open mic nights and a keynote delivered by Dufresne.

"Is Life Like This? How To Write the First Draft of Your Novel in Six Months ..."

ONLINE EXTRA

Go to today.fit.edu to read an attendee's story from the Creative Writing Institute event.

Oceans of Opportunity

Richard "Dick" and Mary "Jane" Schnoor were the kind of people who moved through life in a quiet, gentle manner. They were members of the Cocoa Beach Sail and Power Squadron and attended lectures given annually by Florida Tech professor and head of the department of marine and environmental systems (DMES) **GEORGE MAUL**.

"I would see them there every year," Maul recalls, "and so I invited them to the DMES lectures on campus. They started coming to those and pretty soon were getting to know the students. When we held receptions the evening before graduation, Jane would show up with a plate of cookies to share."

So began the Schnoors' friendship with Florida Tech.

The Schnoors had a lifelong interest in marine science, sailing and environmental issues. They moved to Florida where Dick worked at NASA from 1964 to his retirement in 1986. Jane taught and worked as a guidance counselor at Cocoa Beach High School. They traveled around the world but did so simply, staying in hostels and enjoying a modest lifestyle. Both were commodores at the Cocoa Beach Sail and Power Squadron, and they both had been elected to national office.



Dick and Jane Schnoor

When Dick passed away in 2011, Jane wanted to do something for the students at Florida Tech, so she worked with the Power Squadron to establish the Cocoa Beach Sail and Power Squadron Richard

H. Schnoor Memorial Undergraduate Scholarship, which has been awarded annually to a rising DMES senior.

When Jane passed away in August 2013, her name was added to the scholarship as well as a much broader gift. In their trust, the couple left Florida Tech a bequest totaling more than \$1 million to establish The Mary Jane and Richard H. Schnoor Fellowship in Atmospheric and Marine Science. The bequest will establish an endowed fund that will support graduate students every year in perpetuity.

"There are substantially fewer scholarships available for graduate students, especially at the master's level," said Maul. "This was really needed and will encourage more work to be done in the fields of oceanography and marine science."

As befits the Schnoors modest way, Maul recalls they said very little about the planned gift—though Jane did confirm the legacy gift over coffee one afternoon with **SHELLEY JOHNSON**, director of development. Johnson was delighted to be able to convey the university's gratitude.

"The magnitude of the gift reflects how strongly the Schnoors felt about the work being done at Florida Tech," she said. "Year after year the earnings from the endowment will fund graduate fellowships. Since the original gift is never spent, the Schnoors' legacy to Florida Tech will benefit talented students for generations to come."

The couple's estate plan included contributions to a number of schools, including New York University, Cornell University, the University of Dayton and St. Louis University.

But Florida Tech, distinguished among the other recipients by not being one of the Schnoors' alma maters, had a special place in their hearts.

"Jane believed in finding solutions to environmental issues now and in the future," said Johnson. "Marine science was something that was in their soul."

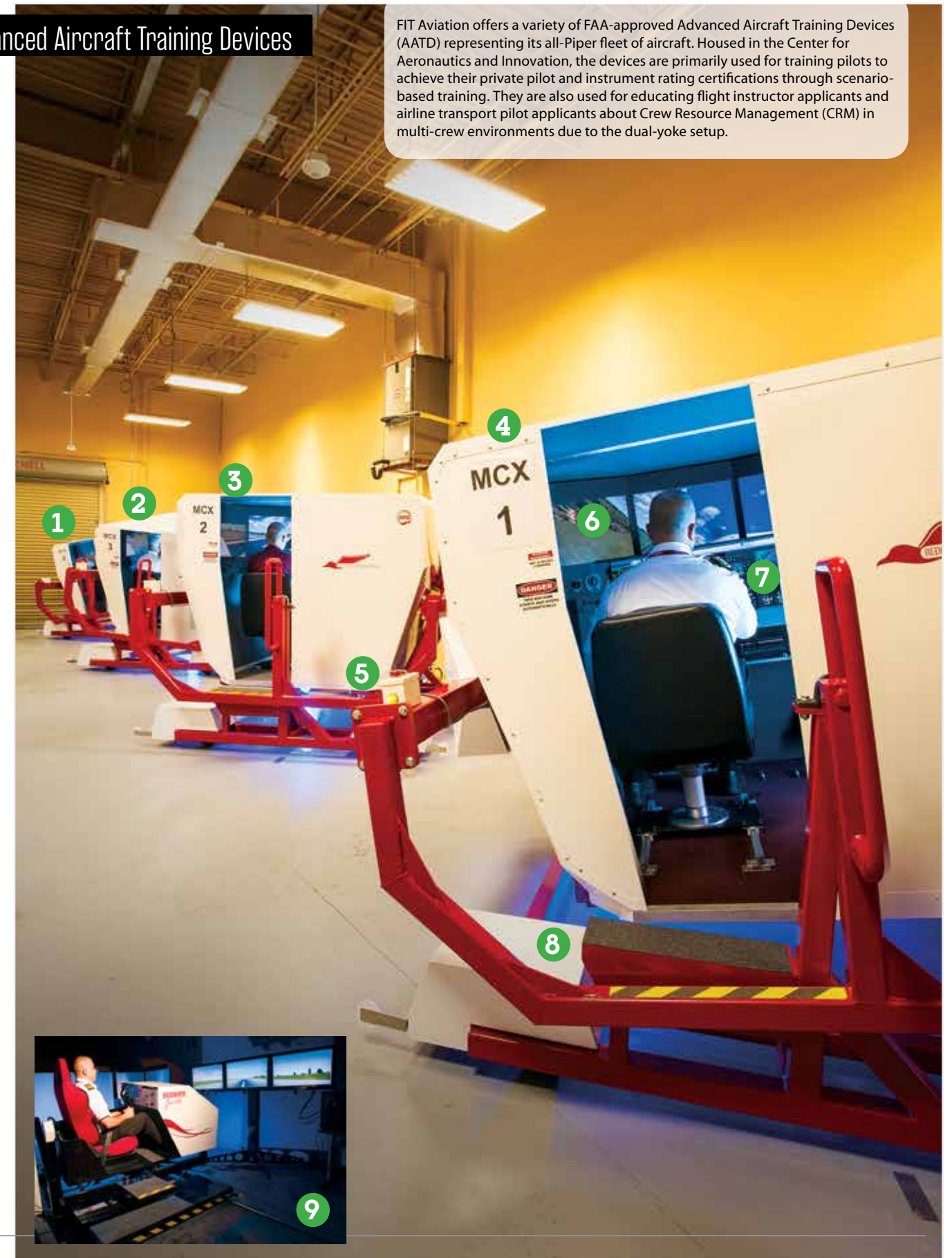
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Behind the Scenes Advanced Aircraft Training Devices

The Redbird MCX can simulate a variety of flight scenarios, such as:

- 1 **Traffic avoidance:** During this maneuver, the final approach of an aircraft to a runway is discontinued by adding power, reducing drag by reconfiguring the aircraft and pitching up to climb to a safe altitude.
- 2 **Stall:** During a stall, an aircraft gets beyond its aerodynamics capabilities. Pilots must learn to recover from such situations.
- 3 **Takeoff:** During takeoff, the aircraft is lined up with the runway, preferably into the wind to depart the airport.
- 4 **Ground reference maneuvers:** These maneuvers require precision while flying close to the ground. A pilot is required to fly an equidistant circle at a specific altitude and airspeed around a spot on the ground.
- 5 Among many safety features, there is an emergency shut-off button outside as well as inside the cockpit to disable the motion platform.
- 6 +200° wrap around visual with a worldwide database.
- 7 **Quick-change cockpit configuration:** three aircraft-specific instrument panels for each simulator. Only takes four thumb-screws and about five minutes to change from one aircraft type to another. The device is also capable of simulating multiengine aircraft.
- 8 The electric motion platform on the Redbird MCX is the most sophisticated in its class capable of providing critical motion cues by being able to pitch up and down by 25°, roll left and right by 20° and yaw by 30°, including a two-axis control-loading system and dual rudders.
- 9 Another of FIT Aviation's training devices is the Redbird XWind crosswind landing trainer, which prepares pilots for landing in difficult crosswind conditions.

FIT Aviation offers a variety of FAA-approved Advanced Aircraft Training Devices (AATD) representing its all-Piper fleet of aircraft. Housed in the Center for Aeronautics and Innovation, the devices are primarily used for training pilots to achieve their private pilot and instrument rating certifications through scenario-based training. They are also used for educating flight instructor applicants and airline transport pilot applicants about Crew Resource Management (CRM) in multi-crew environments due to the dual-yoke setup.



BEYOND THE SEARCH ENGINE

Massive open online courses (MOOCs), the new it-thing in higher education, broadcast free, open access course work to an unlimited community of online learners. For Florida Tech, the concept is both alien—an FIT classroom of 500 or more students!—and intrinsic—educational innovation and research leadership. This intrinsic focus is especially true of the university's first foray into MOOC making, Mastering Academic Research: Information Skills for Successful Students.

The course is designed to help students worldwide find, evaluate and use information efficiently, effectively and ethically for their academic work—in essence, to go beyond the search engine.

“What librarians and instructors want students to know is that those thousands of Google results may not represent the best information available on a topic, and may not encompass the broad, cross-disciplinary scope of research being done in a particular field,” says **ROSE PETRALIA**, Evans Library instruction librarian and one of six FIT MOOC facilitators. “Our MOOC will provide a great set of resources and strategies for researchers regardless of their location or academic status, whether they can access university library resources or not, and it’s offered by FIT, a top university focused on research. We feel like the MOOC platform lets us fill a gap in research instruction and jump into something exciting at the same time.”

The course runs June 23 through Aug. 3 and can be found at <https://learn.canvas.net/enroll/ETKXR9>

—CC



EXPERT ADVICE:

Find Human-Centered Design in Your Pocket and Kitchen

Human-centered design is a seemingly straightforward concept that can be very challenging to execute. Often at work in the development of aircraft and spacecraft cockpits, control rooms and other facets of 21st century life, the discipline focuses on three key elements: technology, organization and people—known as the TOP Model. Even among our personal possessions and household goods are items that embody this synergy between technology, organization and people, according to University Professor **GUY A. BOY**, director of Florida Tech's graduate programs in human-centered design and the Human-Centered Design Institute (HCDi). Here's a look at two examples:

THE IPHONE:

The iPhone is a great example of a human-centered product. It is easy to use; operations are easy to learn and remember; human errors are easy to correct or are automatically corrected; and it is fun. It is clear that usability and usefulness were major considerations during the design process, which translates to a great user experience. In addition, the iPhone embodies human-centered design in the sense that this software- and network-based device becomes transparent in the people-to-people relationship.

THE WINEGLASS:

HCDi research and innovation are often focused on exploring an object's properties. The wineglass is a good example. Tasting a good wine deserves a well-designed glass that embodies various attributes such as texture, grasp, transparency and aesthetics. In other words, a good glass should be able to provide a good wine-tasting experience by enabling people to talk about wine while they are smelling it, drinking it and enjoying it.

—Adam Lowenstein



Building a Wall

Florida Tech construction management students teamed with Harris Corp. employees on a Habitat for Humanity build that began on campus in February. After framing the walls in the parking lot behind the Florida Tech Commons building, the structure was transported to a prepared building site in Melbourne for completion and a wall-raising ceremony. Watch a video recap of the event at <http://bit.ly/PxoLC9>.

Hybrid Rocket Team Flies High



The majority of the 20-plus members of the FIT Student Rocket Society were freshmen, making this the youngest and least experienced team in eight years. But when the smoke cleared, the FIT Max Team secured first place at the Florida Space Grant Consortium Northeast Florida Association of Rocketry annual Hybrid Rocket Competition, while the FIT Precision Team took second place in their division. The results are based on points for the launch of the rockets and the points awarded for notebooks, team built rockets and motors and deducted for status reports. There were teams representing nine Florida universities at the event.

Compost Commune

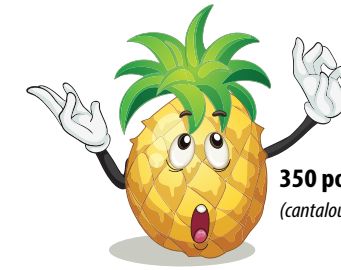


Nestled deep in the Botanical Garden, you'll find the newest residence hall on campus—the worm house. Managed by sustainability studies students, the house facilitates a self-sustaining, highly efficient composting process using worms to break down organic and food waste into excellent soil. The entire process takes just two to three weeks. Read more about it at <http://bit.ly/1l1hERd>.

etc.

PDH by the Numbers

Feeding a campus of nearly 5,000 calls for some serious sustenance. In a typical day, Panther Dining Hall prepares:



350 pounds of fresh-cut fruit (cantaloupe, pineapple and honeydew)



240 pounds (6 cases) of bananas



25 pounds of shredded cheese



80 pounds of Romaine lettuce

Snow Day

Our northern neighbors don't have all the winter fun! In March, the Campus Activities Board asked, “Do you want to build a snowman?” and trucked in seven tons of snow to the field behind the Florida Tech Commons building. Olaf approved.





Far left: 1962 Commencement ceremony program signed by Astronaut Virgil "Gus" Grissom

Left: Basketball used in the basketball team's first victory—a three-point win against Stetson University in January 1967.

"The library has been working hard to find a way to document Florida Tech's history and to preserve university records for generations to come."

Sohair Wastawy, Dean of Libraries

Vision Extraordinaire

In April, Evans Library unveiled the long-anticipated university archive exhibition room with the debut exhibit, Vision Extraordinaire: The History of Florida Institute of Technology. On view are artifacts and documents from the university's most important moments over the past 55 years, including stories about the university's visionaries.

There's the basketball used in the basketball team's first victory—a three-point win against Stetson University in January 1967. There's a program from the 1962 commencement ceremony at what was then called Brevard Engineering College signed by astronaut Gus Grissom, the keynote speaker. There are railroad relics reflecting how, from 1912 to 1919, the Union Cypress Company Railroad carried cypress logs from swamps through what became Florida Tech's campus on its way to the sawmill in Melbourne.

The opening of the exhibit and display space will also mark the launch of Florida Tech's digital Historical Timeline project. Viewable at the exhibit and online at timeline.fit.edu, this component will highlight the university's most important moments since its founding in 1958.

"We are thrilled that our inaugural exhibit and digital timeline reflect Florida Tech's own powerful blend of modern technology and more traditional educational approaches," said Dean of Libraries **SOHAIR WASTAWY**.



ARCHIVE NAMING REVEALED AT EMERITI RECEPTION

President Catanese announced the official name of the new archive room, Harry P. Weber University Archives, at a faculty emeriti reception held in April. Those in attendance included front row, L to R: Jean Sparks, Charles Helmstetter, John Patton, Lynn Edward Weaver, Anthony J. Catanese, Roger Manley, John Morris, Wendy Helmstetter, Harry P. Weber. back row, L to R: Gary Wells, Richard Enstice, Arthur Gutman, Nathaniel Villaire, Debra Blenis, Michael Babich, Russell Weigel, Palmer Stiles, Andrew W. Revay Jr., Robert Frank and N. Thomas Stephens.



ONE BIG QUESTION with Richard Ford

Can We Have Privacy and Security?

To me, one of the most complicated issues of our time is the way in which the Internet gives us access to information and gives others access to information about us.

It's hard to find anyone who hasn't heard of Edward Snowden and the revelations he has made over the last couple of years. The computer—and by extension, the Internet—should force us to re-evaluate everything we thought we knew about privacy, but in many ways, the topic has gone unexplored. We talk about Google, or the NSA, or Facebook, but typically just on the surface level; however, these are complex issues that deserve our full attention.

Concepts of liberty and privacy are deeply held, but also deeply cultural: how I view privacy depends in part on where I grew up. As a transplant to America (I grew up in the UK), my vision of the typical American's worldview when I got here was a stereotype of a kind: live free or die! Thus, when Snowden's leaks started to hit the front page of newspapers around the world I expected a massive public outcry; what I saw was a shrug and a whimper. If I'm honest, I'm still not sure I quite understand why.

In many instances, security and privacy are treated as opposing poles: you can have one or the other, not both. That's a false dichotomy—both are important, and my students, colleagues and I are smart enough and eager enough to explore clever ways not to claim one at the cost of the other. For example, can we design privacy into protocols, making them better able to resist pervasive monitoring not by encryption but by targeted uncertainty? It's an open question, but an interesting avenue of research.

One of the things I tell my students is that they control the future; they control, in many ways, the emerging ideas of privacy and how we will either accept or reject wide-scale government monitoring in the name of law enforcement or security. Today's students build the world of tomorrow, and if they don't like what they get, well, they need to look in the mirror. Security or privacy? I say both and ask all of us as a society to get informed on the issues that we must face as we look to the future.

Richard Ford, Ph.D., is the head of Florida Tech's department of computer science and cybersecurity and the Harris Professor for Computer Science in Assured Information. He earned his doctoral degree in semiconductor physics from The Queen's College, University of Oxford, England.



Lee Stange: A Life Dedicated to the National Pastime

Pitching coach is wrapping up his ninth season on Florida Tech's coaching staff

For the past nine seasons, the Florida Tech Panthers have had someone with a wealth of experience in professional baseball roaming their dugout and working with pitchers. That person is pitching coach Lee Stange, who picked up the game growing up in Chicago.

"Back in my day, we did not have Little League," Stange said. "Most of the time it was just the kids playing together. I had a field about a block away from



Lee Stange with Panthers' head baseball coach Greg Berkemeier.

my house, and we were always playing baseball in the summer."

After finishing high school, Stange, 77, went to Drake University to play football. A knee injury his freshman season

ended his football career, but it did not end his dream of being a professional athlete.

"Two years later, I called a scout (Washington Senators scout Ossie Bluege) who saw me play baseball in high school, and I said I wanted to play ball. He sent me a contract for \$200 a month (to play) in Fort Walton Beach, Fla."

Fort Walton Beach was a Class D minor league team for the Washington Senators in the Alabama-Florida League. After a few seasons in the minors, Stange made his major league debut on April 15, 1961, not as a Senator, but with the Minnesota Twins. The Senators had left Washington, D.C., after the previous season and became the Twins. He pitched one inning out of the bullpen in his first of what ended up being 359 career appearances.

He holds the distinction of being one of just 67 major league pitchers to record four strikeouts in an inning. He finished his career with a 62-61 record and a 3.56 ERA. He threw a total of 1,216 innings for four teams over 10 years. He pitched his final game on Sept. 21, 1970, with the Chicago White Sox.



"I was lucky that I got in the big leagues and never had any arm problems," Stange said. "I was traded a couple of times, was lucky enough to get to Boston and be on the possible dream team in 1967. We won the pennant, but lost the seventh game of the World Series to Bob Gibson (and the St. Louis Cardinals)."

Before his playing career was over, Stange began coaching. When the team's bullpen coach had to leave to care for his ailing wife, Stange started serving as a player-coach. He ended up coaching for 11 years in the majors and spent over 20 years in the highest level of professional baseball.

Stange began working with the Panthers as a member of former coach Paul Knight's staff nearly a decade ago, and as with his time in professional baseball, he was energized by working with young players.

"The kids are the most fun, more fun than the big leagues, which is why I am enjoying what I am doing here," he said.

—Eric Gallo

"The kids are the most fun, more fun than the big leagues, which is why I am enjoying what I am doing here."

Lee Stange

PANTHER ATHLETICS

FLORIDATECHSPORTS.COM

The official website of Florida Tech Athletics



PRESIDENT ANTHONY J. CATANESE, DANIELA IACOBELLI '09, the 1981-82 women's varsity four and the 2001-02 women's basketball team were inducted into the Florida Tech Sports Hall of Fame in February.

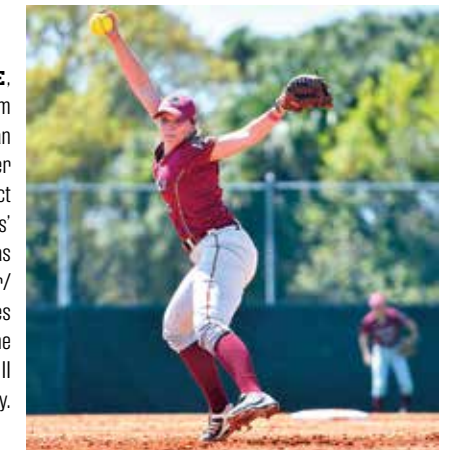


The women's golf team has ranked among the top four teams in NCAA Division II since the 2014 season began. Through March, FIT placed second in two tournaments and third in one tournament out of at least 14 teams.



Head football coach **STEVE ENGLEHART** and **PRESIDENT CATANESE** display their Eastern College Athletic Conference Division II Futures Bowl rings the team received in a ring ceremony in February. The Panthers won the bowl game 32-20 over Alderson Broaddus University in November 2013.

RACHEL PENCE, a freshman from Jacksonville, Fla., began her collegiate career by throwing a perfect game in the Panthers' season opener. She was named Louisville Slugger/National Fastpitch Coaches Association Pitcher of the Week for NCAA Division II in February.



The Triathlon Club finished fourth among Division II schools at the Collegiate National Championships in Tempe, Ariz., in April. Competitors swam 1,500 meters, biked 40 km (24.8 miles) and ran 10 km (6.2 miles). Pictured, from left, are assistant cross country coach and graduate student **CHRIS CACCIAPAGLIA**, cross country runner **JACOB JANSEN** and biology Ph.D. student **WADE DAUBERMAN**.

LAUREN SUAREZ, a freshman from West Palm Beach, Fla., was the first-ever Panther to medal at the Sunshine State Conference Championship, winning bronze in the 100-yard backstroke.



SAM PALACE '09, pictured here as a Panther, was promoted to serve as one of the Washington Nationals' bullpen catchers for the 2014 Major League Baseball season in March.



The women's swimming team earned the College Swimming Coaches Association of America Scholar All-America Award for the fifth straight semester in March. The team combined to average a 3.23 GPA in the fall 2013 semester.

Lagoon Life In Peril

RESEARCHERS FIND NEW SOLUTIONS FOR
THE INDIAN RIVER LAGOON'S WATER WOES

JOHN TREFRY spent a sunlit morning this spring as he has so often during more than three decades as a scientist and teacher at Florida Institute of Technology—on the Indian River Lagoon studying the pollutants that are choking the life out of one of America's natural treasures.

It was not a pretty sight. Dead seagrass floated on the surface, and an algae bloom had turned the water so pea green that even in shallows two feet deep it was impossible to see the bottom. "That was pretty depressing," Trefry said.

Depressing, but hardly surprising. Since 2011, the estuary has been plagued by foul-smelling algae blooms—sometimes toxic—that have closed beaches and killed 47,000 acres of sea grass. Last summer, the mysterious deaths of hundreds of pelicans, dolphins and manatees drew the attention of the *New York Times* and National Public Radio and aroused a passionate response from the public.

The Indian River Lagoon—a 156-mile-long estuary that supports more than 3,500 species of plants and animals, contributes \$3.7 billion annually to Florida's recreation-driven economy and provides 15,000 full- and part-time jobs—faces a health crisis. The question is what to do about it.

FIT has stepped up its efforts to discover the answers by establishing the Indian River Lagoon Research Institute. It brings together nearly two dozen scientists of all stripes—oceanographers and meteorologists, hydrologists and ocean engineers—in a quest to restore the complex ecosystem.

Combined with FIT's extensive network of students and alumni doing lagoon science or working to educate the public through symposiums, films and videos, the institute positions the university to build on its long history of studying what ails the estuary.

KEVIN JOHNSON, an associate professor of oceanography and environmental science, polled fellow members of the institute to see just how much experience FIT has in lagoon science. "Cumulatively, we have 400 and something years," he marveled.

FIT has been engaged in lagoon science since the first alarms about the estuary's health were sounded in the early 1980s at a campus symposium that included scientists from Harbor Branch Oceanographic Institute, the University of Florida, the University of Central Florida and elsewhere.

That symposium inspired **DIANE BARILE**, a 1976 master's graduate and adjunct faculty member, to form the Marine Resources Council, a nonprofit that still fights for a healthier ecosystem. She also led the charge to have the lagoon declared an estuary of national significance, bringing much needed federal money and attention.



Florida Today

Researchers estimate that five to seven million cubic yards of muck blankets the lagoon bottom in Brevard County alone.

The researchers conduct monitoring of critical sites following up with chemical and biological testing for designing and developing solutions to lagoon problems.



Although the Indian River Lagoon Research Institute is just six months old, FIT scientists already have been put to work on three projects worth more than \$1.5 million aimed at getting to the bottom of the issues afflicting the estuary.

Those issues start at the bottom, where thick, gooey muck has been accumulating since the 1950s, a problem Trefry has dogged for decades. He and professor **ASHOK PANDIT**—along with Jonathan B. Martin of the University of Florida—are working on an \$865,000 contract from the St. Johns River Water

Management District to examine how nutrients from the muck and other sources are spurring deadly algae blooms.

More than five million cubic yards of muck is spread over the lagoon, forming what Trefry calls a giant compost pit. His job is to find out how much nitrogen that pit releases into the water. Pandit and Martin are focusing on nutrients that seep in from groundwater carrying fertilizer and effluent from septic tanks.

Collecting and examining this kind of data—and responding to it—is essential to having a thriving lagoon, Trefry argued. “We haven’t put enough time into monitoring the health of the lagoon,” he said. “We just aren’t on top of it enough.”

Closely related to Trefry’s work is a \$250,000 contract—also from St. Johns—issued to Johnson to study why superblooms like the one that fouled the lagoon in 2011 are not kept in check by microscopic animals that ordinarily gorge on algae. A zooplankton ecologist, Johnson wants to find out whether the algae is growing so fast that grazers can’t keep up, or whether they simply don’t eat the type of algae growing and if not, why not.

The final project, a \$453,144 grant issued to institute director **ROBERT WEAVER** and professor of meteorology **STEVEN LAZARUS** by the National Oceanic and Atmospheric Administration, involves developing hydrodynamic

models that simulate the impact on barrier islands and estuaries from tropical storms and hurricanes—among them spreading muck from deep channels to shallow areas.

Weaver, an associate professor of ocean engineering, also is working on a variety of practical solutions to the estuary’s problems. Is it possible to make dredging equipment that pulls muck up from shallow areas without killing seagrass? Would submerged barges of oysters and plants help reduce nutrients that fuel algae blooms? Is there a way to address the reality that the northern lagoon is not cleansed by the tidal flushing seen in the south? If locks at Port Canaveral were opened at high tide, would that generate circulation that flushes pollutants out the Sebastian Inlet?

Weaver sees these kinds of innovations—as well as greater collaboration between scientists at FIT and other agencies and institutions studying the lagoon—as a key to solving the problems of the estuary and other troubled waterways.

“Coastal water quality all over the world is endangered right now,” he pointed out. “I see the Indian River Lagoon Research Institute as a critical testing ground for us to come up with solutions that we can then export to help other communities that are seeing the same problems.”

The institute arrives at a time when the stars seem aligned for change.

The deaths of pelicans, dolphins and manatees—the “charismatic mega-fauna,” as Johnson dryly put it—and the toxic algae blooms that closed beaches in much of the southern lagoon over the summer spurred the public to action.

Last summer, scores of people lined up on the beach in Martin County to spell out SAVE OUR RIVER. This fall, hundreds of citizens spanned causeways during Hands Across the Lagoon to demand that politicians act—reprising a 1990 protest that helped persuade federal officials to designate the estuary that year as one of national significance.

Alumna **ALLISON RANDOLPH** ’13 watched the Martin County protests from San Diego, where she was spending the summer, and decided she had to join the fight to save the estuary she had fallen in love with as a child growing up in South Florida.

The result was “An Estuary’s Story,” a film about the troubles afflicting the St. Lucie River Estuary—and by extension the Indian River Lagoon—that has aired on public television, played in the Beneath the Waves Film Festival, appeared on newspaper websites and been shown on YouTube.

It is an unabashed call to action. “I felt that if someone young, educated, passionate and local, like me, created an educational and motivating piece, that it could be really powerful in keeping that

amazing advocacy momentum going,” Randolph said.

She was not alone in using the power of film to advocate for the lagoon. Recent Ph.D. graduate **LAUREN TOTH** and doctoral student **PHILIP GRAVINESE** teamed up to create “The Indian River Lagoon: What the Muck?!” which explores problems created by the black ooze that is 13 feet deep in parts of the estuary. Their video also was featured at Beneath the Waves, a festival dedicated to educational films about marine issues.

Toth and Gravinese took their advocacy one step further last fall by launching Youth Making Ripples, a spinoff festival that challenges K-through-12 students to make five minute videos about environmental issues. More than 100 films from were submitted from around the nation—the majority from Brevard County—and about half of them focused on the Indian River Lagoon.

The response was inspiring. “There are so many people engaged about this issue,” Toth enthused.

Public advocacy has begun to produce results. In March, Brevard County banned the use of fertilizer in unincorporated areas during the rainy season, a measure scientists believe will have significant impact.

In December, Trefry made the case to state lawmakers for spending \$20 million to dredge muck from the lagoon and provide FIT’s new research institute with financing to monitor the ecosystem’s recovery.

To emphasize his point, he brought each lawmaker a baggie of “Genuine Indian River Lagoon Muck” and warned them not to open it because the foul smell would instantly clear the room.

From long experience, Trefry knows the challenges that lie ahead for the fledgling Indian River Lagoon Research Institute—keeping the public engaged over the long haul and finding the money needed to do real science.

But he also knows that FIT brings scores of allies to the battle—its vast network of graduates engaged in lagoon science, many of them his own students. People like **JOEL STEWARD** ’80, who recently retired after 34 years as an ecologist at the St. Johns River Water Management District, or **RON BROCKMEYER** ’89 and **LAUREN HALL** ’97, who continue to do important science there.

The challenge is daunting, but institute director Weaver reminds Floridians that they need not look far for inspiration. In the 1980s, Tampa Bay’s estuary was in deeper trouble than the lagoon, but scientists, public officials and business leaders pulled together in a concerted effort to restore the waterway.

“Now,” Weaver said, “the water in Tampa Bay is clear again, there is a healthy fish population coming back. That is a real beacon for people to look at.”

—Steve Proctor

S.O. Estuary

5 Things You Can Do To Help

1 Reduce fertilizer use. A single pound of fertilizer will grow more than 500 pounds of algae in the lagoon blocking sunlight to seagrasses, and robbing the water of oxygen, causing fish kills.

2 Send only rain down the storm drain. Keeping pollutants like grass clippings, yard wastes, oils and trash away from storm drains directly impacts the water quality in the lagoon.

3 Pick up after pets. Pet waste left on paved surfaces, lawns or around storm drains and water bodies will eventually reach lagoon or other surface waters after rainstorms.

4 Use native and Florida-friendly plants. These plants need less water and fertilizer to thrive, provide wildlife habitats, and support biodiversity without overwhelming native species.

5 Leave only footprints. During a lagoon visit properly dispose of wrappers, bottles cans, monofilament fishing line, and other trash.

Sourced from St. Johns River Water Management District floridaswater.com

Guiding Principals:

MENTORS PLAY KEY ROLE IN STUDENT SUCCESS AT DESIGN SHOWCASE

The Variable Aspect Ratio Unmanned Aerial Vehicle flies through the air with no onboard pilot. Made of lightweight composites and powered by two lithium polymer batteries, it is controlled remotely by a ground-based operator.

The Formula SAE racecar is a road-hugging power machine with a 600-cubic-centimeter engine. It weighs more than 630 pounds with a driver seated inside.

As different as these two vehicles are, there are similarities: both are projects designed by seniors at Florida Tech's College of Engineering and both were displayed at the annual Northrop Grumman Engineering & Science Student Design Showcase.

And both involve Ken Brace. ▶



“When I was in engineering school, I had a local company help me with my senior project. I just feel it’s a good thing to do the same.”

Ken Brace, owner,
Rapid Prototyping Services

Brace, who owns a small, Satellite Beach, Fla.-based business called Rapid Prototyping Services, provided the body of the UAV and the air intake for the car engine—all at no cost.

More importantly, he was among a handful of private-sector experts who joined university faculty in serving as mentors for these and hundreds of other fledgling student-designers.

“We’ve taken courses, and they teach us a certain amount, but we don’t necessarily see how it applies to the real world,” said **CHADWICK HARVEY**, a senior in aeronautical engineering and team leader on the

UAV project. “The mentors, they are able to guide us, lead us in the right direction, because they know all too well that this is our first time doing something like this.”

DARREN EBANKS, a senior in mechanical engineering and member of the Formula SAE team, agreed.

“It’s such a big jump from just general classes in engineering to actually making the car. There is so much in between, things like manufacturing and stuff like that, that we just haven’t experienced yet,” he said. “It’s really good to have people who can kind of guide us along the way.”

Harvey’s team also had a mentor they never met in person. Christopher Neal, owner of UK-based Merlin Flight Simulation Group, would take performance parameters, control surface sizing, engine power and other data emailed to him, input that in his simulator and basically fly the plane before it ever actually left the ground.

Brace and other industry mentors often serve as showcase judges, which allows them to see the final products they had a hand in helping develop. But it is the time spent with these fledgling engineers and scientists that is most rewarding.

“When I was in engineering school, I had a local company

help me with my senior project. I just feel it’s a good thing to do the same,” he said. “I told them when you get to be my age and a local university contacts you, you just return the favor.”

Another mentor and showcase judge is E. Lee Marcum, a partner and chief research and development officer at Clean and Green Technologies. He has worked with Florida Tech faculty and students since 2006 and helped at this year’s showcase with the Wing Wave Life and Energy System from the College of Engineering ocean engineering program.

“I am proud of our continuing association with FIT,” he said.

—Adam Lowenstein



Left: Ken Brace, with clipboard, listens as members of the Formula SAE team talk about their project during the student design showcase in April. In addition to mentoring several teams, Brace served as a showcase judge.

Above: Team leader Chadwick Harvey, foreground, and team members work on their student design showcase project, an unmanned aerial vehicle that has adjustable-length wings. Mentor Ken Brace helped both Harvey’s team and the Formula SAE team with parts and advice.

Below: Representatives from businesses large and small served as judges for the student showcase, which offered both engineering projects and, shown here, research projects from the College of Science presented as descriptive posters.



In a shared glance, one can tell what the other is thinking ... and what move is about to come next.

Opponents and opposing fans get them confused all the time, even though they're wearing different jersey numbers. Yep, it's a twins thing. And it played out in triplicate this past season in the Florida Tech Athletics Department. While some athletics programs may have one set of twins in their athletics department, Florida Tech had three this past season.

Two
of a
Kind $\times 3 =$



THREE SETS OF TWINS
COMPETE FOR THE PANTHERS

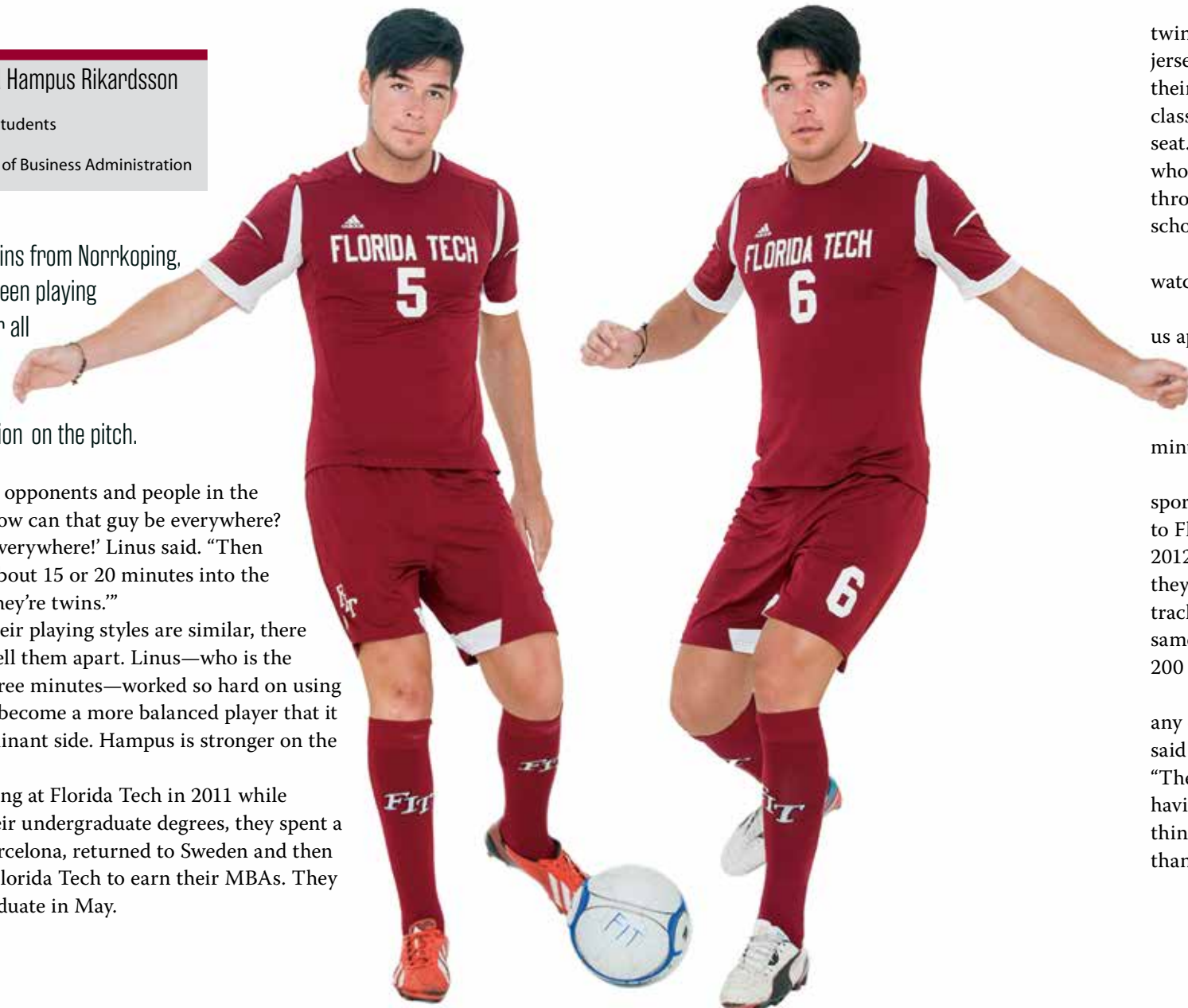
Meet Linus and Hampus Rikardsson
Men's soccer
Year: Graduate students
Ages 24
Majors: Master of Business Administration

The identical twins from Norrkoping, Sweden, have been playing soccer together all of their lives, which has led to some confusion on the pitch.

"I've heard opponents and people in the crowd (say), 'How can that guy be everywhere? He's running everywhere!' Linus said. "Then they find out about 15 or 20 minutes into the game ... 'Oh, they're twins.'"

Though their playing styles are similar, there is one way to tell them apart. Linus—who is the youngest by three minutes—worked so hard on using his left foot to become a more balanced player that it is now his dominant side. Hampus is stronger on the right side.

After playing at Florida Tech in 2011 while working on their undergraduate degrees, they spent a semester in Barcelona, returned to Sweden and then came back to Florida Tech to earn their MBAs. They were set to graduate in May.



Meet Ashley and Alyson Vezina
Women's Soccer and Track & Field
Year: Sophomore
Ages 19
Majors: Ashley—Chemical Engineering;
Alyson—Molecular Biology

When Ashley and Alyson were born, their parents used bracelets to tell them apart.

As kids, the identical twins liked to change soccer jerseys or pull a fast one on their teachers by switching classes and sitting in the same seat. There was one teacher who could not tell them apart through four years of high school.

Perhaps he should have watched them run. "People say they can tell us apart by how we run, but we're not sure what the difference is," said Alyson, who is one minute younger.

Soccer is their main sport, but since coming to Florida Tech for the 2012–13 academic year, they have begun running track and even do the same events—the 100, 200 and 4x100 relay.

"I wouldn't want it any other way," Ashley said of being a twin. "There's something about having a best friend. I don't think you can get any closer than what we are."

"It's definitely really cool to be where we both get our academics and can do the sports that we love."

Ashley Vezina,
who plays two sports for the Panthers
with her sister and identical twin, Alyson



Meet Melissa and Randy Echols

Basketball

Year: Junior

Ages: 21

Majors: Melissa—Applied Behavior Analysis;
Randy—Psychology

From marathon card games where they each tried to be the last one to win to trying to better the other one's accomplishments on the basketball court, Melissa and Randy have always pushed each other.

When they were young, Randy played center and envied how Melissa could hit jumpers from everywhere. That inspired him to work on his perimeter game. When Randy began to dunk in seventh grade, Melissa (older by two minutes) worked until she could grab the rim.

Just don't ask which one is the better shooter.

"We are trying not to argue about this," Melissa said. "We agree to disagree, basically."

Not so fast, her brother chimed in.

"Here's the thing about that ... ever since she went and blatantly told everybody she's a better shooter than me, I've asked her two questions—when have you ever beaten me in a shooting contest, and when are we going to do another one?" he grinned. "She has yet to answer both of those."

—Carl Kotala



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Gleason

NAME A SEAT

Campaign

"We have all been in Gleason at one time or another, and this is a great opportunity to be part of the ongoing improvements on campus. We may not be able to have our name on a building, but we can have our name on a seat. Join me and be part of the 500."

Vic Ross III, Class of 1990
Chair of the Gleason "Name a Seat" Campaign

alumni.fit.edu/gleasonseats

AL-651-812

FROM THE FTAA PRESIDENT

DUANE E. DE FREESE '82 M.S., '88 PH.D.



2014 is a transformational year for the Florida Tech Alumni Association (FTAA) board and the university. In February 2014, the FTAA board approved unanimously a work plan for 2014–2015 that represents a significant shift in how we will begin to communicate with our Panther alumni family, friends and the community. Over the next year, the FTAA board will focus on three primary initiatives: 1. Reach Out and Connect; 2. Lead by Example and Give Back; and 3. Communicate and Share Stories.

Achieving the needed outcomes from these initiatives represent both an opportunity and a challenge for the FTAA board. We will be individually reconnecting with our broad network of alumni, former faculty and friends. Don't wait for us to contact you. We look forward to hearing from you.

We will be supporting the ongoing \$100 million capital campaign through expanded individual gifts from FTAA board members and a new effort from the FTAA board to cultivate gifts from our alumni family.

In addition to supporting President Catanese's capital campaign focus to expand the Florida Tech endowment, the FTAA board will raise \$150,000 to make modest renovations the Florida Tech Alumni House. The goal is to create an improved Alumni House environment that welcomes and better serves students, parents, alumni and friends and one that truly supports our university motto: "High Tech with a Human Touch."

We need your help to achieve this vision. How? Please make a donation to the capital campaign and direct your gift to the Alumni House renovation. Please contact us if you are interested in a major gift and Alumni House naming opportunity. Or simply become a Panther4Life member.

Thank you for your continued support of the FTAA and your alma mater!

Duane E. De Freese '82 M.S., '88 Ph.D.

YOUR ALUMNI ASSOCIATION OFFICERS

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 Penny Vassar '98 MBA | Member-at-Large | Anderson, SC | pvassar@fit.edu
 Chad Shoultz '96 | Member-at-Large | Indialantic, FL | cshoultz@cfl.rr.com

A TRIO OF DISTINGUISHED ALUMNI

Florida Tech's three Jerome P. Keuper Distinguished Alumni Award winners, Dale Dettmer '71 M.S., Rob Phebus '74 and Tom Folliard Jr. '89, together on the Melbourne campus for Folliard's first meeting as a university trustee.



Chapter Socials



DC Area Chapter: April 3 at Blue Jacket Brewery



Orlando Chapter: April 3 at Quantum Leap Winery



Florida Tech Alumni Korea chapter: March 14 at Air Force Club (Seoul)

Seattle



Kim Kraushar '92, Rolando Degracia '87, Amelia Degracia, Billy Jackson '13



President Catanese, John Lally '90



Xerxes Beharry '08, Rogelio Gutierrez '12, Miles Wallio '11, Bryan Evans '10, Jamarus Brooks '10, Shannon Quinn '08

SEATTLE CITY SPOTLIGHT
 Recommended by **Chris Kuntz '89**

Best Restaurants Canlis for special occasions; Matt's in the Market for a casual lunch	Scenic Site Kerry Park, Columbia Tower Observation deck
Must-see attractions Pike Place Market, Space Needle, Seattle Center and EMP Museum, Dale Chihuly Garden and Glass Museum, Ballard/Chittenden Locks, Pioneer Square & the Underground tour, Fremont Troll, Gas Works Park & Alki Beach	Major Employers Microsoft, Boeing, T-Mobile, Amazon, Costco, Nordstrom
	Local Haunt Capitol Hill Bars and Restaurants
	Favorite Coffee Shop Bakery Nouveau
	Get Outside Great hiking at Mt. Rainier, Alki Beach and Rattlesnake Lake

Orlando

Honorable John Antoon '93, President Catanese, Nancy Antoon



Ken Revay, Ken Peach '93



George Morris '79, Bino Campanini

Washington, D.C.



Gonzalo Pita '12, Veronica Castro '13



Bino Campanini, Frank Kinney, Amy Atkinson '00, David Atkinson '00



Richard Lewis '03, Joan Pope



A first-time campus event featuring food, drinks and live music for graduating students, their family members and friends rocked campus on May 2, the eve of Florida Institute of Technology's spring commencement ceremonies. Panther4Life Grad Bash, was sponsored by the Alumni Association, Campus Activities Board and Greek Life, with additional support coming from the Office of the President. It honored the nearly 1,100 graduates and served as a welcome into Florida Tech's Alumni Association.



Andy Kirbach, Alumni Association board member; Bino Campanini; Greg Tsark, vice president for facilities operations and university architect



Dorian Isabelle Magee, Victoria Tann, Katie Schea



Alumni Association board members from left: Marian Dionne, Ameen Sarkees, Henry Gibbs, Rick Horner, Allyn Saunders, Duane De Freese, Pete the Panther, Vic Ross, Kevin Menard



Pikes played a leading role in pre-game tailgating. Among those partaking of hot dogs, hamburgers and drinks under the big top was President Anthony J. Catanese.



Brothers Jim Hughes '74, Carlos Cueto '71 and Joe Caruso '73 in front of the reunion banner. The banner accompanied the group throughout the weekend and was signed by each brother.

A Banner Reunion: Pi Kappa Alpha celebrates 45 years at FIT

The Pi Kappa Alpha Zeta Sigma chapter marked its 45th reunion in conjunction with 2013 Homecoming.

Enthusiastically welcomed back by 67 current-day members were more than 150 alumni, including a dozen men whose fraternity bonds extend back to the chapter's chartering ceremony on March 1, 1968.

The founding fathers, together with the fellows who followed their lead in the years since, met in multiple venues throughout the get-together and participated in a whirlwind of activity that blended the togetherness of fraternal brotherhood with the pageantry of Saturday afternoon intercollegiate football.

Highlights included:

TOM GUTIERREZ, a 1969 pledge who had remained near and dear to chapter hearts for 44 years, despite never attaining active status was inducted into membership during a ceremony Friday afternoon at the Zeta Sigma Chapter House overlooking the Indian River Lagoon.

The 45th Reunion Dinner, held at the Chapter House, was emceed with great gusto by Brother **ED GULA** '01. The dinner was highlighted by the presentation of five awards known as "Ozzies," an honor reserved for brothers who have made, or are making, a difference to Zeta Sigma, to Pi Kappa Alpha and/or to the lives of others.

For many brothers on hand, the occasion marked their first time back on campus since graduation. "It seemed like time stood still for many of us," said **JIM HUGHES** '74, the reunion coordinator who received a plaque bestowing on him the title "Zeta Sigma's Godfather."

Planning already is underway for Zeta Sigma's 50th birthday observance.

Adapted from an article by Doug Lang

During halftime at the football game, the group assembled on the 50-yard-line and received tribute for being FIT's oldest and largest fraternity. (By virtue of having been in continuous operation since founding, the chapter holds the distinction of being No. 1 in Florida in that regard.)



The chapter's float captured first prize in the Homecoming Parade, and Brother Ricky Barbera was named Homecoming King.

(Below) Named after William "Ozzie" Osborne '68, the first in a line of Zeta Sigma presiding officers, the Ozzie awards were presented to James Reeman '89, Ed Gula '01, James Cicardo '00, Brock Tucker '05 and Kevin Menard '97.



View the photo gallery **ONLINE EXTRA**

share your news!
Submit your AlumNotes to alumni@fit.edu

1970s

1972 Time Capsule:
FROM THE FIT ARCHIVES
The university's first off-campus program is launched in Maryland at the request of the U.S. Navy. Today, the program offers course work at 10 locations in five states and via the Virtual Site through the Extended Studies distance learning program.

KARLEN WANNOP '76 retired March 1, 2014, after 36 successful years at Woods Hole Oceanographic Institution. Some of her most remarkable work included being part of the ROV/AUV team that explored the bottom of Mariana's Trench in 2009 and building circuits for the newly renovated submersible Alvin.

1980s

ALAN PRESTWOOD '80 MBA was recently elected to the Health First board of trustees. He is currently the senior vice president of investments with Wells Fargo Advisors in Melbourne. Prestwood is also vice president of the Hosts of Brevard and serves on the boards of the Brevard Neighborhood Development Coalition, the Evans Center and the Florida Tech Alumni Association.



CAMILLE J. IURILLO '80 recently expanded her law practice, Iurillo Law Group, P.A., with two new partners.

The firm has offices in St. Petersburg, Fla., and Portsmouth, NH, and practices in the areas of complex bankruptcy, creditors' rights, business law, business litigation, real estate and personal injury.



ED DONAVON '82 completed his 29th consecutive "Race for the Grasshopper" 5K at the Cowpens National Battlefield in South Carolina, making him the only person who has successfully run in each race since its inception in 1986. Donavon retired in 2011 from teaching ninth grade physical science at the J.F. Byrnes Freshman Academy in Duncan, SC. He is currently an adjunct professor of biology for the University of South Carolina Upstate, located in Spartanburg. He and his wife, Sharon, have lived in upstate South Carolina for 29 years.

1985 Time Capsule:
TOP GROSSING FILM
Back to the Future
GALLON OF GAS
\$1.20

SHEILA JORDAN '89 MBA started her new position as chief information officer at Symantec Corp. in February 2014. She also serves as director for NextSpace, a provider of innovative physical and virtual infrastructure for entrepreneurs, and sits on the CIO Advisory Board for SnapLogic.

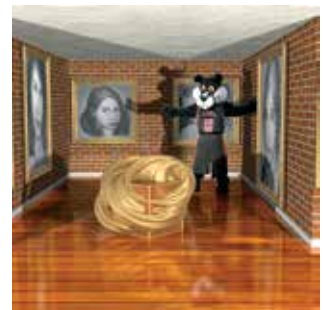


DUANE DE FREESE '82 M.S., '88 Ph.D., FTAA president, just returned in April from a week-long alumni cruise with Sea Education Association out of San Juan, Puerto Rico. De Freese served as an alumni crew member on the 134-foot brigantine, the SSV *Corwith Cramer*. He first sailed with S.E.A. on the RV *Westward* in 1976 as a student and stayed on as volunteer crew. "That blue-water sailing and research experience on a tall ship changed my career path and life-perspective," he says. "Getting a chance to sail again after 38 years was a great experience." A number of FIT alumni have sailed on S.E.A. ships and obtained college credits for their semester at sea. Check out S.E.A. and its programs at <http://www.sea.edu>.



TOM WEST '89 MBA was recently named one of America's top 100 CIOs by IDG Enterprise. He is the president of information technology at Nova Southeastern University and was recognized for his accomplishment at the Premier 100 Awards Program.

1990s



MARK CRAIG '90, '92 M.S., adds Pete the Panther to his skillful work in computer programming. He created this virtual gallery, including his own illustrations on the walls, using a raytracer he wrote years ago. To read more about his interest in

raytracing, including how the topic parallels substitute teaching, visit his blog at <http://mrmcsoftware.wordpress.com>. Other examples of his work are at www.youtube.com/MrMcSoftware, <http://mcssoftware.deviantart.com>, <http://sites.google.com/site/mrmcsoftware> and <http://mcssoftware.deviantart.com/gallery/45684183>.

CLARA BENNETT '91 began her new position as executive director at the Boca Raton Airport in February 2014. She graduated from Florida Tech with a B.S. in aviation management that has led her to over 20 years of experience in aviation and local government.



Head men's soccer coach **ROBIN CHAN** '91 and his wife Ellie welcomed their first child, Christian Edwin Chan, on April 8, 2014. He weighed 8 lbs. and measured 20 inches long.

REBECCA HUPP '92 recently joined the Boise Convention & Visitors Bureau board of trustees. After over 20 years in the aviation industry, she is currently the director of the Boise Airport and serves on the chamber's Travel Industry Advisory Board.

1997 Time Capsule:
TOP TUNE
Candle in the Wine, Elton John
FROM THE FIT ARCHIVES
Florida Tech receives a \$50 million grant from the F.W. Olin Foundation, marking the beginning of transformational changes to the Florida Tech campus. By the end of the decade, the F.W. Olin Engineering Complex and the F.W. Life Sciences Building are completed.



George Leonard, left, with former teammates Tom Folliard Jr. and John Cooper at the 2012 Richmond reception



George Leonard, left, with former teammates Henry Gibbs and John Cooper at a basketball reunion in Virginia Beach.

HAIL TO THE CHIEF: REMEMBERING GEORGE LEONARD

Former Florida Tech standout basketball player **GEORGE LEONARD** died tragically on Sept. 27, 2013, at the age of 50. He was crossing the street in Queens, NY, when he was hit by a car.

George, known by his teammates and friends as "Chief," started his college basketball career at Stonehill College under Coach **TOM FOLIARD**, and when Folliard moved to Florida Tech in 1984 to become head men's basketball coach, George decided to make the move as well.

George, a 6'5" power forward, played for Florida Tech from 1984-1986 and was a key member of the Panthers squad as the team began its rise up the Sunshine State Conference and national ranks. He was a bruising rebounder and inside scorer—a true presence on the court. But his real impact was off the court, where his infectious laughter and smile would light up a room.

He will be missed by all who knew him, but none more so than his three children—Maya, Eli and Jordan. George was a dedicated

father who talked about his children all the time; they were truly the center of his universe.

Over the past 30 years or so, the Florida Tech men's basketball team has enjoyed unprecedented success, and it was George Leonard and his teammates who laid the foundation in the mid-1980s for today's success. The Florida Tech community will not be the same without George Leonard—"Hail to the Chief!"

Kevin Folliard '90



GARRY NEWTON '97 M.S. is deputy commander, the senior civilian position, with Naval Air Systems Command (NAVAIR). He began his career as an industrial engineer at NAVAIR in 1991 and steadily ascended in leadership and responsibility. He was awarded the Navy Civilian Meritorious Service Award in 2002 and the Presidential Rank Award for Meritorious Executive in 2010. He earned a bachelor's degree in industrial engineering from West Virginia University and a

master's in management from Florida Tech's National Capital Region site.

JUSTIN MEYER '99 began his new position as deputy director of marketing and air service development for the Kansas City International Airport and Charles B. Wheeler Downtown Airport in April 2014. He is an FAA Certified Flight Instructor and has presented several topics at AAAE, ACI-NA and Routes events.



YANNICK BIRON '02 joined Valipat, a provider of administrative intellectual property (IP) services, as chief product officer in April. He is responsible for the company's product line, quality control and process optimization, as well as for developing new products for future roll-outs. He also serves on the company's executive committee. A French and European patent attorney, Biron received his

Continued on page 36

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undergraduate degree in aerospace engineering from Florida Tech and a postgraduate degree in innovation and technology management from Toulouse Business School. He is a qualified Lean Six Sigma expert (Black Belt). Prior to joining Valipat, he was secretary of the French Association of Industry Intellectual Property Professionals (ASPI).

2002 Time Capsule:

TOP TECH

Released in fall 2001, Apple had sold 600,000 iPods by the end of 2002.

FROM THE FIT ARCHIVES

Dr. Anthony James Catanese becomes the fourth president of the university.



KARA SMOLAREK '02 and **DAVID WHITTAKER** (current Florida Tech online student) introduced their baby girl, Kailani Grace, into the world on Oct. 1, 2013.



KELLY LONG '05 welcomed her daughter Avery in 2013.

Submit your AlumNotes to alumni@fit.edu



BRANDON ELLIOTT '08, and wife Ali, welcomed Brice Elliott on May 23, 2013. Brice weighed 8 lbs., 9 oz. and was 20 inches long.

2010s

RICHARD HAARS '10 works for Boeing Commercial Airplanes in Seattle as a product review engineer on the 787 program responsible for production test/build verification.

2011 Time Capsule:

IN THE NEWS

The final voyage of the space shuttle Atlantis marked the end of NASA's space shuttle program.

FROM THE FIT ARCHIVES

University merges with Brevard Art Museum; \$1 million gift establishes it as the Foonsaner Art Museum



ANTHONY FREUDE '12 M.S. welcomed sons Anthony and Luke on Nov. 8, 2013. Luke arrived first at 5 lb., 7 oz. and 18 inches, followed by Anthony at 3 lb., 9 oz. and 16 inches long. Keeping it in the Florida Tech family, Uncle **NICK** received his degree in 2006, grandpa **DICK ENSTICE** is faculty emeritus, "baba" **STEPHANIE** has been here almost 17 years, and mom **ANYA** took a summer class.



TAZIA ABDOOL '13 is a seismic data processing engineer with Schlumberger Geosolutions in Houston, TX. She is part of a team that creates high-definition subsurface images of the Earth using seismic data. She has already learned so much on the job and cannot wait to see what comes next.

CAPT. BILLY R. JACKSON

'13 MBA is a company commander in the U.S. Army. He is married with two kids and lives in Washington.

ROBERT KOPP '13 M.S. is a consultant with Ergometrics in Seattle. Using many of the skills he gained in the I/O psychology master's program, he designs high stakes employment tests for public safety organizations.

In Memoriam

ROBERT HAROLD OAS '85 MBA passed away April 19, 2014, following a lengthy battle with cancer. He moved to Brevard County in 1977 and worked for Rockwell Collins until his retirement. He is survived by his wife of over 50 years, Kathy, and many other family members.

ROB SATTERFIELD '05 M.S., ABA online program co-instructor, passed away on March 29, 2014. He is survived by his wife Debbie.

KENNETH W. WATSON SR. '86 MBA passed away Oct. 3, 2013. He retired from Rockwell Collins in 2008 and moved to enjoy his retirement in Madisonville, Tenn. He is survived by his wife Karen and many other family members.



Calling All Panther Cubs!

Congratulations! If you've recently welcomed a Panther Cub to your family, contact us for your free Panther Cub apparel item.

Choose from a **T-shirt, bib** or **onesie**. Then send us a photo of your child in their Panther swag, and an AlumNote about yourself. We will proudly display it in *Florida Tech Today*.

Email hrosskamp@fit.edu for details

2014 Small Business Administration South Florida District Woman-Owned Business of the Year Award Winner

On The Job: Sherry Acanfora-Ruohomaki

K9 Kampus

Acanfora-Ruohomaki is the owner and founder of K9 Kampus, a full-service luxury dog daycare, boarding, grooming and training facility and all-around doggie wonderland in Melbourne. Features include a Lure Chase Course, doggie pool, indoor play area and multilevel outdoor playground.

"I worked for a few highly successful high-tech companies in Silicon Valley and loved every minute of it. When I moved back to Florida, I worked for XL Vision in their business development department, which is a company that created business entities from identifying unmet business needs in various industries. That experience led me to become co-founder of XL TechGroup, the successor of XL Vision and then to open my own consulting company, Facets Consulting Group in which I focused on assisting entrepreneurs realize their own dreams of bringing their technologies to fruition.

Then one day I was contacted by the dean of engineering at FIT and was informed they were the co-recipients of grant from the National Science Foundation with the University of Central Florida in association with UCF's very successful Technology Incubator to start a Technology Accelerator on the campus of FIT. I became the director of operations for the Business Accelerator, Florida TechStart, which provided educational programs and technology boot camps for members of the community that had technology ideas and aspirations to start their own businesses.

During this, I always had a passion for animals and realized an unmet business need for fellow animals lovers. You see

I couldn't find a place I felt comfortable leaving my four-legged family member whether it be for a day, a week or longer. Not that there weren't dog daycare or boarding facilities in the area, I just didn't like the way they operated. I also realized there were no places in our area where people could go with their dogs and just have fun. In 2000, the idea sparked and throughout the years I would perform due diligence until one day I said, 'I am tired of working with the two-legged dogs; I want to work/play with the four-legged furry ones.'

I said it out loud in a kidding manner, but realized if I wanted a fun place for my dog to go to, other people would too. Nine years later, I evaluated how many people/companies I assisted over the years and knew if I didn't attempt to put my dream together I would live to regret it.

I have been asked many times don't you miss doing what you went to school for and I answer that there is not a day that goes by that I don't use every one of my degrees. I run a staff of nearly 25 that includes dog trainers and groomers, and I do everything from payroll, to the website, to marketing, to networking, to maintenance, and more. There is never a dull moment."



DEGREES: '93 B.S. Computer Engineering, '00 B.S. Electrical Engineering, '05 M.S. Industrial/Organizational Psychology; also Executive MBA, University of Central Florida

FAMILY: Husband Davin and daughter Bella Donna, 7

HOBBIES: Muscle cars, karate and spending time with her daughter

FAVORITE FLORIDA TECH MEMORY: Being one of the founding members of Alpha Phi Sorority and then years later becoming its advisor.

LITTLE KNOWN FACT: "Everyone called me Angel when I was in college, but not many people know that I was called Angel because I was a race car driver in drag racing and the name of my car was the Midnight Angel (Bracket Racer 1981 Camaro Z28)."

News from the desk of

Bino Campanini '90, '92 MBA

Vice President for Alumni Relations
and Executive Director, Alumni Association

ON CREATING THE FUTURE ...

As we embark on the most ambitious capital campaign to date, President Catanese cites one definitive objective—"to be one of the 10 most respected private technological universities in the world."

And we are well on our way. Yet, achieving the \$100 million campaign goal is going to require the support of our alumni worldwide as well as friends, corporations and foundations. The Florida Tech Alumni Association (FTAA) board has committed its support and encourages alumni to get personally involved in helping Florida Tech Create the Future.

Historically, the FTAA has not participated so visibly in fundraising activities, but FTAA President Duane De Freese emphasizes the need for the association to work hand in hand with the administration in what is clearly a transformational period at Florida Tech. A major goal outlined at the FTAA

At the March board meeting, FTAA President Duane De Freese presented President Catanese with a check for \$25,000 on behalf of the Florida Tech Alumni Association.

board meeting is to raise \$150,000 to support renovation/upgrades of the Alumni House.

"By providing an enhanced environment that welcomes alumni and students, expanded meeting space, and an outside garden area for impromptu or formal gatherings, the proposed renovations will create an environment that truly serves the growing needs of our university community," said De Freese. "We are asking all FIT alumni to consider making a donation for the Alumni House renovation."

For more information about getting involved, visit <http://CreateTheFuture.fit.edu>.



ON VISITING PANTHERS ...

We are proud of all our alumni around the globe who are enhancing the reputation of our university, and we encourage you to come back and visit us. Recently, federal Judge **CATHARINA HAYNES '83** stopped by the Alumni House. Haynes received the 2014 Florida Tech Award of Distinction as part of the university's annual Women's History Month luncheon. The award recognizes a prominent Florida Tech alumna who has achieved significant accomplishments in her career. Haynes is a circuit judge of the United States Court of Appeals for the Fifth Circuit. In 1980, she enrolled at FIT at just 16 years old and graduated in three years!



Watch the award-winning **Trenton Thunder** when the Alumni Association hosts

"A Night at the Ballpark"
August 5, 2014

Arm and Hammer Park in Trenton, NJ

Enjoy the game and a private reception for alumni. For details, contact Stevie Pursell spursell@fit.edu

ON ALUMNOTES ...

We want to hear from you! Surveys show ALUMNOTES is one of your favorite sections of the magazine, so I encourage you to help us expand it.

Send your news to ALUMNI@FIT.EDU. We will share it with the 60,000+ alumni worldwide!



ON TRADITIONS ...

As most of you know, I was part of Florida Tech's 1988 NCAA II National Championship soccer team, and I still lace up the cleats for the annual alumni game. This year, the younger (and clearly fitter) Panther squad outpaced the alumni on the field. However, after the game, it was good to see the former players still able to hold their own when it came to celebrating being part of a great Panther tradition.



Florida Institute of Technology
High Tech with a Human Touch™

Where is Pete?

You tell us!

Take a photo of **YOU AND PETE** in a unique destination.

Then, email us at pete@fit.edu

or upload to Twitter or Instagram using **#PetePhoto**

Prizes!

Win a Panther Pride Package for the best photo!

AlumNotes

Send us an update about yourself with your photo and we'll include it in the Florida Tech Today AlumNotes.



Florida Institute of Technology

Office of Marketing and Communications
150 W. University Blvd.
Melbourne, Florida 32901-6975



Cheers!

Brevard Engineering College's first commencement ceremony in 1961 honored six graduates. This May, nearly 1,100 students earned their Florida Tech degrees during two ceremonies—a morning session for undergraduates and an afternoon session for graduate students.



In 1980, these three women held an impromptu graduation celebration in front of Gleason Auditorium. Are you in this photo? How did you celebrate your Florida Tech graduation?

Email us at fltechtoday@fit.edu.