Researchers are using AI to fuel aquaculture growth.

Feeding the Future

Researchers are using AI to fuel aquaculture growth.
Welcome to the fall 2023 edition of Florida Atlantic magazine. It is my pleasure to introduce an engaging collection of stories, insights and achievements that capture the spirit of our dynamic university.

This issue includes articles that speak to Florida Atlantic University’s upward trajectory in academic excellence, research innovation and community engagement. By working to expand and enhance these areas, we are building on our commitment to ensure success for all.

As featured on the cover, Florida Atlantic’s aquaculture initiatives through Harbor Branch Oceanographic Institute have developed a revolutionary source for sustainable food solutions using technologies like artificial intelligence and autonomous monitoring. These “smart farms” highlight the responsible ingenuity of our researchers and we are proud to share in this issue their cutting-edge efforts to preserve our oceanic food supply.

Innovators at Florida Atlantic also can be found outside the research labs. With the introduction of Name, Image and Likeness (NIL) opportunities for student-athletes, Owls are ahead in the game when it comes to capitalizing on their athletic abilities. Participating student-athletes join Brian White, FAU’s vice president and director of athletics, to sound off about their strategies and enthusiasm for “NIL in Paradise” in the content ahead.

Florida Atlantic has three ongoing public polling efforts that are contributing to the advancement of scholarship and journalism across the country. Using sophisticated data collection practices, researchers are developing a valuable pool of information about important topics such as economic trends and natural disasters. You can read more about their work in the following pages.

At the Harriet L. Wilkes Honors College, students are forging their own unique paths through exceptional opportunities such as interning with renowned scientists from the Max Planck Florida Institute for Neuroscience, authoring peer-reviewed undergraduate research papers, and winning national and international competitions for academic excellence. I am excited for you to learn more about the top-rated college and its high-caliber students, who are raising the bar for scholarly achievements across disciplines.

With continued support from our outstanding community, the future of Florida Atlantic remains exceedingly bright and full of unparalleled opportunities. I hope you enjoy reading about our most recent achievements and undertakings throughout this issue.

Go Owls!

Stacy Volnick, Ph.D.
President
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BUILDING BRIDGES

FAU's Civil Engineering Connects Communities, Helping Them Thrive

Florida Atlantic’s College of Engineering and Computer Science is a leader in building bridges, both literally and figuratively. A collaboration — which began in 2020 — with the Engineers in Action organization’s Bridge Program has allowed FAU to bridge the gap between its civil engineering students and other countries, by providing footbridges to rural communities previously isolated from commercial centers. The university is just one of a few to be able to do so.

Most recently, seven civil engineering students and alumni from the college traveled to Mkhulamini, Eswatini in Africa to build a footbridge so the Mkhulamini community could have access to the rest of the region.

The Emialeni Mabovini footbridge facilitates the movement of more than 3,700 individuals, connecting them with schools, health care clinics, grocery stores and churches, as well as farmland and residential homesteads. It also allows the Mkhulamini community, which is 70 percent reliant on subsistence agriculture, to travel to sell or trade their products, such as maize, spinach and various livestock — a huge boost to its local economy.

The bridge was completed as part of the college’s senior capstone design class. Frederick Bloetscher, Ph.D., associate dean for undergraduate studies and community outreach in the Department of Civil, Environmental and Geomatics Engineering, oversaw the project.
Florida Atlantic is among 24 schools in the United States, including Duke, Notre Dame, Northwestern, Penn State, Virginia Tech and McGill University, to design and construct bridges. Students cannot travel to any of the sites beforehand, and some situations may be different on the ground than what is expected, posing challenges but also teaching how to be adaptive to things that are uncontrollable.

"We are relatively new to this, but we have built more bridges than some of these bigger schools," Bloetscher said. "Our plan is to continue to build bridges as long as we have interested students and a community willing to help us raise the funds to go."
Engineer The Future

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College of Engineering & Computer Science
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TRIPLE THREAT TO PUBLIC HEALTH

Vibrio Bacteria, Plastic Marine Debris and Sargassum Create a Perfect ‘Pathogen’ Storm

A new study uncovers how the interplay between Sargassum spp, a type of seaweed; plastic marine debris; and Vibrio bacteria has created a perfect “pathogen” storm that has implications for both marine life and public health.

Vibrio bacteria are found in waters around the world and are the dominant cause of death in humans from the marine environment. Since 2011, Sargassum — free-living populations of brown macroalgae — have been rapidly expanding in the Sargasso Sea and other parts of the open ocean. Frequent and unprecedented seaweed washing up on beaches also is occurring. Plastic marine debris, first found in surface waters of the Sargasso Sea, has become a worldwide concern.

Currently, little is known about the ecological relationship of vibrios with Sargassum. Moreover, evidence is lacking to determine whether vibrios colonizing plastic marine debris and Sargassum could potentially infect humans. Because efforts are underway to find innovative solutions to repurpose Sargassum, Florida Atlantic researchers and collaborators wanted to better understand if these substrates could potentially pose a triple threat to public health.

For the study, researchers fully sequenced the genomes of 16 Vibrio cultivars isolated from eel larvae, plastic marine debris, Sargassum, and seawater samples collected from the Caribbean and Sargasso seas of the North Atlantic Ocean. What they discovered is Vibrio pathogens have the unique ability to “stick” to microplastics and that these microbes might just be adapting to plastic.

“Plastic is a new element that’s been introduced into marine environments and has only been around for about 50 years," said Tracy Mincer, Ph.D., assistant professor of biology at FAU’s Harbor Branch Oceanographic Institute and Harriet L. Wilkes Honors College. “Our lab work showed that these Vibrio are extremely aggressive and can seek out and stick to plastic within minutes. We also found that there are attachment factors that microbes use to stick to plastics, and it is the same kind of mechanism that pathogens use.”

The study, published in the journal Water Research, represents the first Vibrio spp. genome assembled from plastic debris. It also highlighted vertebrate pathogen genes closely related to cholera and non-cholera bacterial strains. Testing confirmed pathogenic potential.

“Another interesting thing we discovered is a set of genes called ‘zot’ genes, which causes leaky gut syndrome,” Mincer said. “For instance, if a fish eats a piece of plastic and gets infected by this Vibrio, which then results in a leaky gut and diarrhea, it’s going to release waste nutrients such as nitrogen and phosphate that could stimulate Sargassum growth and other surrounding organisms.”

Findings show some Vibrio spp. in this environment have an “omnivorous” lifestyle targeting both plant and animal hosts in combination with an ability to persist in environments with very low nutrient levels. With increased human-Sargassum-plastic marine debris interactions, associated microbial flora of these substrates could harbor potent opportunistic pathogens. Importantly, some prior cultivation-based data show beached Sargassum appear to harbor high amounts of Vibrio bacteria.

“I don’t think at this point, anyone has really considered these microbes and their capability to cause infections,” Mincer said. “We really want to make the public aware of these associated risks. In particular, caution should be exercised regarding the harvest and processing of Sargassum biomass until the risks are explored more thoroughly.”
Although aging often is accompanied by cognitive decline, a new study should motivate adults to keep moving throughout their lifetime, especially during middle age.

With cognitive decline, among the first structures of the brain affected are the hippocampus and adjacent cortices, areas essential for learning and memory. Deficits in cognitive ability are associated with reduced hippocampal volume and degradation of synaptic connectivity between the hippocampus and the (peri) entorhinal cortex. Increasing evidence suggests that physical activity can delay or prevent these structural and functional reductions in older adults.

Florida Atlantic researchers and collaborators focused on the effects of long-term running on a network of new hippocampal neurons that were generated in adult mice at middle age. What they observed from these “mice on the run” is that running throughout middle age keeps old adult-born neurons wired, which may prevent or delay aging-related memory loss and neurodegeneration.

The findings, published in the journal eNeuro, show long-term running not only promotes the survival of these neurons, but also their integration into a network relevant to the maintenance of memory encoding during aging. Long-term running wires “old” new neurons, born during early adulthood, into a network that is relevant to the maintenance of episodic memory encoding during aging.

“Long-term exercise profoundly benefits the aging brain and may prevent aging-related memory function decline …”

- Henriette van Praag, Ph.D.

Adult-born neurons are thought to contribute to hippocampus-dependent memory function and are believed to be temporarily important, during the so-called...
“critical period” at about three to six weeks of cell age, when they can fleetingly display increased synaptic plasticity. However, these new neurons do remain present for many months, but it was unclear whether those born in early adulthood remain integrated into neural networks and whether their circuitry is modifiable by physical activity in middle age.

Findings also revealed long-term running significantly increased the number of adult-born neurons and enhanced the recruitment of presynaptic (sub)cortical cells to their network.

“Long-term running may enhance pattern separation ability, our ability to distinguish between highly similar events and stimuli, a behavior closely linked to adult neurogenesis, which is among the first to display deficits indicative of age-related memory decline,” said Carmen Vivar, Ph.D., a study collaborator from Centro de Investigacion y de Estudios Avanzados del IPN in Mexico.

Aging-related memory function decline is associated with the degradation of synaptic inputs from the perirhinal and entorhinal cortex onto the hippocampus, brain areas that are essential for pattern separation, and contextual and spatial memory.

“We show that running also substantially increases the back-projection from the dorsal subiculum onto old adult-born granule cells,” van Praag said. “This connectivity may provide navigation-associated information and mediate the long-term running-induced improvement in spatial memory function.”

Running not only rescued perirhinal connectivity but also increased and altered the contribution of the entorhinal cortices to the network of old adult-born neurons.

The study provides insight as to how chronic exercise, beginning in young adulthood and continuing throughout middle age, helps maintain memory function during aging, emphasizing the relevance of including exercise in daily life.

PROMOTING TRANSIT ACCESS

FAU Lands $2 Million Grant from U.S. Department of Transportation

For those who don’t own a car, public transportation and multimodal options can provide vital and lifesaving support, especially during a disaster. A new center established with a grant from the U.S. Department of Transportation helps enhance multimodal transportation systems and sustainable communities through collaborative, multidisciplinary research, education, workforce development and technology transfer.

As a consortia member of the newly formed Center for Equitable Transit-Oriented Communities (CETOC), FAU researchers received $2 million over five years to collaborate on efforts to promote transit access, multimodal infrastructure, compact and efficient land use patterns, as well as resilience and climate mitigation and adaptation.

Focus areas include planning, design, development and management of places such as corridors, neighborhoods, cities and regions where people have the ability to access transit to meet their daily needs and depend on transit during disasters.

“Our project will take transit-oriented development one step further by creating and supporting transit-dependent populations and resilient communities with multimodal transportation options, affordable housing options and economic security,” said John Renne, Ph.D., deputy director of CETOC, professor in the Department of Urban and Regional Planning, and director of the Center for Urban and Environmental Solutions in FAU’s Charles E. Schmidt College of Science.

Work resulting from CETOC will align with the U.S. Department of Transportation’s goals by promoting net-zero emissions, infrastructure resilience and access to transportation.
A Business You Can Count On

fau.edu/sbdc
The U.S. is projected to experience a national shortage of 63,720 full-time registered nurses in 2030 and 141,580 full-time licensed practical nurses in 2035. A new survey by Cross Country Healthcare, Inc. and FAU's Christine E. Lynn College of Nursing found that although nurses are passionate about doing meaningful work and earning a good income, only one-third plan to remain in the profession for the foreseeable future, and about one-fourth plan to leave in one to two years. The survey, “The Future of Nursing: At the Breaking Point,” is based on responses from nearly 1,500 nursing professionals and students.

Nurses reported experiencing symptoms of anxiety (46 percent), insomnia (35 percent) and depression (32 percent). Most employed nurses (83 percent) do not use mental health or well-being counseling, despite employers offering such services.

According to the survey, 71 percent of nurses claim insufficient staffing is the worst part of the profession and the leading cause of their well-being struggles and poor mental health, resulting in burnout and feeling overworked. Fifty-five percent cited lack of support resources. The nurses’ experience with the COVID-19 pandemic added to feelings of discontent, and nearly 2 in 5 employed nurses said it dramatically increased their desire to leave the profession.

With regard to mental health in nursing students, 61 percent said their school offers mental health and well-being resources and 47 percent reported using them. When asked if they were satisfied with their decision to become a nurse, 93 percent said they were.

“The nurses have endured and thrived over the years. The profession as a whole will need a lot more investment of human capital, as well as fiscal and other supportive resources moving forward,” said Safiya George, Ph.D., the Holli Rockwell Trubinsky Eminent Dean and professor in the Christine E. Lynn College of Nursing. “This national survey has helped to identify innovative ways to improve quality of work and life for current and the next generation of nurses.”

“Nurses have endured and thrived over the years. The profession as a whole will need a lot more investment of human capital, as well as fiscal and other supportive resources moving forward.”

- Safiya George, Ph.D.
For the second consecutive year, two Florida Atlantic students received the Barry Goldwater Scholarship, the most prestigious national research fellowship for undergraduate students.

David Baldwin and Michael Green were among 413 scholars nationwide, selected from a pool of 1,267 students from 483 institutions.

Baldwin, a junior in the Harriet L. Wilkes Honors College, is majoring in environmental science with an interest in ecological research. He recently completed his second internship as part of the Yale Conservation Scholars program with the New York City Parks and Recreation Department’s Division of Environmental Planning. Baldwin plans to pursue a doctoral degree in ecology and evolutionary biology, with a professional goal of researching and teaching as an ecologist.

Green graduated from FAU High School in May and is a senior biology major in the Wilkes Honors College. His research interests are in entomology, a zoology field focused on the study of insects, which is underrepresented at FAU. After earning a bachelor’s degree in biology, Green plans to pursue a doctoral degree in entomology. He also plans to continue his research on insect taxonomy, systematics and ecology, and teach at a university.

Baldwin and Green applied for the scholarship with assistance from FAU’s Office of Undergraduate Research and Inquiry and Prestigious Fellowships.

“I am incredibly proud of David and Michael,” said Donna Chamely-Wilk, Ph.D., associate dean for Undergraduate Research and Prestigious Fellowships and associate scientist in the Department of Chemistry and Biochemistry. “This is a testament to the caliber of FAU’s students, the quality of our collaborative programs, and the dedication of our exceptional faculty mentors who guide their curiosity and passion for research.”
Introducing new products to the market can be risky. In fact, statistics show that 40 to 90 percent of new products fail. A key component of product adoption is consumer psychology, and while there are a few theories that attempt to explain why certain people are not likely to accept novelties, a new study takes a slightly different approach.

Researchers in FAU’s Charles E. Schmidt College of Science and collaborators tested the theory that the most innovative people are making purchasing decisions independently of others and that highly innovative people are more likely to adopt when the trend has an increasing rate of growth. Additionally, moderately innovative people are more likely to adopt when the trend has a positive rate of growth, and the least innovative people pay attention only to the total number of adoptions when making the purchasing decision.

To put their theory to the test, researchers divided people/adopters into four categories: innovator, early adopter, majority and laggard. They applied their innovation model to predict sales data of 200 products of a supermarket chain over four years. They assigned particular preferences for various adoption trends based on the adopters’ psychological profiles and generated forecasts for retail sales. They then compared the performance of their innovation model in predicting sales with two other commonly used innovation models and one financial time series model.

Results, published in the journal Physica A, offer a new psychological interpretation of what is likely the most popular existing adoption model used in marketing today. Key findings show that different adopter groups are looking for particular properties of trends to inform their purchasing decisions and that those properties can be formulated mathematically with testable predictions. Importantly, their innovation adoption model outperformed two behavioral models and the Bass model, which is the standard model in business innovation forecasts.

“Innovators look for new products and try them out first, regardless of what anyone else is doing. Early adopters, who look for new future successful products, try to get them early. They react to the value of the second derivative of cumulative sales when making decisions,” said Andrzej Nowak, Ph.D., psychology professor in the Charles E. Schmidt College of Science. “The majority are interested in products quickly gaining popularity and are more likely to buy when the first derivative of cumulative sales is high. The laggards see only the total number of adopters, which is cumulative sales, as a convincing reason to buy.

“Further research in the area of retail product sales forecasting is extremely important since accurate models of product adoption can help companies reduce waste from unsold products, which in many cases also can affect the environment and decrease storage costs.”
"This data illustrates perfectly what we’ve been saying about an ongoing housing affordability crisis. Rents aren’t coming down significantly, if at all, so until incomes increase sharply, consumers in much of the country will continue to do without basic needs."

Ken H. Johnson, Ph.D., economist in the College of Business, to Money on how a six-figure salary is required to afford rent in 11 cities, including Miami.

"They make the most sense in car-centric areas, and there are many drive-throughs positioned far from pedestrian or bicycle traffic. But drive-throughs are often located in the ‘exact worse place for them to be’ for road safety."

Eric Dumbaugh, Ph.D., professor in the Department of Urban and Regional Planning in the Charles E. Schmidt College of Science, to CNN on traffic safety and how drive-throughs are creating problems for cities and towns.

"Floridians should be careful. There is a lot of variety in what is being produced. When there’s a huge demand for this drug quickly, it encourages some labs that aren’t super skilled at this to make it. It’s a costly drug and as a result people are finding other ways to get it. In our area, people travel to Latin America where they can get it for a fraction of the price it sells for in the U.S. For people who are overweight or have health problems or diabetes, this is a remarkable drug. But there are risks."

Dawn Sherling, M.D., associate professor of internal medicine in the Charles E. Schmidt College of Medicine, to the Sun Sentinel about the Ozempic and Wegovy weight loss craze and associated risks.

“It’s a major discovery that suggests using these modifications when communicating with young assists them in learning how to produce these calls themselves. Vocal learning is actually very rare. Out of the millions of species that use sound to communicate, there’s just few groups that must learn their vocal communication systems.”

Rindy Anderson, Ph.D., behavioral ecologist in FAU’s Charles E. Schmidt College of Science, to National Geographic on a study showing dolphins use “baby talk” with their calves, a first among non-human species.
“On the ocean floor at the depth where the Titanic rests – 12,500 feet – the pressure is nearly 380 times greater than at the surface. It’s a familiar concept to divers, who feel the pressure when they descend, breathing air regulated to match the pressure around them. The deeper you go, the higher the pressure climbs. People always underestimate that impact. At 12,500 feet, the pressure is more than 4,400 pounds per square inch. With that kind of force, any defect in the Titan’s hull could have triggered an implosion.”

Luc Wille, Ph.D., center, professor and chair of physics in the Charles E. Schmidt College of Science, to USA Today on the catastrophic implosion of the Titan submersible.

“Findings from our study certainly inform voluntary adoption of paid sick leave policies by businesses as well as future legislation. Coming to work sick, injured or ill can diminish productivity and performance and may lead to the spread of illness to other employees. In any given week, about 2 percent of workers attend work while sick, particularly women, low wage workers, and those ages 25 to 34.”

LeaAnne DeRigne, Ph.D., professor of social work in the College of Social Work and Criminal Justice, to HealthDay discussing her study on how paid sick leave is good for business.

“The findings also suggest starting to exercise while you’re young may be even wiser. The young mice that ran probably built up a ‘cognitive reserve’ of healthy neurons and connections, more than among the inactive animals, that served them well as they aged.”

Henriette van Praag, Ph.D., associate professor of biomedical science in the Charles E. Schmidt College of Medicine and member of the FAU Stiles-Nicholson Brain Institute, to the Washington Post on her study that shows running through middle age keeps neurons wired and helps prevent memory decline.

“Not only does continued development in these areas put people and homes and businesses at risk, but it also compromises these areas’ abilities to absorb the energy and flooding associated with storms.”

Serena Hoermann, assistant, director for FAU’s Center for Urban and Environmental Solutions, to CNN about the impacts of Hurricanes Idalia and Ian on Floridians.

“While wearing the glove, human users have control over the movement of each finger to a significant extent. The glove is designed to assist and enhance their natural hand movements, allowing them to control the flexion and extension of their fingers. The glove supplies hand guidance, providing support and amplifying dexterity.”

Erik Engeberg, Ph.D., professor in the College of Engineering and Computer Science, to Gizmodo on his smart robotic glove that allows patients to relearn playing the piano after a stroke.
The mental and emotional health of Florida’s youth is a high priority that requires timely attention. Because of high student-to-counselor ratios and the lack of sufficient and highly trained staff, high-need schools are particularly impacted. This translates into stressful and challenging school and classroom environments, higher rates of discipline, chronic absenteeism, teacher burnout and lower academic achievement.

To help address these issues, FAU College of Education researchers received a five-year, $6 million grant from the U.S. Department of Education to partner with five school districts in Florida. The program, “Wellness Advocates Valuing Educators and Students” (WAVES), is designed to increase the number of mental health service providers in high-need schools. WAVES will help to reduce the gap in school counselors in these schools and bring the student-to-counselor ratio closer to the recommended level of 250:1 over the five-year grant period.

Florida Atlantic will train 119 school counselors and will reduce barriers to degree completion by significantly reducing costs for tuition, fees, books, transportation, certification exams and professional development. Aspiring school counselors also will be trained to plan and deliver comprehensive school counseling programs from pre-K to grade 12. School counselors will learn how to collaborate with other support service staff, such as school psychologists and social workers, to address students’ academic, social, emotional and career development.

“Access to a school counselor should be an opportunity available to all students,” said Stephen Silverman, Ed.D., dean of FAU’s College of Education. “Given the national and state shortage of mental health professionals, the WAVES program will help to increase the pipeline of highly trained, certified school-based mental health providers to serve high-need schools. This influx of skilled school counselors has the potential to transform schools by providing students with the support they want and need.”
LEGISLATIVE INTERNSHIP PREPARES STUDENTS FOR SUCCESS

Two Florida Atlantic students participated in the legislative process and experienced how public policy is developed through the new FAU Florida Legislative Internship Program (FFLIP).

Launched this spring by FAU’s Office of Government Relations in partnership with the Career Center and Department of Political Science, the program allowed the FFLIP interns to work for an assigned Florida legislator and live in Tallahassee during the 60-day legislative session.

Through this immersive experience, the interns learned about the roles and responsibilities of elected officials, while developing an extensive professional network.

**Kyle Webb** interned for Rep. Kelly Skidmore. He worked on several projects and learned about state government in a fast-paced, hands-on environment. On campus, Webb was involved in FAU Student Government, where he served as chair of the Economic Sustainability Committee. He also is an Eagle Scout and volunteered with the Boy Scouts of America as an assistant scoutmaster. Webb graduated in May with a bachelor’s degree in public administration and minors in political science and disaster management. He plans to pursue a career in national security and foreign affairs.

**Joseph Guzzi** served as an intern in the office of Rep. Toby Overdorf, where he learned about the needs of society and how those needs can be addressed publicly or privately. Prior to the internship, Guzzi served as supervisor of elections for FAU Student Government and as a paralegal intern for the Broward County Division of the Florida Department of Children and Families. Guzzi is a senior majoring in political science with plans to pursue a career in the legal field.

“As a person whose professional life was shaped by a legislative internship experience early in my career, I am incredibly excited that we can provide similar opportunities to our students. Working in the state legislature can be a transformational experience for a young person,” said Ryan Britton, executive director of government relations. “FFLIP student interns are also wonderful representatives of our institution and are another way that Florida Atlantic engages with lawmakers in Tallahassee.”
Florida Atlantic made considerable gains in the U.S. News & World Report list of “Top Public Schools,” moving up to No. 112 from No. 131 in this year’s ranking of the nation’s best universities. This is the largest rise out of all public universities in the state of Florida for the second year in a row. U.S. News & World Report also ranked FAU at No. 209 for “Top National Schools,” up from No. 262 last year.

“The Florida Atlantic community has worked incredibly hard to reach new levels of excellence,” said FAU President Stacy Volnick. “It’s an honor to see our efforts reflected in this year’s rankings as we continue to innovate and expand while ensuring success for all.”

Florida Atlantic also rose to No. 26 in the U.S. News & World Report “Social Mobility” ranking, up from No. 41. This number is computed using graduation rates of students receiving Pell grants and includes public and private national universities. Additionally, Florida Atlantic is ranked No. 50 in the nation for graduates with the least debt.

In other rankings, Florida Atlantic’s undergraduate international business program is ranked No. 22 in the nation, up from No. 26 last year. The university also moved up 15 spots to No. 150 for undergraduate engineering programs, undergraduate computer science moved up five spots to No. 210, and undergraduate business programs moved up five spots to No. 159.
Florida Atlantic is highly ranked by multiple authorities on higher education excellence.

**U.S. News & World Report**

**BEST GRADUATE PROGRAMS**

- #36 Rehabilitation Counseling
- #38 Nursing Master's
- #72 Public Affairs
- #99 Environmental Engineering

**Best Colleges**

- #1 Best Online Hospitality Management Degree
- #2 Executive Education in the United States

**College Consensus “Best Value Online Colleges and Universities”**

- #13 Nationwide

**Insight into Diversity magazine**

- 2023 Inspiring Programs in STEM Award
Thanks in part to popular films like “Sound of Freedom” and the “Taken” series, national awareness of human trafficking has increased. Yet, according to research, pop culture tends to skew the realities of victimization – particularly when it comes to children – thereby muddying the path toward real change.

Despite federal laws that classify minors involved in commercial sexual exploitation as victims not offenders, they continue to be arrested and incarcerated for prostitution. Given that most youth who fall victim to child prostitution and sex trafficking are between the ages of 12 and 14, there is an urgent need to better understand the risk factors of this vulnerable population.

Calli M. Cain, Ph.D., assistant professor in Florida Atlantic’s College of Social Work and Criminal Justice, conducted the only nationally representative, anonymous, self-report survey of more than 2,600 youth detained for prostitution. The study, published in the journal *Victims & Offenders*, reveals that most victims have an extensive history of physical, sexual and emotional abuse, and that these experiences vary greatly by gender.

“Detaining them often exacerbates their problems, delays appropriate care, interrupts their education, exposes them to youth who commit more serious offenses, and increases justice system costs,” Cain said. “Providing treatment and perhaps residential care in a safe environment could help them exit ‘the life’ and prevent them from being re-trafficked, which is a common occurrence when they are treated punitively by the Juvenile Justice System.”

**SIGNS A CHILD IS BEING TRAFFICKED**

**Physical:**
- Sudden inappropriate clothing
- Unexplained new tattoos
- Overly tired

**Relational:**
- Acquaintances with gang affiliations
- Disjointed family connections/living arrangements
- Personal interactions online with older people

**Behavioral:**
- Risk-taking behaviors/poor boundaries
- Unexplained absences from school
- Unable to keep up with studies
- Sudden sexualized behavior
- Withdrawn, depressed or distracted

**Verbal:**
- Self-shaming/blaming
- Bragging about income/expensive possessions

- Source: Shared Hope International
Key findings include:

- 75 percent were males and 25 percent were females. The most commonly incarcerated youth (29.4 percent) were white males around 16 years of age.

- Nearly 43 percent were molested and more than 35 percent experienced forced sex growing up.

- Nearly 50 percent experienced emotional abuse; 85 percent also witnessed serious violence.

- Nearly four out of five females experienced physical abuse as a child, compared to just over half of males.

- Approximately 65 percent of females were molested as a child, compared to 36 percent of males; and three-fourths were emotionally abused, compared to 37 percent of males.

- 84 percent of females reported using substances every day or several times a week in the months before custody compared to 75 percent of males.

- 80 percent of females reported three or more victimization types compared to 49 percent of males, and 31 percent of females experienced all five types of prior victimization (e.g., physical and emotional abuse, molestation, forced sex growing up) compared to 11 percent of males.

The study also showed males were significantly more likely to have lived with their parent(s) growing up compared to females. Females were more likely to have lived in foster care/group homes, with friends, on their own, or were homeless before their arrest.

“Considering most victims of sex trafficking do not identify themselves as victims, education and training are essential to identifying victims and preventing further exploitation,” Cain said. “Knowing the signs and getting trained on proper intervention techniques gives us a much better shot at disrupting the trafficking pipeline and protecting our youth through early intervention efforts, a coordinated and collaborative criminal justice response, and responsive public policy.”

NEW FELLOWSHIP IN PULMONARY MEDICINE AND CRITICAL CARE

Florida Atlantic’s Charles E. Schmidt College of Medicine received initial accreditation for a fellowship program to train physicians who will care for critically ill patients and patients with lung disease.

The FAU Pulmonary Medicine/Critical Care Medicine Fellowship is based at Baptist Health’s Boca Raton Regional Hospital – the primary site for the program – as well as Bethesda Hospital, also part of Baptist Health, and the West Palm Beach VA Medical Center.

The program was established as part of the College of Medicine’s Graduate Medical Education Consortium, a partnership with five Palm Beach County hospitals. The consortium ensures the region has an adequate and well-trained physician workforce by establishing residency and fellowship programs in specialties that serve their communities.

The three-year program will include three fellows per year for a total of nine fellows, who will train alongside top physicians and clinicians in the fields of critical care and pulmonary medicine. The program will include rotations at four locations: Boca Raton Regional Hospital, Bethesda Hospital’s east and west campuses, and the West Palm Beach VA hospital.

The fellowship complements existing residency programs at Florida Atlantic, including internal medicine (launched in 2014), general surgery (launched in 2016), emergency medicine (launched in 2017), psychiatry (launched in 2018), and neurology (launched in 2018). This new program brings a total of five fellowships to the university: vascular surgery, cardiology, geriatric medicine, hospice and palliative care, and pulmonary/critical care medicine.

More than 175 resident physicians and fellows go through these programs each year. Since the inception of the first residency program in internal medicine, more than 205 physicians have graduated from these programs. About 50 percent of all graduates end up practicing in Florida.
‘DISCOVERY TO CURE’

$11.5 Million Donation to Combat Life-Threatening Illness

There is no cure for amyloidosis, a life-threatening disease that most commonly impacts the brain, leading to Alzheimer’s disease and brain bleeds, among other complications. It also can be present throughout the body including in the heart, kidneys and liver.

An $11.5 million gift from philanthropists Ann and John Wood of the FairfaxWood Scholarship Foundation will support researchers in the Charles E. Schmidt College of Medicine as they work to find a cure for this devastating illness. This is the fourth contribution the Woods have made to the College of Medicine. Their $28 million gift in 2022 was the largest known scholarship gift to a Florida public university’s medical school. Made in memory of their son, Robert A. Wood, it created the opportunity for debt-free tuition for aspiring physicians.

“Philanthropy has an increasingly important role in advancing science and supporting vital research initiatives that have implications for people not just locally but across the globe, especially when it involves an illness or condition that is complex, multifactorial and difficult to treat,” said Ann and John Wood. “Amyloidosis, in particular, is a disease that has personally impacted our family, and why we decided to invest in this initiative to usher in a new era to treat this disease, hopefully find a cure, and most importantly, provide patients with hope.”

The monumental gift establishes the FairfaxWood Health & Innovation Technology Initiative, a collaborative model that will break through traditional single organ-focused research. A multi-disciplinary team of experts will harness the power of artificial intelligence and cutting-edge data science as they take on the complex task of uncovering the cause of amyloid fibrils – a hallmark of the disease. It could become a permanent research resource for vital work on other multi-organ illnesses.

Another integral component of the gift is the establishment of the endowed FairfaxWood Chair of Clinical Neurosciences. Michael R. Dobbs, M.D., has been named the inaugural chair within the College of Medicine’s new Clinical Neurosciences Department. An expert in vascular neurology, Dobbs will work with a team of researchers and clinicians, directing “discovery to cure” initiatives for amyloidosis and other complex and severe disorders.

“We are eternally grateful to Ann and John Wood for their vision, generosity and continued support of our medical school through this extraordinary gift,” said FAU President Stacy Volnick. “The FairfaxWood Health & Innovation Technology Initiative will transform the way our researchers and clinicians study and treat amyloidosis and other serious medical conditions that require a synergistic approach to improve health and quality of life.”
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Kudos for Efforts to Help Navigate the Business Lifecycle

The Florida Small Business Development Center (SBDC) at FAU is at the forefront of education, research, community engagement and economic development, as it offers a myriad of services and training to small- and medium-sized businesses in Broward and Palm Beach counties.

The SBDC at FAU recently received the prestigious “NASBITE International 2023 Program Excellence Award” for helping to develop and promote international trade. The award recognizes innovation and excellence in international trade instruction, curriculum development, research, program development, and/or advocacy of international business issues.

“It is both exciting and an incredible honor for the Florida Small Business Development Center at FAU to receive this global recognition by NASBITE International,” said Gregg Fields, Ph.D., interim vice president for research, executive director of the Institute for Human Health and Disease Intervention, and professor in the Department of Chemistry and Biochemistry.

The SBDC at FAU helps business owners and entrepreneurs successfully navigate various stages of the business life cycle, providing no-cost specialized services to fit their needs. The center also provides support for pre-venture businesses, such as exploring business feasibility, as well as established businesses that have been in operation for three or more years.

“This award is a testament to the center’s outstanding and innovative work in international, economic and community engagement,” Fields said.

STUDYING SHARK ATTACKS

FAU Researcher Headlines ‘National Geographic’ Series

Florida Atlantic researcher Stephen Kajiura, Ph.D., has gained national recognition for his studies of sharks and rays. His work has been featured in numerous documentaries, including National Geographic TV’s highly popular SharkFest series.

The professor of biological sciences in the Charles E. Schmidt College of Science leads the Shark Lab at FAU, where he studies the behavior and sensory abilities of sharks and rays, as well as the migration patterns of blacktip sharks. What many don’t know is that the lab has conducted a shark aerial survey in Southeast Florida since 2010 — the longest running project of its kind.

Kajiura recently starred in the six-episode “When Sharks Attack 360,” part of SharkFest 2023, which combines expert sleuthing, reenactments and testimonials, as well as visual effects where sharks swim right up to him in the cutting-edge VFX shark lab. Kajiura also was featured in the eight-episode “When Sharks Attack … and Why.”

SharkFest 2023, a four-week event, aired in July on National Geographic TV and can be streamed on HULU and Disney+. A SharkFest collection page is available on the Nat Geo TV app and ABC app with episodes from previous years of SharkFest that also feature Kajiura and other Florida Atlantic scientists.

STEPHEN KAJIURA, PH.D.
FAU STILES-NICHOLSON BRAIN INSTITUTE

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EXPANDING THE SCOPE OF HUMANITIES

Dean Focuses on Interdisciplinary Skills Needed for a 'Lifelong Journey'

From broad initiatives to individual student successes, Michael J. Horswell, Ph.D., is paving an innovative path for the Dorothy F. Schmidt College of Arts and Letters. Since Horswell became dean in 2017, the college has been on an upward trajectory, as he continues to expand meaningful learning opportunities for students while enhancing the prominence and prestige of its programs.

“It is more important than ever that students at public universities like Florida Atlantic acquire the critical and creative thinking skills needed for a lifelong journey of career success and personal fulfillment,” Horswell said.

The college recently received national recognition when its public affairs program in the School of Public Administration was named the No. 72 “Best Graduate Program” in the nation by U.S. News & World Report. The program has moved up 18 spots in the ranking since 2020.

The college also has received more than $51 million in philanthropic support during Horswell’s tenure. This includes $20 million from Kurt and Marilyn Wallach in 2020 — the largest gift in FAU history at the time — to establish the Kurt and Marilyn Wallach Institute for Holocaust and Jewish Studies. The institute will integrate research, service and educational offerings in Holocaust, human rights, Jewish studies and related programs with a mission to deter hate, bias and discrimination.

In 2019, former Kansas City Royals owner Avron Fogelman donated his vast collection of sports memorabilia valued at more than $10 million. The collection is now displayed in FAU’s Avron B. Fogelman Sports History Museum in the Schmidt Family Complex for Academic and Athletic Excellence. It provides a source of both entertainment and education for students and members of the community about some of the most significant sports events in U.S. and world history.

Horswell said he strongly believes that intertwining the arts, humanities and social sciences helps students achieve their professional goals. To that end, one of the most pivotal shifts under his leadership has been an emphasis on interdisciplinary studies. A minor in sports studies was added to the School of Communication and Multimedia Studies, fostering collaboration among the political science, history, sociology and exercise science programs. In the philosophy department, a STEM minor was added, and researchers in the cutting-edge Center for the Future Mind work with researchers in the FAU
Florida Atlantic’s Dorothy F. Schmidt College of Arts and Letters received a $1 million gift from Marilyn and Jay Weinberg to support Holocaust, Jewish studies and human rights educational programs. In recognition of their gift, the Marilyn and Jay Weinberg Grand Lobby in the future Kurt and Marilyn Wallach Holocaust and Jewish Studies Building will be named in their honor.

“Marilyn and I support the Wallach Center because it is critically important that we combat the rapidly increasing incidents of antisemitism, especially on our college and university campuses,” Jay Weinberg said. “This building and programs within it will be a beacon in this effort to set a standard for other colleges and universities to emulate. Antisemitism will not go away without our constant efforts to eradicate it by bold and aggressive actions, such as the creation of the Wallach Building and future institute here on the campus of FAU.”

The Weinbergs’ gift will create an endowment that provides support for faculty, staff and students; equipment; programming and the ongoing care of the Wallach Building in perpetuity. Upon the building’s completion, the Weinberg Grand Lobby will be a central hub for conversation and reflection on the stimulating lectures, exhibits and performances that will promote the teaching and scholarship of Jewish history and culture.

Over the years, the Weinbergs’ philanthropy to Florida Atlantic has been extensive and impactful. Their contributions include funding for the Guterman Family Center for Holocaust and Human Rights Education, as well as scholarship support for first-generation students in the Kelly/Strul Emerging Scholars Program and for students in the Dorothy F. Schmidt College of Arts and Letters.

Jay Weinberg served on the FAU Foundation Board of Directors from 2012 to 2014 and was elected vice chair in 2013. He served another term from 2016 to 2022. In December 2022, he was awarded the President’s Distinguished Service Medallion in recognition of his philanthropy and service to the university. In February, Marilyn was honored for her extraordinary achievements within the community and to FAU by the Dorothy F. Schmidt College of Arts and Letters during its annual Cultural Arts and Society Today Party.

“Jay and Marilyn Weinberg have been steadfast supporters of FAU and the Dorothy F. Schmidt College of Arts and Letters,” said Michael Horswell, Ph.D., dean of the College of Social Work and Criminal Justice. “Their gift leaves a legacy for future generations to obtain knowledge and understanding of the Holocaust, and an appreciation and respect for human rights of all.”

Stiles-Nicholson Brain Institute to explore the possibilities of artificial intelligence.

“By expanding the scope of humanities curricula to new territories, Arts and Letters students have benefitted from a more comprehensive education that allows them to broaden their academic ambitions and increase their career opportunities,” he said.

Horswell, who earned a doctorate in Latin American literature from the University of Maryland, College Park, also amplified the college’s attention to intercultural education. As one of his first undertakings as dean, he founded the Americas Initiative, which has strengthened the academic offerings and research output for topics associated with culture and society in the Americas. Additionally, the School of Interdisciplinary Studies launched a global studies major, which teaches students about various cultural, political and economic challenges around the world.

Understanding that humanities scholarship flourishes in the light of diverse ideas, Horswell also co-founded the Breezeway Dialogues series in 2021 with Naelys Luna, Ph.D., dean of the College of Social Work and Criminal Justice. The series provides students from all majors with opportunities to discuss controversial topics while learning best practices for civil discourse.

As the college continues to advance toward new and uncharted triumphs, Horswell is leading the charge with his faculty and staff by reimagining Arts and Letters.

“The world-class faculty in the Dorothy F. Schmidt College of Arts and Letters prepares our students for myriad careers that will undergo unforeseen transformations in the years ahead,” Horswell said. “Our versatile graduates will be prepared to evolve along with the global society and economy in which we all are increasingly interdependent.”
Burning crop residue to prepare agricultural fields contributes large quantities of pollutants to the atmosphere and is a known cardiorespiratory health hazard worldwide. Combustion byproducts in smoke cross the blood-brain barrier causing inflammation, and repeated inhalation of smoke can contribute to cognitive decline and dementia among older adults.

Federal efforts to monitor air quality have been focused on population-dense urban communities. As such, impacts of smoke exposure from agricultural fires on the risk of Alzheimer’s disease and related dementias (ADRD) in rural populations are not well understood.

Researchers from Florida Atlantic and collaborators received a five-year, $4.2 million R01 grant from the National Institute on Aging of the National Institutes of Health to better understand this issue. They will study the rural communities along Lake Okeechobee in Palm Beach County, where residents are subjected to repeated, intermittent exposures to air pollution during agricultural fires.

Led by Lisa Kirk Wiese, Ph.D., principal investigator and associate professor in FAU’s Christine E. Lynn College of Nursing, the project will involve nearly 1,100 adults ages 45 and older from five communities along the lake. An interdisciplinary team from nursing, social work, urban and regional planning, and epidemiology will examine the effects of smoke-related air pollution on risk of ADRD in these residents, as well as social isolation and cognitive function during agricultural burn and non-burn seasons.

“Most research on Alzheimer’s disease and related dementias targets older adults. Our study will include middle-aged adults when dementia risks begin to accelerate,” said Christine Williams, DNSc, multi-PI and professor emeritus in the Christine E. Lynn College of Nursing. “As a result, we will be able to promote early awareness of the disease and earlier modification of the associated risk factors.”

The research team will gather electronic data using smartwatches in a subsample of residents, who will be monitored for physical activity, social activity and cognitive performance. Biomarkers will provide passive continuous sensing of heart rate, respiratory rate, blood pressure, height and weight and calculated BMI.

“Findings from this study will inform a mitigation model and public health interventions that will diminish the threat of Alzheimer’s disease and related dementias in rural settings and ultimately improve quality of life and reduce health care expenditures,” said Safiya George, Ph.D., Holli Rockwell Trubinsky Eminent Dean and professor in the Christine E. Lynn College of Nursing.
Where can the Arts, Humanities and Social Sciences take you?

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FAU faculty, staff and students go above and beyond in the workplace, community and around the world to make a difference. Their work does not go unnoticed. Here’s a look at some of the prestigious accolades and awards earned across FAU’s campuses.

**Peter Ricci, Ed.D.,** director of FAU’s hospitality and tourism management program, was recently recognized as one of the 100 Most Inspirational Leaders in Hospitality and Travel for 2023 from the International Hospitality Institute. He also was selected as co-president elect for the Hospitality Sales and Marketing Association International (HSMAI) South Florida chapter at its 37th annual awards gala. The gala raised funds for the HSMAI South Florida Peter Ricci Scholarship Fund, which helps college students pursuing hospitality careers.

**Shirley Gordon, Ph.D.,** professor in the Christine E. Lynn College of Nursing, was inducted into the Global Academy of Holistic Nursing as a distinguished scholar. The vision of the academy is to create global communities that embrace the praxes of holistic health, wellness and social justice.

**Siri Terjesen, Ph.D.,** professor and associate dean for research and external relations in the College of Business, was one of the 12 inaugural Freedom and Opportunity Academic Prize recipients from the Heritage Foundation. She was recognized for the impact of her research and teaching exploring economic freedom, corporate governance, entrepreneurship, human flourishing, as well as other issues related to freedom, opportunity and American values.

**Debra Hain, Ph.D.,** professor and director of the Doctor of Nurse Practitioner Program in the Christine E. Lynn College of Nursing, received an award for excellence from the American Association of Nurse Practitioners during the organization’s national conference in New Orleans.
NAEYLS LUNA, PH.D., dean of FAU’s College of Social Work and Criminal Justice, was named an American Council on Education Fellow for the 2023-24 academic year. Fellows observe and work with the president and other senior officers at their host institutions, attend decision-making meetings, and focus on issues of interest, as well as conduct projects of pressing concern for their home institutions, seeking to implement their findings.

MARA SCHIFF, PH.D., associate professor in FAU’s College of Social Work and Criminal Justice, was named a Fulbright Global Scholar for the 2023-24 academic year. She will conduct qualitative research that explores how integrated justice and education systems might collaboratively produce more stable, less violent, and more inclusive communities.

TAGHI M. KHOSHGOFTAAR, PH.D., the Motorola Endowed Chair Professor and director of the Data Mining and Machine Learning Lab in the College of Engineering and Computer Science, recently achieved a significant academic milestone. His scientific publications have garnered more than 30,000 citations over the past five years, yielding a Google Scholar h-index of 88.

HELEN MUNCHOW, assistant director of comparative medicine in FAU’s Division of Research, and KEN SALLENG, D.V.M., director of veterinary care, earned grand place in a competition at the Laboratory Animal Welfare Training Exchange Conference in Pittsburgh.

PAIGE PAVLIK GARRIDO, assistant director of corporate training and talent development for the Executive Education program in the College of Business, was named the 2023 South Florida Business and Wealth Prestigious Women Top Mentor.

MICHAEL CEVALLOS ’23, a graduate student studying artificial intelligence in the Charles E. Schmidt College of Science, received the Undergraduate Physical Chemistry Award from the American Chemical Society. The award recognizes outstanding achievements by undergraduate students in physical chemistry.
Two FAU Harbor Branch Oceanographic Institute students, CLARK MORGAN and NATALIA JAWORSKI, earned Guy Harvey Scholarship awards from the Guy Harvey Foundation for their work on the biology, ecology, habitat or management of sustainable marine fisheries in Florida’s marine environment. Morgan and Jaworski are both students in the Fisheries Ecology and Conservation Lab led by Matt Ajemian, Ph.D., associate research professor at FAU Harbor Branch.

LISA METCALF ‘99, ’10, senior media relations director for university news; KATRINA MCCORMACK, associate director of communications for athletics; and EVAN SHOMO, former assistant director of communications for athletics, received the Gold Coast PR Council’s PR Star Award for their media relations work related to the FAU men’s basketball team's journey to the Final Four. Their efforts resulted in more than $1.9 billion in earned media value. Additionally, Metcalf received the Best PR Campaign Award for “Hot Chicks, Cool Dudes: The Impact of Climate Change on Sea Turtle Sex Ratios,” which appeared on the “TODAY” show as the longest national TV news segment in FAU history, running at more than eight minutes long. Other segments aired on NBC Nightly News and a variety of other outlets, totaling more than $82 million in earned media value.

JUDY MONESTIME, instructor of health administration programs in the College of Business, was selected for the Visiting Disability and Rehabilitation Equity Researcher Mentorship Program Fellowship with Langston University Rehabilitation Research and Training Center on Research and Capacity Building for Minority Entities. With a peer mentor, Monestime will develop a research proposal to be submitted to the National Institute on Disability, Independent Living, and Rehabilitation Research’s Field-Initiated Projects Program.
From left, Amanda Matthews and Megan Davis, Ph.D. Matthews graduated with her master’s degree in August. She now works as research and education coordinator for the sea vegetable project and the Queen Conch Lab program.
Using AI to Meet the Global Need for Sustainable Seafood

BY CHELSEY MATHESON

As the global human population continues to swell, food production must stretch to meet our growing needs. The world’s oceans are particularly stressed, as fisheries wither under the constant demand for more seafood.

Studies of primary nutrient sources show that the ocean reached its maximum productivity for generating wild-caught seafood in the late 1980s. As a result, more than 50 percent of the seafood consumed in the U.S. comes from aquaculture, but less than 1 percent is produced domestically. From tapping ancient food sources to creating cutting-edge tools, researchers at FAU Harbor Branch Oceanographic Institute are working to change that, by developing new aquaculture techniques to meet the growing global demand for sustainable seafood.

FAU Harbor Branch’s aquaculture research initiative involves a team of scientists and engineers working to increase the supply of nutritious, safe and high-quality domestic seafood; improving production efficiency; increasing seed stock availability; developing novel feeds; improving aquatic animal health; creating a skilled labor force; and enhancing technology transfer to the private sector.

“If we’re going to continue to increase the demand for seafood, the gap in productive potential by wild-caught fisheries needs to be filled, and fundamentally, we know it’s not going to come from the oceans. It’s got to come from aquaculture,” said Paul S. Wills, Ph.D., research professor and associate director for research at Harbor Branch and principal investigator of the integrated multi-trophic aquaculture (IMTA) system project. “This is why we’re seeing the movement from hunter-gatherer to farming with our seafood products.”

AI to Improve Efficiency

Monitoring is a major challenge for aquaculture farmers, particularly in pond aquaculture, as dissolved oxygen management is crucial to preventing fish kills. Traditional dissolved oxygen monitoring practices are time-consuming, expensive, imprecise and labor intensive, which is particularly detrimental as the industry buckles under a prolonged labor shortage.
Florida Atlantic scientists and engineers are working directly with aquaculture farmers to develop cutting-edge technology to improve efficiency and productivity through autonomous monitoring. A team led by Bing Ouyang, Ph.D., associate research professor in ocean engineering and technology at FAU Harbor Branch, has taken monitoring to the skies through a Hybrid Aerial Underwater RobotiC System (HAUCS). The team includes Wills; Jason Hallstrom, Ph.D., director of FAU’s Institute for Sensing and Embedded Network Systems Engineering; and Tsung-Chow Su, Eng.Sc.D., professor in the Department of Ocean and Mechanical Engineering. The project is supported by a $1.2 million grant from the United States Department of Agriculture’s National Institute of Food and Agriculture in collaboration with the National Science Foundation’s National Robotics Initiative 2.0.

Cooperation with the fish farm community has been essential during the development stage of the HAUCS project. The project originated from Peter Reiff, owner of Logan Hollow Fish Farm in Illinois. Ouyang and Wills spent extensive research time at the farm during the project’s first phase. Testing also was conducted at Flowers Fish Farm in Dexter, Missouri; Aqua Blue Cichlids in Fellsmere; and at Southern Illinois University’s Touch of Nature aquaculture research farm, as well as at its Center for Fisheries, Aquaculture and Aquatic Sciences.

Currently, pond aquaculture farmers rely on technicians to drive around the farm to collect data and make decisions on the health of the ponds based on limited information. One innovative sensing solution in HAUCS is to adopt drones equipped with underwater sensors that can deploy automatically and expedite these surveys while also producing more comprehensive data.

The process works by landing a drone on a pond’s surface and dropping an underwater sensor payload into the pond, which instantly scans conditions through the entire water column. Graduate students working with Ouyang and Wills helped develop the system.

“One of the challenges of aquaculture ponds is that there is a vertical stratification of dissolved oxygen,” Ouyang said. “So, the dissolved oxygen is normal or high on the top layer, but it could become critically low at the bottom layer. Normally, the people doing the survey don’t have that information. Our system can provide that information, so resting on the water really breaks through in that regard.”

In addition to dissolved oxygen, HAUCS collects a large swath of data including wind, solar radiation and air temperature, and sends the information to a centralized database that feeds a machine learning algorithm. The resulting artificially intelligent model can then make predictions about pond conditions and assess potential risks, which translates to more efficient use of resources and an overall healthier fish farm.

“We measure as many data points as we can because in nature, all of these things have some effect on pond dynamics,” Wills said.

In essence, HAUCS is an “Internet of Things” solution dedicated to the operation of pond aquaculture farms. Until now, the focus of the HAUCS project has been developing automated monitoring and prediction technologies and creating an interface where farmers can quickly access the real-time information. The next step is automated action. This project is in the development stage, but Ouyang’s team envisions incorporating ground-based AI-empowered machines to work in tandem with HAUCS mobile sensing systems to perform essential, but traditionally labor-intensive, tasks based on a robust machine-learning prediction model. For instance, if HAUCS senses a problem with a pond’s dissolved oxygen level, it would be able to automatically deploy an emergency aerator to stabilize the situation.

“We want to work toward an AI-driven intelligent fish farm of the future,” Ouyang said. “That’s our end-goal here.”

As a first step, the team recently built a vertical take-off and landing (VTOL) plane, compliant with the National Defense Acquisition Act.

“To support the more sophisticated AI model to be developed in the next phase, we will need to collect a lot more data about the farm,” Ouyang said. “The geometry of the pond, the general environment of the pond, weather, surface color, and

A study is underway to develop an automated biomass sensor system to optimize sea lettuce harvesting.
“We want to work toward an AI-driven intelligent fish farm of the future. That’s our end-goal here.”

- Bing Ouyang, Ph.D.

FAU Harbor Branch engineers developed a vertical takeoff and landing plane to support a more sophisticated AI model for automated pond aquaculture maintenance. This project received support from the Harbor Branch Foundation through sales of the “Protect Wild Dolphins” specialty license plate.
all of that information. That’s why we want this VTOL plane to complement the quadcopter drone we already use.”

The VTOL plane also has longer endurance than the quadcopter HAUCS drones, so it has potential to be adapted to other environmental monitoring applications, such as coastal zone surveillance or environmental assessments of marine renewable energy sites.

**Multi-trophic Aquaculture**

Aquaculture studies at FAU Harbor Branch also look at novel approaches to the type of food being produced, as well as developing technology to improve production capacity and efficiency while minimizing waste. The IMTA system, a sophisticated, land-based recirculating system, is central to this effort, as it provides a stable environment for scientists to conduct their research.

The IMTA system supports cultivation of animal, plant and algae species that exist at different levels of the natural food chain using a complex, highly controlled water flow. Organisms are situated within the system so that waste is engineered into resources, as each species draws its energy from nutrients provided by other occupants. Species that have been grown in the system include pompano, cobia, red drum, shrimp, sea urchins, sea cucumbers, conch, oysters, clams and sponges.
**Benefits Beyond Nutrition**

Food production is not the only benefit of aquaculture initiatives at FAU Harbor Branch Oceanographic Institute. Halophytes are also an excellent resource for nutrient removal as well as shoreline and soil restoration. An estimated 17 million square kilometers of agricultural soil globally is affected by saltwater intrusion, but halophytes’ salt-loving attributes could help rejuvenate the blighted fields, according to Megan Davis, Ph.D., research professor at FAU Harbor Branch.

Halophytes’ complex root systems help stabilize the land and prevent erosion. Planting halophytes along degraded shorelines helps make the coastal areas stronger and more resilient. Red mangroves are also grown in Harbor Branch’s integrated multi-trophic aquaculture system and donated to coastal restoration projects.

“There is a tremendous amount of soil that has been damaged by saltwater intrusion,” Davis said. “It is a wonderful opportunity for groups around the world to grow these halophyte plants that are so highly nutritious and can take the salts out of the soil as well.”

**Salty Superfoods**

Though finfish and shellfish are the most well-known aquaculture products, plant crops also are incorporated into the IMTA system. These crops contribute to the health and efficiency of the system by absorbing nutrients produced by finfish, thereby cleaning the water as it circulates to other parts of the system. The outdoor tanks where plants are grown also collect rainfall, helping to naturally replenish the system’s water supply. Importantly, the plants offer great potential to be a profitable aquaculture product.

Sea vegetables are superfoods that grow quickly, require little or no fresh water, and offer higher concentrations of minerals and antioxidants. Researchers at FAU Harbor Branch are studying cultivation and harvesting methods of these mighty greens to make them a sustainable, valuable food crop.

Among the sea vegetables grown are a group called halophytes, salt-loving land plants that have adapted to growing in saltwater. They are found along coastlines and in salt marshes across the globe, and edible halophytes have been consumed by humans for centuries.

One of the ways that halophytes have adapted to growing in saltwater is by accumulating salt within their cells through ion compartmentalization in the vacuoles. The result of this process is a succulent, salty, cucumber-textured vegetable that is packed with essential minerals like potassium, calcium, manganese, zinc, iron and sodium.

“Halophytes are amazing plants because you don’t need fresh water, which is a big deal because there is so little fresh water in the world,” said Megan Davis, Ph.D., principal investigator and research professor at FAU Harbor Branch. “They are very sustainable and can be planted just about anywhere there is access to saltwater.”

Four species of edible halophytes have been studied at FAU Harbor Branch: sea asparagus (*Salicornia bigelovii*), sea purslane (*Sesuvium portulacastrum*), saltwort (*Batis maritima*) and sea blite (*Suaeda linearis*). All these species are native to Florida and can be found growing in the wild near the Harbor Branch campus in Fort Pierce.

Studies show that sea vegetables thrive in cultivation, whether they are planted with their roots submerged in a substrate — such as sand or clay pebbles — or in a floating raft system with their roots directly submerged in saltwater. Sea vegetables can grow year-round, but the prime growing season is during the cooler fall and winter months in central and south Florida.

The most recent sea vegetable study focused on determining the optimal harvest frequency for sea blite, observing both the harvestable yield and its nutritional content.

(continued on page 43)
Queen Conch and Sea Vegetables

Producing Sustainable Seafood in Puerto Rico

Megan Davis, Ph.D., research professor at FAU Harbor Branch Oceanographic Institute, along with partners Conservación ConCiencia and the Naguabo Fishing Association, have been hatching and cultivating queen conch at the Naguabo Aquaculture Center in Puerto Rico since 2019 through funding from NOAA Fisheries. The hatchery benefits the local economy with the goal to help restore conch populations.

In addition to producing juvenile queen conch, grant funding from the U.S. Department of Agriculture (USDA), Agriculture Research Service and Puerto Rico Sea Grant allows Davis and partners to create an aquaponic system to grow sea vegetables using the nutrients produced by the queen conch and other animals. Native varieties of sea asparagus (Salicornia bigelovii), sea purslane (Sesuvium portulacastrum) and saltwort (Batis maritima) are grown using a nutrient film technique, which is a popular hydroponic growing system where the plants’ roots receive a continuous stream of dissolved nutrients from animals being cultivated in the aquaculture system.

The two funding sources have separate, important objectives, she said.

“The goal of the USDA project is to grow this edible product that’s getting its nutrients from queen conch, fighting conch and lobsters, to grow for culinary purposes,” Davis said. “For the Sea Grant project, it’s not just the edible side, but also coastal restoration; helping to stabilize sand dunes.”
“We were looking to increase biomass and nutritional content. Those are the underlying drivers of our halophyte studies because we’re interested in providing an alternative vegetable that doesn’t require fresh water,” said Amanda Matthews, research and education coordinator for the sea vegetable and queen conch program at FAU Harbor Branch.

The plants were grown in a dune sand substrate and incorporated into the IMTA system, where they received saltwater rich in bionutrients from pompano and other animals being raised in different parts of the system. Results of the study showed that frequent harvests stunted the growth of the plants leading to less overall biomass, but more nutrients were available in the edible portions of these plants. Future studies are planned to further investigate the best schedule for harvesting without reducing overall productivity.

Davis said she sees big potential for halophytes, particularly sea blite, to become viable, profitable crops.

“I think if you’re looking at a business, you’re looking at trying to find the fastest-growing species that has the most appeal to it,” Davis said. “*Suaeda* [sea blite] grows an enormous amount of biomass compared to the other sea vegetables in a faster amount of time. It also has a very nice flavor and is very versatile because it can be considered a vegetable, a garnish or an herb. I think the challenge is getting the product to market, so people understand it.”
Salt-loving Crops

Another sea vegetable cultivated in the IMTA system is *Ulva lactuca*, commonly known as sea lettuce. Seaweeds similar to sea lettuce are often found in dishes such as seaweed salad or poke bowls. Like halophytes, *Ulva* is a salt-loving crop that grows quickly both in the wild and in culture.

A study is underway to develop an automated biomass sensor system to optimize sea lettuce harvesting. The best time to harvest it is during the fastest part of the growth curve when the crop can bounce back more quickly and not stunt future production. Researchers have developed a prototype sensor that measures the relative density of sea lettuce in the tank. As the plants grow, the density gets thicker. The intention is for the sensor to eventually be able to alert farmers of the exact moment to harvest the crop.

During the development stage, the main activity is gathering data. The sensors are constantly monitoring not only density in the tank, but also variables like sunlight, temperature and nutrients. When the sea lettuce is harvested, the total biomass is weighed and reported back to the system. The idea is to use AI to develop a model that can make continual, autonomous assessments of the biomass in the tank to predict the exact time that the crop should be harvested. The data being collected by the sensors can be accessed at any time via an online portal, which allows aquaculture farmers to have an accurate, real-time view of the health of their crop.

“We’re looking at ways to create precision aquaculture by developing tools to help farmers make better decisions that will make their operations more sustainable and easier to operate,” Wills said.

Wills said that time is of the essence to find solutions for food needs while also preserving the world’s fisheries.

“Ultimately, we want to gather the data, develop the technology and share what we’ve learned with the private sector as quickly as possible,” Wills said.
Research Daily
Read the stories behind the research.
The financial landscape of collegiate athletics has seen a seismic shift in favor of student-athletes over the last two years. That means success on the field or court can translate directly to those individuals, and examples within Florida Atlantic’s Department of Athletics are plentiful.

The United States Supreme Court ruled unanimously that restrictions against compensation of collegiate student-athletes violated antitrust law in June 2021. This landmark decision opened the door to allow student-athletes to engage in Name, Image and Likeness (NIL) activities – which use an individual’s name, image and likeness for commercial or promotional purposes – without affecting their eligibility to compete.

Florida Atlantic was ahead of its time in this arena: in November 2020, the athletic program joined up with Opendorse, touted as the “leading NIL marketplace and technology company.” Student-athletes were urged to sign up, a quick process that asked them to provide social media details and other information. In doing so, FAU became both the first university from Conference USA and the first university from the state of Florida to join.

“From the very beginning of the changes in legislation, FAU Athletics has always done everything it could to assist our student-athletes in their pursuit of NIL success,” said Brian White, FAU vice president and director of athletics. “I am a firm believer that our student-athletes have the ability to add great value to this thriving community and be well compensated for their contributions.”
Members of the FAU football offensive line took part in a national NIL deal with Hooters. From left: Andre Lamas, Brendan Bordner and Chaz Neal.

Women’s basketball guard Alexa Zaph aligned with Raw Juce on social media.

The Florida Panthers partnered with more than 100 female student-athletes to become the first professional sports team to sponsor an entire women’s collegiate athletic program.

Women’s basketball guard Jada Moore entered a national NIL campaign with Dunkin’.

Former Owls’ quarterback N’Kosi Perry partnered with Islamorada Beer Company as one of the first student-athletes in the nation to be sponsored by an alcohol company.

“I just messaged a lot of people – and when I say a lot, it was over 100 companies because I was really interested – and I was so excited that it was allowed.”

– Former track and field student-athlete Cara Simpson
While the men’s basketball team’s unprecedented run to the Final Four stands out amongst FAU Athletics’ success, there are many other examples of student-athletes thriving in this new landscape, including:

- The Florida Panthers partnered with more than 100 female student-athletes to become the first professional sports team to sponsor an entire women’s collegiate athletic program.

- Women’s basketball guard Alexa Zaph aligned with Raw Juce on social media.

- Women’s basketball guard Jada Moore entered a national NIL campaign with Dunkin’.

- Members of the FAU football offensive line took part in a national NIL deal with Hooters.

- Former Owls’ quarterback N’Kosi Perry partnered with Islamorada Beer Company as one of the first student-athletes in the nation to be sponsored by an alcohol company.

“With enhanced success comes an enhanced level of name recognition, and thus a greater value to a student-athlete’s name, image and likeness,” White said. “Our student-athletes have been very smart about capitalizing on their successes and the local community has certainly recognized the value that these athletes can provide.”

Perhaps no other FAU student-athlete has tapped into the NIL market more effectively than Cara Simpson, a former member of the Owls’ track and field team. She is the school record holder in the indoor 300 meters, ranks in the program’s all-time top five in eight other indoor and outdoor events, and is a four-time member of the Conference USA Commissioner’s Honor Roll. A native of Jacksonville, Simpson graduated in August with a master’s degree in business analytics. She has more than 25 NIL deals to her credit.

“If there’s an opportunity, I’m definitely going to hop on it and make the best of it,” said Simpson in an interview with Opendorse. “In the beginning, when the NIL ruling was passed, I didn’t know where to start. I initially reached out to a lot of different companies I was interested in. I was like, ‘Hey, I know they just passed the new NIL rule and we’re allowed to partner with companies. Are you interested in partnering with me?’ I just messaged a lot of people – and when I say a lot, it was over 100 companies because I was really interested – and I was so excited that it was allowed.”

In addition to Opendorse, Florida Atlantic recently announced a partnership with TheLinkU, a cutting-edge platform that connects student-athletes with local businesses. This is yet another avenue for those looking to support these individuals – and these avenues are nearly limitless.

“There are so many different ways to support the NIL success of our student-athletes,” White said. “Working directly with the athletes on how they can help drive ROI to your business is the first one that comes to mind. Influencer marketing is increasingly effective and FAU student-athletes have a very large and loyal following. Other examples include buying jerseys, T-shirts and trading cards. You can also partner with our athletes and a local charity in an effort to add value to the community, or request individual sport lessons, personalized video messages or youth party appearances. I would encourage the community to keep in mind the world-class athletes who represent their ‘Hometown Team’ and strongly consider the value that they have in this community and that they could provide to you and or your business.”

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Perception is reality, and where people get their news molds perceptions on various issues. Florida is the third most populous state in the nation, so knowing the views of Florida voters and their news media habits is key to understanding how the state’s sizeable political and economic influence will shape the nation’s future. Many in politics and business are watching closely because the state’s electoral college prize is often brought up during tight national elections — and the next one in 2024 may be extremely close.

Knowing the voters’ minds requires deliberate and detailed work because the current environment of self-segmented traditional and social media often creates perceptions of reality that are vastly different among co-workers, neighbors and even family members. To understand the subtleties of the public’s perceptions on various issues, Florida Atlantic has three ongoing public polling efforts — in three different colleges — that study crucial topics including economics, politics, environmental issues and Florida voters’ media habits.

Florida Atlantic Polling Initiatives
Educate and Inform

BY JOSHUA GLANZER, AMBER BONEFONT AND GISELE GALOUSTIAN
A pioneer in polling at Florida Atlantic since 2014, the Business and Economic Polling Initiative (BEPI) in the College of Business has done a range of work, from analyzing Hispanic and Florida consumer attitudes to collaborating with other institutions in Florida.

Led by Monica Escaleras, Ph.D., director of FAU BEPI, the initiative currently releases two types of polls: a general topics poll looking at various opinions within the community on political, social and cultural topics; and the Hispanic Index of Consumer Sentiment, which focuses on Hispanics’ outlook on the economy and their personal finances.

“Hispanics are the largest ethnic minority group in the United States, and there is a large concentration in the state of Florida,” said Escaleras of the poll’s emphasis on the Hispanic community. “It makes a lot of sense to understand their outlook on various topics, especially the economy.”

The FAU BEPI polls have touched on a broad range of concerns important to the community over the years, like how Hispanics viewed the economy and their finances heading into 2023, how inflation impacted summer plans, and how Floridians reacted to their concerns about the economy.

BEPI is also a learning lab for students, giving them the chance to gain hands-on experience with questionnaire design, data collection and data analysis to learn every aspect of public opinion research.

“Students can engage in undergraduate research. They are learning how to write questions, how to collect that data and then turn around and analyze it,” Escaleras said.

BEPI’s work has garnered local and national media attention. It has been featured in the Associated Press, CNN, the Miami Herald, the South Florida Sun Sentinel, Politico and Bloomberg. Results of a poll also were presented at the U.S. Senate.

Additionally, the initiative collaborates with other entities in the state of Florida, such as the Brevard Indian River Lagoon Coalition and the Clean Water Coalition of Indian River County. It also collaborated with other colleges at FAU, including the Charles E. Schmidt College of Medicine and the Dorothy F. Schmidt College of Arts and Letters, to collect data for research projects that have gone on to be featured in top journal publications.

Since the state’s environment strongly affects Florida’s prosperity, FAU BEPI worked with the Charles E. Schmidt College of Science to understand how the state’s environmental challenges affect voter opinions. Warm temperatures and abundant rainfall strengthen the state’s tourism, agriculture and other industries,
but weather patterns also present Floridians with risks, such as flooding and high winds from hurricanes and other weather events. Over the past few years, residents have started to understand that the state will be on the front lines of the battle against the effects of climate change. The views on preparedness and resilience to climate hazards impact residents’ behavior, so understanding this is vital to emergency planners, government officials and businesses in Florida.

To investigate this, Florida Atlantic’s Center for Environmental Studies (CES) within the College of Science first partnered with BEPI in October 2019 to conduct a quarterly Florida Climate Resilience Survey. Since then, polling has continued to gauge changes in participants’ attitudes and opinions over time. The latest survey in May showed an increasing number of Floridians agree that human actions are causing climate change, including a record number of Florida Republicans. This finding reinforces the trend observed in the seven prior Florida Climate Resilience Surveys conducted by the center.

Virtually all respondents (90 percent) believe climate change is happening, with 65 percent attributing the causes to human actions, including 49 percent of GOP voters. This belief in — and concern about — human-caused climate change appears to be translating into support for policies to reduce impacts. For example, 52 percent of Floridians support a hypothetical $10 monthly tax to strengthen Florida’s infrastructure to weather hazards. Younger Democrats and Republicans are leading this trend, with 64 percent of voters under age 35 in support.

“The longitudinal examination of Floridians’ attitudes about climate shows a consensus forming where Republicans in our state buck the national trend of their party,” said Colin Polsky, Ph.D., professor and director of the CES. “At least in Florida, climate change may no longer be an effective wedge campaign issue for elections and beyond.”

The effects of climate change and other issues drive which candidates Florida’s voters support, and Florida Atlantic is examining this as well. In April, the first poll by Florida Atlantic’s Mainstreet Research Political Communication and Public Opinion Research Lab (FAU PolCom Lab) went into the field. The lab, created by the Department of Political Science and the School of Communication and Multimedia Studies in the Dorothy F. Schmidt College of Arts and Letters, in partnership with Canadian firm Mainstreet Research, investigates the relationship between media consumption and voter behavior by combining voter opinion polling with questions about the media consumption habits of the participants.

The June/July poll by FAU PolCom Lab found that although Florida Gov. Ron DeSantis and former U.S. President Donald Trump enjoy significant popularity among Floridians, Trump maintains a formidable 20 percent lead over DeSantis among statewide GOP primary voters, with Trump capturing the support of 50 percent of Republican voters compared to DeSantis’ 30 percent. However, the poll also unveiled a promising trend for DeSantis. The gap between Trump and DeSantis in Florida narrowed by 7 percent since the PolCom Lab’s April poll results, indicating the potential for the race to tighten as the election gets closer.
“The poll highlights Donald Trump’s quite durable support. He does especially well with white working-class voters, who have consistently formed a steadfast base for the former president,” said Kevin Wagner, Ph.D., PolCom Lab co-founder and professor of political science at FAU. “This persistent support continues to bolster Trump’s strong and steady position within the party.”

For a nuanced understanding of the Floridian electorate’s relationship to news media, the most recent poll also examined voters’ media preferences, trust levels, social media usage and political news discussions. It found that GOP and Democratic voters differ on where they go for their political news. Cable news emerged as the primary choice for Republicans, with 44 percent indicating viewership, followed by Democrats (32 percent) and Independents (21 percent). Conversely, Democrats and Independents demonstrated a greater reliance on network TV news and newspapers, with 27 percent and 18 percent, respectively, compared to only 10 percent of Republicans.

Persisting skepticism toward mainstream media becomes apparent from the poll results, with a meager 10 percent of Florida voters professing unwavering trust, while 26 percent express a somewhat trusting sentiment. Gender and political
What source do you get the majority of your political news from? (all voters)

**Response**

- Network TV such as ABC, NBC, CBS: 12%
- Cable News such as CNN, Fox News, MSNBC, Newsmax: 18%
- Local TV news: 8%
- Newspapers: 35%
- Social Media: 12%
- Podcasts: 7%
- Spanish language media: 6%
- Other websites or blogs: 1%

**Mainstreet Research Survey - Florida, July, 2023**

Robert Gutsche Jr., Ph.D.

Affiliation exhibit noteworthy trends in this regard, as a substantial 45 percent of male voters manifest deep-rooted distrust, whereas only 20 percent of women share this sentiment. Among the political affiliations, Democrats appear more trusting, with 56 percent expressing faith in mainstream media, compared to 32 percent of Independents and 20 percent of Republicans.

However, the poll unveils a silver lining for local media with a solid 59 percent of Florida voters placing their trust in local media outlets. Further analysis reveals a slight gender discrepancy, with women (64 percent) displaying marginally higher levels of trust compared to men (55 percent).

“It is great to see that local media is still seen as influential and important to voters,” said Robert Gutsche Jr., Ph.D., associate professor in the School of Communication and Multimedia Studies. “The challenge is that local news increasingly is seeing its ranks and resources cut, which will further influence how and where voters get their information.”

Florida voters are also keen to discuss politics: 43 percent of respondents engage in political conversations occasionally, and 29 percent indicate extensive involvement in political dialogue.

Although Florida voters are discussing politics, they are not necessarily expanding their views in those talks, according to Carol Bishop Mills, Ph.D., PolCom Lab co-founder and professor of communication. Many of these conversations (56 percent) took place with individuals who sometimes agreed and sometimes disagreed, while 25 percent occurred with like-minded individuals. Surprisingly, conversations with individuals holding opposing views occurred only 10 percent of the time.

“Listening and communicating with others who hold different beliefs are valuable skills,” Mills said. “Having difficult conversations and expanding our perspectives help us avoid merely confirming our own worldview.”

Carol Bishop Mills, Ph.D.
SMALL CLASSES, BIG OPPORTUNITIES

Florida Atlantic University’s Harriet L. Wilkes Honors College is one of the top-rated public honors colleges in the country.
FAU Honors College 
Provides World-class Education at 
an Affordable Price

BY CHELSEY MATHESON

Nestled among oak trees in the seaside town of Jupiter sits Florida Atlantic University’s John D. MacArthur Campus. The campus is home to the Harriett L. Wilkes Honors College, one of the top-rated public honors colleges in the country, offering students a world-class honors education at an affordable public university price.

Unlike other public university programs, the Wilkes Honors College, which opened in 1999, is freestanding and self-contained, which means all faculty are dedicated solely to the college, and students can complete the entirety of their liberal arts and sciences coursework within the honors college curriculum. With a total enrollment of approximately 600 students — double what it was in 2012 — and a faculty-to-student ratio of approximately 1:15, classes are small, and learning is pursued in formal and informal settings.

A central component to the Wilkes Honors College is real-world experience that prepares students for the next step in their education or career. Each year, more than 150 students complete internships in settings such as research labs, biotech companies, hospitals and pharmacies, schools and nonprofit organizations. Many of these opportunities allow the students to conduct original research that can have a real impact in areas like medicine, environmental conservation and understanding the human brain — and help them stand out from their peers when it’s time to take their next steps beyond the undergraduate level.

From left: Zion Strasse and Rachel Luria, associate dean of student affairs, Wilkes Honors College
Our local community and geographic landscape serve as a living laboratory of engaged learning.”

- Justin Perry, Ph.D., dean of the Wilkes Honors College
“Our local community and geographic landscape serve as a living laboratory of engaged learning,” said Justin Perry, Ph.D., dean of the Wilkes Honors College.

Students don’t have to travel far to access cutting-edge research labs. The FAU MacArthur Campus is the only place in the world where two top biomedical research organizations — the Max Planck Florida Institute for Neuroscience and The Herbert Wertheim UF Scripps Institute for Biomedical Innovation & Technology — stand side by side. With the addition of the FAU Stiles-Nicholson Brain Institute and easy access to FAU Harbor Branch Oceanographic Institute in Fort Pierce, honors students have unmatched opportunities to work alongside world-renowned scientists in a variety of fields.

For instance, students can apply for the FAU Max Planck Honors Program, which provides exclusive enrichment opportunities, including courses taught or co-taught by Max Planck scientists and Florida Atlantic faculty. The curriculum includes an introductory “topics in neuroscience” course, career development workshops taught by preeminent scientists, and access to international symposia where students can interact with and present their research to Nobel laureates.

“Our Wilkes Honors College undergraduates have been instrumental to our lab’s success,” said Sarah Stern, Ph.D., Max Planck research group leader for integrative neural circuits and behavior. “They are incredibly motivated and knowledgeable and have helped us tremendously to move our projects forward. We feel honored to have the opportunity to work with them and be part of their scientific training.”

In addition to completing an internship, all Wilkes Honors College students must meet two other unique curricular requirements to graduate: study abroad and complete a thesis project under the direct supervision of a faculty mentor. Perry noted that at least half of all thesis projects are completed at an on-campus research facility or at FAU Harbor Branch.

“The Wilkes Honors College provides an extraordinary opportunity for high-achieving students to explore a wide range of intellectual interests,” Perry said. “We’re Owls. Owls are curious creatures. It’s that innate curiosity that will serve these students well into their future.”
LIFE-CHANGING EXPERIENCE

Working in a state-of-the-art research lab has a profound effect on the trajectory of students’ lives. Ianis Ciolacu, a senior in the college, was determined to become a medical doctor. His time in the lab of Kendall Nettles, Ph.D., at The Wertheim UF Scripps Institute opened his eyes to new possibilities in pursuing a career in health care. The Nettles lab studies treatment-resistant cancers, including prostate and breast cancers, in search of novel therapeutics to improve patient outcomes. Ciolacu is involved in a study of triple-negative breast cancer, looking for new ways to attack the cancer cells, as they do not respond to hormone therapies.

“I was very set on going to medical school,” Ciolacu said. “Having any sort of research, let alone one of the top institutions in the country on my CV, would look very good. But I’m more open to the opportunity now of pursuing research after undergraduate, whether it’s an M.D./Ph.D. program or even just a Ph.D. program for studying oncology.”
Wilkes Honors College student Michelle Gras is also studying cancer, in the lab of Shailaja Allani, Ph.D., director of FAU’s Center for Molecular Biology and Biotechnology. Gras is experimenting with treatment combinations to help mitigate some of the detrimental side effects of a common chemotherapy drug. Like Ciocacu, Gras plans to pursue a career in medicine, but her undergraduate research experience has broadened her horizons to include looking for a position in a lab at the National Institutes of Health. She cites accomplishments like presenting her research at a conference in Seattle and, most importantly, being first author on a published paper as reasons why she is confident her resume will stand out among other applicants.

“I can go to a lab and say, ‘I have all these qualifications,’” Gras said. “Most people don’t have those qualifications coming out of undergrad.”

At the Harriet L. Wilkes Honors College, world-class opportunities are available without the Ivy League price tag, so high-achieving students are not excluded due to financial constraints. A majority of Wilkes Honors College students graduate with no college debt, and the average amount among those with debt is $10,000 less than the national average for public universities. This is accomplished through a robust program to match students with merit and need-based scholarships and grants, such as the prestigious Henry Morrison Flagler Scholarship, which is awarded to five students each year. The Flagler Scholarship covers room and board, tuition and fees, and four summer enrichment programs – a value of more than $72,000 over four years.

Affordability is particularly important at the Wilkes Honors College because:

16 percent of students are the first in their family to attend college and
30 percent are eligible for Pell Grants, the federal program for undergraduates with exceptional financial need.
Forty Under 40
Vice President Credits Collective Success

BY KATRINA MCCORMACK

Florida Atlantic’s sports teams have had unprecedented success in recent years. Much of that success can be attributed to the university’s vice president and director of athletics, Brian White, who recently was named to Sports Business Journal’s Forty Under 40 Class of 2023.

“I’m honored to be included on such a distinguished list,” White said. “This is a testament to the great work of our staff, coaches and student-athletes, who I am fortunate enough to work with and represent. Thank you to the SBJ for recognizing Florida Atlantic’s collective successes.”

White arrived at Florida Atlantic in March 2018 and wasted no time initiating the culture of #WinningInParadise that helped the program gain national prominence. He spearheaded the Owls’ growth and quickly led the program through exciting times — including a football conference championship and a bowl game win — and through its most trying time — the global pandemic that saw all intercollegiate athletics put on pause.

In fall 2021, White was instrumental in one of the more influential changes to FAU Athletics: accepting an invitation to join the American Athletic Conference, which came to fruition officially on July 1.

White hired Dusty May as the head men’s basketball coach in 2018. Not only did he witness the steady growth of the program, but he joined the team in cutting down championship nets to celebrate the 2022-23 Conference USA regular season and tournament titles, as well as the postseason play that carried the Owls all the way to the NCAA Tournament’s biggest dance: the Final Four.

Florida Atlantic also has seen facilities upgrades under White’s leadership. The Schmidt Family Complex for Academic and Athletic Excellence, a $72 million project, opened to rave reviews in 2020. The complex houses the football program, the department’s academic support staff, the College of Business’ Executive
I’m honored to be included on such a distinguished list. This is a testament to the great work of our staff, coaches and student-athletes, who I am fortunate enough to work with and represent.”

– Brian White, vice president and director of athletics
Education program, and one of the most spacious strength and conditioning gyms in Florida. Every student-athlete greatly benefits from the complex, which is one of the crown jewels of Florida Atlantic’s Boca Raton campus.

Other facilities enhancements included a new football game day locker room, training room and equipment room at FAU Stadium; brand-new, state-of-the-art locker rooms for the men’s and women’s basketball teams at Eleanor R. Baldwin Arena; and LED lighting at FAU Baseball Stadium. As part of the Hagerty Family Athletics Village, the Hagerty Family Track and Field Complex soon will receive renovations, as will the Tom Oxley Athletic Center, Florida Atlantic’s Olympic sports hub.

FAU Athletics’ academic success also continues to grow under White’s leadership. Student-athletes have put together a streak of 15 consecutive semesters (as of fall 2022) with a department-wide GPA of 3.0 or better.

“Congratulations to Brian on being named to the prestigious Sports Business Journal’s Forty Under 40 list. It is a well-deserved accolade for all that he has achieved at Florida Atlantic,” said FAU President Stacy Volnick. “We are so proud of our student-athletes’ academic and athletic accomplishments, and I look forward to celebrating many more successes under Brian’s leadership.”
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From Owl to Angel
First-Round Draft Pick Nolan Schanuel Finds Early Success in Majors

BY SAM DEAN

Nolan Schanuel stepped onto Florida Atlantic’s Boca Raton campus in fall 2020 with ambitious goals.

“I wanted to be the best player this baseball program has ever seen,” Schanuel said. “And I wanted to continue my career at the professional level.”

Schanuel’s goals became a reality in July, when the Los Angeles Angels selected him as the 11th overall pick in the first round of the Major League Baseball Draft. He surpassed former Owl C.J. Chatham, who was selected 51st overall in the second round in 2016, as Florida Atlantic’s highest professionally drafted student-athlete in any sport.

“Since I realized at 4 years old that baseball was something you could do for a job, this has been the dream,” Schanuel said. “Now to be a part of the Angels’ organization, I could not be more excited.”

Schanuel quickly worked his way up through the Angels’ system, playing a few games each with the rookie-level Arizona Complex League Angels and the Single-A Inland Empire 66ers. He also played 16 games with the Double-A Rocket City Trash Pandas, batting .339 with one home run, 12 RBI and 15 runs scored.

Just six weeks after being drafted, Schanuel became the first player from this year’s draft to be called up to the majors. He quickly acclimated to the big leagues, earning a .324 batting average and a .457 on-base percentage in his first two weeks. He then broke an Angels’ franchise record by hitting safely in each of his first 10 games, passing David Eckstein, who hit safely in his first nine games in 2001. He broke another record by reaching base safely in his first 16 games, beating Darin Erstad’s previous club record of 15 games, which was set in 1996.

After reaching base in his 25th straight game, Schanuel broke the record for the longest on-base streak by a player 21 years old or younger to begin his MLB career in the modern era. When he extended that streak to 26 games, he tied for fourth all time for the longest on-base streak to begin an MLB career.

Schanuel, a product of the renowned baseball program at Park Vista High School in Lake Worth, received only one Division I offer — from Florida Atlantic. Not only was it the school closest to home, but it also provided the best fit.

“The coaching staff took me in from day one and told me what I needed to hear as opposed to what I wanted to hear,” Schanuel said. “I think that’s so important for the player and person that I’ve developed into three years later.”

That growth and development was evident in early 2023, when Schanuel was named Conference USA Preseason Player of the Year and a Preseason All-American by four major college baseball publications.

The lofty preseason expectations would have been a burden to some, but not for Schanuel. The 6-foot-4-inch, 220-pound first baseman got off to a fast start and sent shockwaves throughout the college baseball landscape in late February when he homered twice in a 6-5 win over No. 22 Miami. One week later, he launched three more home runs on the road at No. 6 Florida, a team that made it to the 2023 College World Series finale.

Those performances would prove to be just the tip of the iceberg for Schanuel, who went on to lead all of Division I and set new FAU single-season records in batting average (.447) and walks (71). He also led the country with an outlandish .615 on-base percentage. In addition to those jaw-dropping numbers, Schanuel tallied 19 home runs, 64 RBI and 88 hits. He struck out just 14 times in 289 trips to the plate. It’s no wonder he became an easy choice for Conference USA Player of the Year.
But the accolades were not just limited to on-field success. In June, Schanuel was only the fourth student-athlete in Florida Atlantic history to earn College Sports Communicator’s Academic All-America honors, a program that recognizes the nation’s top student-athletes for their combined performance on the field and in the classroom. To be eligible, a student-athlete must have at least a 3.5 cumulative GPA, be an important starter or reserve, and have completed one full calendar year at his/her current institution. Schanuel had a 3.61 GPA while majoring in entrepreneurship in FAU’s College of Business.

“Nolan is a great role model for anyone who’s looking for a role model. He does his work, he’s a good person, he’s polite, and he performs on the field,” said John McCormack, head baseball coach at FAU. “He saw the value in sharing his collegiate experience with his family and allowing them to be part of what was going on in his life. I think he also saw the value of what we, as a staff, were trying to accomplish with him in terms of unlocking his potential. We couldn’t be happier for him.”

Did you know?

John McCormack, the Owls’ skipper since 2009 and a 34-year FAU coaching veteran, earned his 500th win as head coach with a 5-4 victory over No. 15 Florida Gulf Coast University on April 11.

McCormack has won more than 60 percent of the 1,868 games he has coached at Florida Atlantic. He has been instrumental in 13 of the baseball program’s 14 NCAA appearances, each of its eight conference championships, and one Super Regional appearance in 2002.
Dusty May

Dusty May, Florida Atlantic men’s basketball head coach, was named iHeartMedia State College Coach of the Year by the Orlando Sentinel. May outdistanced Florida State football coach Mike Norvell by 173 votes to earn the honor.

Awards continue to be added to May’s resume after he led Florida Atlantic to new heights in the 2022-23 season. The Owls advanced to the Final Four in the NCAA Tournament for the first time in program history. Florida Atlantic posted an incredible 35-4 record, which marked the most wins in NCAA Division I this season and was just three wins shy of the single-season Division I record. The Owls became only the third No. 9 seed to make the Final Four in NCAA Tournament history. Additionally, Florida Atlantic was only the fifth team ever to reach the Final Four after previously having no NCAA Tournament wins.

CROWDED TROPHY CASE

May also was named the CBS Sports National Coach of the Year; the NABC All-District 17 Coach of the Year; the Conference USA Coach of the Year; and the Palm Beach County Coach of the Year. Additionally, May was a semifinalist for the Naismith National Coach of the Year.

May led Florida Atlantic to a collection of program records, including wins (35), longest winning streak (20), conference wins (18), points (3,035), field goals made (1,084), 3-pointers made (375), rebounds (1,519) and assists (562). He also earned his 100th career victory as a head coach with a 62-55 win over Tennessee in the Sweet Sixteen at Madison Square Garden in New York City. The Owls then gave May his 101st victory in the Elite Eight against Kansas State, sending the awe-inspiring team to the Final Four in Houston.
Kristi Tekavec
Kristi Tekavec, Florida Atlantic’s beach volleyball assistant coach, was named a 2023 Thirty Under 30 award recipient by the American Volleyball Coaches Association. Tekavec is entering her sixth year as a coach with the program and her second as assistant coach. Throughout her coaching career at Florida Atlantic, she helped lead the Sandy Owls to two conference championships, one each in the Coastal Collegiate Sports Association and Conference USA, as well as the program’s first NCAA Tournament appearances in back-to-back seasons in 2022 and 2023.

Prior to joining the Sandy Owls coaching staff, Tekavec played for Florida Atlantic’s indoor volleyball team from 2013 to 2017 and competed with the Sandy Owls in 2014 and 2019.

Jessica Lambert
Jessica Lambert, a junior from Craydon, England, had a historic season for Florida Atlantic’s track and field team, qualifying for the 2023 NCAA Regionals after winning gold medals in the 800m at both the indoor and outdoor Conference USA Championships. The exercise science major has set five school records.
For Andrew Imber, two things in life have left an indelible mark: hockey and FAU.

“My dad and I went to my first Florida Panthers’ game back in the Miami Arena in 1993. I was only 5 and it was one of those things where I instantly fell in love with the sport,” said Imber. “My dad said at 5 years old I understood it better than he did. He had Panthers’ season tickets in the 90s through work so that became a fun little thing we did together.”

Fast forward 29 years, and Imber’s passion for the Florida Panthers is now his full-time job. As the public address (PA) announcer for all of the Panthers’ home games at Amerant Bank Arena in Sunrise, the 34 year old is in his eighth season and has called more than 300 games.

“I had a predisposition for broadcasting when I was younger and played Super Mario golf or Super Mario tennis. I would goofily announce the games in the background with friends,” Imber said. “I always loved watching sports and commentating. But I don’t think I really knew what I wanted to be until college, because that’s when I found Owl Radio.”

Florida Atlantic University was Imber’s first and only choice when it came to college selection. He wanted to stay near family, and FAU had Division I sports so it was a win-win.

“Two weeks into my FAU career I found Owl Radio on campus,” Imber said. “I was like, ‘how does this work?’ And they said anyone can have a show, so I had my own sports radio talk show, the ‘Rush Hour Sports Report,’ and I did it every week.”

Simultaneously, Imber also immersed himself in other opportunities at FAU. From operating the scoreboard at FAU football games, to color commentating and eventually doing play-by-play calls for Owl
Radio – at football, basketball and baseball games – the practice and experience only fueled his desire to do more.

But the most pivotal moment came when Imber noticed that FAU had a club hockey team.

“I called the coach and introduced myself and told him I wanted experience, and he said they didn’t have anything and no one has done broadcasting at games,” Imber said. “It became a match made in heaven because I started the broadcast from scratch and did play-by-play for the team online. At one point, I did play-by-play and public address announcing at the same time. It made the dream start to come into focus and gave me unbelievable experience.”

Kevin Petrich, Ph.D., a communications professor at FAU, first met Imber in his broadcast journalism class in August 2010. In teaching such hands-on courses, Petrich said that he is privileged to have frequent glimpses into students’ potential for successful professional work in the media and in other fields. Relatively few demonstrate the necessary creativity, attention to detail, sharp thinking, technological aptitude, and interpersonal skills, but Imber always stood out.

“I still recall feeling as though I was with a colleague when, in a particularly stressful moment producing our news program at a remote location, I watched him calmly sit down and flawlessly record his voice tracks for a story whose copy he had carefully prepared,” Petrich said. “His relaxed demeanor, excellent written communication and superb oral communication were very welcome that day.”

A Bachelor of Arts degree with a major in multimedia studies and a minor in sociology soon followed for Imber in spring 2011. The day of his last class at FAU, he interviewed for and was chosen to be the communications intern for the Florida Panthers’ 2011-12 season. But it wasn’t until 2015 after the Panthers’ organization experienced major turnover did the PA announcer position open up.

“It was me and 65 people for tryouts,” Imber said. “The audition was quick. They narrowed it down to the top three. I was one of them and they brought us back again. It was really unbelievable and they went with me for start of preseason.”

Imber arrives to Amerant Bank Arena two-and-half-hours before every home game starts. He begins his time with a pregame meeting, making sure everyone is on the same page. Then comes sound check and rehearsal, the national anthem singer practices, and then Imber warms up on the microphone just before game time.

“I love announcing the starting lineup and getting the crowd hyped before the game starts, but I also really just love everything about my job.”

- Andrew Imber

But nothing could prepare Imber for what was to happen this past hockey season. After barely clinching a wild card spot in the playoffs, the Panthers faced the Boston Bruins, the team that had set the NHL record for most wins and points in a season. Down 3–1 in the series, the Panthers unbelievably came back and won Game 7 in overtime to pull off one of the biggest upsets in NHL history.

The Panthers would then go on to defeat the Toronto Maple Leafs to advance to
the Eastern Conference Final for the first time in 27 years. A sweep of the Carolina Hurricanes soon followed, bringing the Panthers to the Stanley Cup Final for the first time since 1996.

Although the Panthers were defeated by the Vegas Golden Knights in five games, the incredible ride of the playoffs to the Stanley Cup was one that Imber called the best few months of his life.

It also was a historical moment for Imber personally, as he is the first Florida Panthers’ PA announcer to ever announce a Stanley Cup Final win at home.

“From hosting every road game as a watch party, to seven overtime game winners, to rolling through three series like that … every night created a new memory. These types of runs are special, because even if you do the best you can in the regular season, you can still lose in the first round,” Imber said. “I am so thankful for the memories, and I’m hopeful that feeling the sting of defeat in the finals will push the team further to go win next year … that this laid the rest of the groundwork to get to the championship again.”

During the spring, Imber also serves as the PA announcer for the Houston Astros and Washington Nationals spring training games. In his spare time, Imber focuses on his fitness, something that encouraged him to try out for “American Ninja Warrior,” in which he was chosen for season 9.

“I was always a big fan of the show and saw there was one or two ‘American Ninja Warrior’ gyms in Miami. I started to train more and submit videos because I thought being a pro sports announcer would give me a shot,” he said. “They had me come for pre-interview in 2017 and we filmed in Daytona Beach. I never saw my time on the course on TV, but it was a great experience.”

Imber said he is grateful for the opportunities and the doors that have opened for him, while emphasizing that a clear mindset is most important for anyone who wishes to achieve their goals.

“I have a little puck memento that I carry around with me that has ‘First. 32. Last.’ inscribed on it. This represents three different mindsets for me. Somebody is hearing me for the first time, and I want them to leave with a good first impression so I put on my very best,” Imber said. “The 32 is because there are only 32 teams in the league and only 32 PA announcers, so I am in exclusive company. And the ‘last’ reminds me to call every game like it’s my last. There’s no safety net in this industry, so I make sure to belt it out like it’s my last every game. I am incredibly lucky and when you’re living your dream, you never feel like you’re working.”
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With an increased number of malaria cases originating in Florida and other locations throughout the U.S., FAU researcher Andrew Oleinikov, Ph.D., licensed his technology to industry to develop a treatment for the serious and sometimes fatal disease.

Learn more at www.fau.edu/research-admin/technology-development
Meet the New Alumni Board

BY WELLS DUSENBURY

Justine Avila, a College of Business graduate, will lead the FAU Alumni Association Board of Directors for the 2023-24 fiscal year.

“As an alumna of Florida Atlantic University, I have always been passionate about the university and how to engage and bring fellow alumni back to our alma mater,” Avila said. “I am excited to work with our new executive board as we continue to cultivate our alumni base in new and exciting ways this year.”

The 29 members of the board are tasked with supporting and growing the alumni association for a variety of initiatives, including scholarships, community outreach and membership.
Tips from an Expert

TRAVEL TIPS FROM A GLOBAL SECURITY EXPERT

BY KATHERINE FRAZIER-JONES AND WENDY GUASTAFERRO, PH.D.

For three decades, FAU criminal justice alumnus Michael Reiter ’88 worked in law enforcement, spending nearly 10 of those years as the Palm Beach chief of police overseeing the investigation that ultimately brought down notorious sex trafficker Jeffrey Epstein.

After he retired from police work in 2009, Reiter founded Michael Reiter and Associates, a security firm that specializes in the protection of high-net-worth individuals. His firm’s services span from personal and travel security like video surveillance and safe rooms, to crime prevention through environmental design. The 2023 Distinguished Alumnus for the College of Social Work and Criminal Justice recently shared invaluable insights to ensure safer traveling.

Q: Let’s start with some basics. What tips do you have for traveling through airports?

A: If you still use printed boarding passes, don’t throw them away at the airport. Some of them are encoded with data about you and your trip that could help someone trying to steal your identity. Same thing with bag tags that are placed on your checked luggage; dispose of them securely. Your physical appearance when traveling is also super important. If you’re standing out wearing a brightly colored, patterned dress and your best jewelry in an airport full of people dressed in black and muted colors, you make yourself an easier target for opportunists.

Q: For people traveling to unfamiliar places, what is your top safety advice?

A: Avoid being alone in unfamiliar areas no matter where you are in the world. If you realize you’re on an unfamiliar street, especially at night, and no one else is around, get to safety as soon as possible. Absence of others creates a vulnerability for victimization. Also, keep in touch with somebody back home. Let them know roughly where you’re going, where you’re staying, and what you’re doing. And consider having a check-in procedure; this is particularly important if traveling in parts of the world where risk is higher. Something like: “Here’s the calendar of when I’m going to call you. If you don’t hear from me, I’d like you to do this. I’d like you to call this hotel.” Also, walk up and down the streets ahead of time with Google Street View if you’re picking a hotel or if the area is an unfamiliar place.

Q: Do you have any specific guidance for international travelers?

A: It is essential to stay informed of things happening in your destination that can create risk. Fortunately, the U.S. State Department has the Smart Traveler Enrollment Program (STEP) where you can register your trips for free with the nearest embassy or consulate and get text alerts about risks in the area before and throughout your trip. Say, for instance, you were going to Rome, you may receive texts about strikes, demonstrations, boil water orders, weather events that could affect your travel, terrorism threats and so on.
Celebrating Florida Atlantic's Past.

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Welcome Home

For more than 60 years, Florida Atlantic has been a home to students from every corner of the globe. While the campuses, faculty, and size of the University have changed, Florida Atlantic will always hold a special place in the hearts of its alumni.

Rekindle your love for FAU and witness the university's stunning transformation with Alumni and Community Engagement's immersive campus tours and other initiatives to welcome you home this fall.

Visit faualumni.org/welcome-home to sign up and learn more.
Another great tip is to use its official traveler’s checklist, which can be downloaded for free on the travel.state.gov website. The checklist will guide you through getting a security briefing on your destination, finding out what you’re allowed to bring into the country, and what the tolerance levels are for those items before you pack them. For example, one of my client’s employees would carry a knife to do his job aboard a boat, but some countries look at a knife as a very dangerous weapon. Some countries also consider pepper spray a technical weapon of mass destruction and, depending on the amount, possession may be punishable by law. Finally, if you’re not confident that you know enough to be able to go out on your own, consider hiring a local guide who is licensed and insured.

Q: Does the STEP program help travelers after they arrive at their international destination?
A: Yes. Once you register your travel dates with STEP, the whole time you’re abroad they will inform you of what is going on. And they also know that you’re there. The last time there was a major societal disruption in Egypt, the U.S. State Department used the STEP registry to determine how many Americans were in the region and then used government aircraft to get them to safety.

Don’t just rely on your passport because maybe you arrive in one city by air and are traveling somewhere else by train. You’re much better off if you register your travel details and itinerary in the STEP program. Plus, say you’re on an international trip and your family or friends can’t reach you. What do they do? They call our government and say, “Can you help me here?” If you’ve registered your trip through STEP, the authorities will have all the details of where you’re staying and can take the steps necessary to locate you.

Q: What is your approach to business travel security?
A: I recommend never using public or hotel Wi-Fi. I use the cell network and connect my laptop to my phone. I know it can be expensive, but it’s a lot less expensive now than it used to be. If I checked into a hotel and I was a bad guy and I wanted to intercept others, I would set up a Wi-Fi network, which you could do easily with a laptop and a Wi-Fi router and have almost the same name as the Wi-Fi of the hotel. Maybe they set it up so alphabetically it appears on your phone above the legitimate hotel Wi-Fi, and you’re not looking carefully and you click on the fraudulent access point. With the right software, they’re now seeing everything you do, including when you sign on to your bank account, which you should never do while traveling, by the way. It’s just too much vulnerability.

You may also want to consider purchasing a Faraday bag for your phone and laptop. They block radio frequencies from coming out of and going into your devices — another layer of protection for your personal or business data. Also, make sure your room’s door viewer, or peephole, has a cover. If it doesn’t, use a piece of opaque tape to cover it. Why? There is a very simple device that bad actors can buy on eBay that you hold up to the outside of the door to reverse the optics and see inside the room. I recommend addressing these kinds of low-tech threat scenarios first because they are much more likely.

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Q: In closing, how can travelers balance preparation with precaution and feel comfortable enjoying their time away?
A: Travel really is one of the gems of life. It keeps your brain young in making all those decisions. Should we go here? Is this the right way? What about this? What about that? It’s a wonderful thing. The more of these tips you follow, the more confidence you will have for a trouble-free trip. Planning in advance of traveling and avoiding complacency during your trip — that is everything. 😊
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1980s

Lee E. Brown, master’s in exercise science ’87, doctorate in educational leadership ’00, received the Legacy Scholarship from the National Strength and Conditioning Association (NSCA) Foundation. The Legacy Scholarship is presented to one NSCA member each year who is pursuing a doctoral degree in strength and conditioning-related fields. Brown is a professor emeritus of kinesiology at California State University, Fullerton. He has authored more than 600 scholarly articles, presentations, books and chapters.

Chloe Dolandis, interdisciplinary studies, arts and humanities ’07, earned a best voiceover award for an outstanding radio promo from the Society of Voice Arts and Scientists. Dolandis is also the female promo voice of Cinemax Latin America (in English).

2000s

Pablo E. Paez, finance and real estate ’03, MBA ’08, was appointed to the FAU Board of Trustees by the Florida Board of Governors. He is executive vice president of corporate relations for The GEO Group and executive director of The GEO Group Foundation.

Darryl Maraj, marketing ’04, MBA ’06, was named senior vice president and global CIO of GA Telesis. Maraj is dedicated to fostering technological growth and progress in the South Florida community and serves as the 2023 chair of South Florida CIO. He was previously recognized as the 2021 South Florida CIO of the Year and 2022 National Orbie Award finalist.

2010s

Nick Claudio, electrical engineering ’06, has joined Freese and Nichols, a privately owned engineering, planning and consulting firm serving clients across the Southwest and Southeast United States. Claudio has more than 16 years of experience in the remote management of water and wastewater facilities and will be the technical leader for the firm’s instrumentation and controls. He’s based in Central Florida and assists on projects companywide.

Ana Larrea-Albert, MBA ’14, is the author of the “ZeeZee World” children’s books, a bilingual series encouraging children to dream big, take action and make a difference. Larrea-Albert holds a master’s in public administration, management, leadership and decision sciences from Harvard Kennedy School. She teaches leadership and organizations in FAU’s Executive Education program.

Did you get married, have a baby, start a new job, receive an award, or experience some other big life moment or personal victory recently? Send your news, including full name, graduation year, college or major, and high-resolution photos (at least 300 dpi) to FloridaAtlanticMag@fau.edu.
Karl Ross, master’s in accounting ’14, earned a silver medal in the men’s 400-meter hurdles and a bronze medal as part of a 4x100 relay team at the USATF Masters Outdoor Championship meet in Greensboro, North Carolina in July. He began jumping hurdles five years ago at the age of 53. Ross is an investigator for the Miami-Dade Commission on Ethics and Public Trust.

Thomas De Maio, political science ’15, master’s in higher education ’17, is a captain in the U.S. Air Force and a Judge Advocate General (JAG attorney). He recently received the 15th Air Force’s Judge Advocate Company Grade Officer of the Year Award.

Noah Goldberg, political science ’19, is working for the NCAA as a postgraduate intern in the Eligibility Center. He graduated from Florida A&M University’s law school with a Juris Doctorate in May.

Andrew Garrison, economics ’20, master’s in economics ’21, is the new director of the Phil Smith Center for Free Enterprise in Florida Atlantic’s College of Business. He also is an adjunct professor in the college.

Vuk Velickovic, MBA ’21, earned a silver medal in the Association of Pickleball Players (APP) 2023 Boca Raton/New York City Open at the Billie Jean King National Tennis Center in New York. He advanced to the gold medal match in his first APP appearance and second-ever pro event. Velickovic began playing pickleball while serving as a volunteer men’s tennis coach and dormitory leader at Florida Atlantic in 2019–20.
FAU’s Boca Raton campus was designated a burrowing owl sanctuary by the Audubon Society in 1971, inspiring the university to adopt the feisty bird as its mascot.

The first mascot costume was created in the mid-1980s, when comedian Bob Hope visited campus and wanted to do a routine with the mascot. A “wise old owl,” complete with academic regalia, was brought to life.

Over the years, the mascot’s appearance has become more athletic, especially once FAU added its football program in 2001. It became known as Owlsley in 2008, when the name was selected through a student contest.

Today, Owlsley has an outfit for every occasion, a sidekick named Hoot, and more than 5,000 followers on Instagram.
The original mascot with two graduates in the 1980s.

The third mascot with former FAU President Frank Brogan at an alumni event in 2005.

The second mascot with benefactor Tom Oxley and former FAU President Anthony Catanese at the opening of the Tom Oxley Athletic Center in 2001.

Four generations of retired mascot costumes have been restored by the Special Collections Department and are on permanent display in the S.E. Wimberly Library. Scan the QR code for more information.

Owlsley at the FAU Campus Recreation & Fitness Center in 2010.