ISSUE 6

FALL 2024

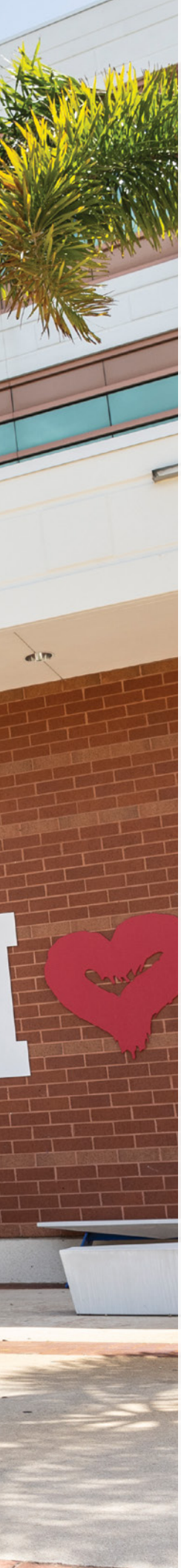
FLORIDA ATLANTIC

UNIVERSITY MAGAZINE

A Global Advantage

COMMITMENT TO INTERNATIONAL STUDENT SUCCESS DRIVES A MAJOR SURGE IN ENROLLMENT


LIBERAL ARTS



PRESIDENT'S MESSAGE

The fall semester is always an exciting time at Florida Atlantic University, as we welcome new and returning Owls, cheer for our student-athletes, and celebrate achievements. Once again, we are recognized as one of the nation's best universities by multiple publications, including U.S. News & World Report and Washington Monthly — two of the most notable sources of college rankings. Additionally, we are thrilled to have reached the half-billion-dollar milestone in our comprehensive fundraising campaign, the goal of which is to raise $600 million for scholarships, as well as programs and research related to health care and the environment.

This fall — which marks 60 years since the University opened its doors to upper-division and graduate students in 1964, and 40 years since admitting its first freshmen and sophomores in 1984 — Florida Atlantic welcomed one of its largest incoming classes in history. From a record 47,000 applicants, we selected more than 4,200 impressive students to join the Class of 2028. The average high school GPA of students who joined us in the fall is 3.92 and the average ACT score is 24. As a first-choice university, we are excited to welcome the very best and brightest students from our state and across the nation as we continue our upward trajectory.

Many of our talented students come from various locations around the world as well, representing more than 110 countries. In addition to contributing to our vibrant community by sharing their unique perspectives and traditions, after graduating, international students fill high-demand jobs and have a positive economic impact on our region and state. This issue's cover story takes a closer look at the people and programs that are ensuring their success.

Florida Atlantic also is promoting economic development through its nationally ranked entrepreneurship program. Empowered by faculty and staff in the College of Business, our innovative students have launched more than 115 new businesses in their missions to achieve success and generate positive change. You can learn more about our award-winning entrepreneurship program in the following pages.

With Florida Atlantic's unique campus locations spanning more than 110 miles along the Southeast Florida coast, environmental research plays a significant role in our community. A decades-long study of sea turtles conducted by a team of interdisciplinary researchers is shedding light on the future of the species, as well as related environmental conditions. In this story of conservation and survival, you'll find key insights for ecosystems in Florida and beyond.

Discourse surrounding the U.S. presidential election captured audiences around the world. To drive these conversations, the FAU Political Communication and Public Opinion Research (PolCom) Lab engaged with national and international media outlets by providing polling data about the habits and opinions of voters. In this issue, a story about the PolCom Lab explains how our academic community collects and analyzes data to track political trends, study emerging technologies and keep the public informed.

I hope you enjoy reading these stories and more in this issue of Florida Atlantic magazine.

Go Owls!

Stacy Volnick, Ph.D.
President

FALL

2024 CONTENTS

ISSUE 6

FLORIDA ATLANTIC MAGAZINE

50

FLORIDA ATLANTIC
UNIVERSITY MAGAZINE

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Amber Bonefont, Joseph Choma, Ph.D., Cammi Clark, Alyse Cooke, Sam Dean, Wells Dusenbury, Jonathan Fraysure, Gisele Galoustian, Joshua Glanzer, Kristine Gobbo, Amy Haycock, Chelsey Matheson, Katrina McCormack, Lisa Metcalf, Ben Paul, Scott Silversten, Genesis Silvestre, Olesea Svet

Design and Graphics
Craig Korn

Photographers/Images
Jim Abernethy, Alberto Alvarado, Keira Arimenta, Paige Arriola, Sasha A. Baranov, Katarzyna Bytnar, Joseph Choma, Ph.D., Kevin Cox, Ph.D., Stacy Di Marco, Alex Dolce, Downtown Photo, Aaron Fertel, Getty Images, Zachary Greathouse, Gush, Cecilia Hampton, Harvard Jolly Architecture, Michael Loccisano, Chelsey Matheson, Sarah Milton, Ph.D., Kevin Ortiz, Mauricio Paiz, Jay Paredes, JC Ridley, Robert Snow, Jeffrey Tholl, Samantha Trail, Briana Valentino, Adam TM Wyatt, Ph.D., Jeanette Wyneken, Ph.D., USA Baseball
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FEATURES

44 **Global Advantage**
FLORIDA ATLANTIC'S COMMITMENT TO STUDENT SUCCESS DRIVES A SUBSTANTIAL INCREASE IN INTERNATIONAL ENROLLMENT

50 **In Hot Water**
TRAILBLAZING TRIO LEADS THE FIGHT TO SAVE FLORIDA'S SEA TURTLES

58 **Innovating the Future**
HOW THE COLLEGE OF BUSINESS WORKS TO SHAPE THE ENTREPRENEURS OF TOMORROW

64 **Gauging America's Political Fault Lines**
FLORIDA ATLANTIC POLCOM LAB INFORMS VOTERS AND THE MEDIA

DEPARTMENTS

6 **AROUND CAMPUS**
University News

82 **FOREVER OWLS**
Alumni News and Notes

72 **WIN COLUMN**
Florida Atlantic University Athletics

90 **TIME MACHINE**
A Look Back

AROUND CAMPUS
UNIVERSITY NEWS

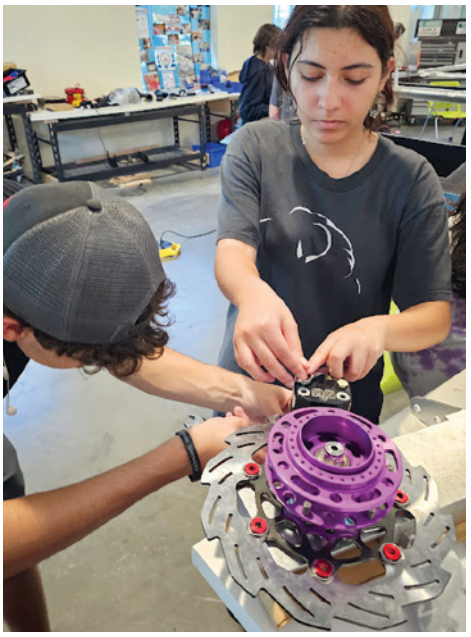
SHINE ON

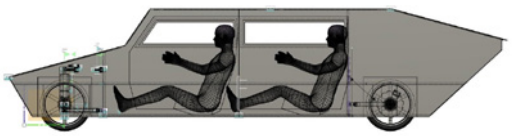
Solar Owls Use Sun to Soar at Texas Motor Speedway

As the temperature climbed toward 100 degrees in mid-July, a group of 26 Florida Atlantic University High School students were hoping for just one thing … more sun!

That's because the Florida Atlantic Solar Owls were gathered in Fort Worth, Texas, to compete in the 31st annual Solar Car Challenge at the Texas Motor Speedway. The Solar Owls were racing their ALSET Solar CyberSedan, which the students designed and built from the ground up over the course of a year at the Tech Runway facility in the Research Park at Florida Atlantic University.

Led by Allan Phipps, director of The Cane Institute at A.D. Henderson/FAU High, the Solar Owls spent a combined 20,000 hours designing, constructing and testing their CyberSedan. Nearly all the major materials used in the car were donated by sponsors, including items such as the battery pack and the carbon fiber frame.





"The Florida Atlantic Solar Owls consist of over 50 students from more than 12 different majors, united in their goal to innovate and apply their academic knowledge to address real-world challenges in the automotive and alternative energy sectors," Phipps said. "I am incredibly proud of the entire team and all they have achieved in designing and building a fully functional, full-size four-seater solar cruiser. This car truly embodies the future of commuter vehicles, never needing to be plugged in to charge."

Upon arriving in Fort Worth, the Solar Owls and 31 other teams were subjected to three days of scrutineering — rigorous evaluation by a panel of experienced judges — to ensure competing vehicles complied with technical and safety regulations. The teams that passed all inspections then took to the track for four days of racing.

The Solar Owls' CyberSedan allowed for a driver and three passengers to traverse the

1½-mile track, home to an annual NASCAR race. Team members were seated on pit road to monitor the car's performance, speed, battery life and various key indicators, with a few other team members in the stands as spotters to watch all activity across the speedway.

At the end of the grueling week of work and racing, the Solar Owls finished in second place in the Cruiser Division, which is defined as all cars featuring four passengers with the solar array integrated into the body of the vehicle. The Solar Owls were honored with the Lockheed Martin Award for demonstrating the highest level of engineering excellence. Earlier in the week, the Solar Owls received the Renda Carter Award presented for the outstanding team video and scrapbook, both of which summarized the team's efforts designing and building the car.

"The experience was absolutely surreal," said Mark Zagha, team captain and senior at FAU High. "Racing a car that we built on a NASCAR racetrack was a once-in-a-lifetime opportunity. The hard work that everyone put in during the past year contributed to our success on and off the track."

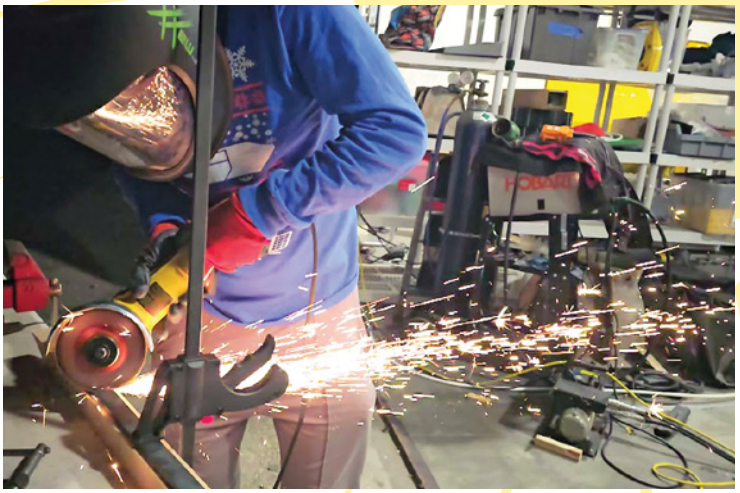
The Solar Car Challenge was established in 1993 by educator Lehman Marks. The program is designed to help motivate students in the fields of science, technology and alternative energy.

This year's event featured 32 teams from 12 states, with the Solar Owls becoming the first high school or university team from Florida to build a Cruiser Division car and ultimately compete in the race. A cross-country version of the race occurs biannually, with alternating years showcasing cars on the track at Texas Motor Speedway.

"This is the brain sport," Marks said. "It's not just about building the car, but how to drive that car, solve the inevitable problems that happen with the car, and keeping your team intact through four grueling days of racing. Doing the Solar Car Challenge makes these students better equipped to face the challenges they'll have in life."

Racing a car that we built on a NASCAR racetrack was a once-in-a-lifetime opportunity. The hard work that everyone put in during the past year contributed to our success on and off the track."

– Mark Zagha, Team Captain



FIGHTING ALZHEIMER'S DISEASE

Researchers to Develop Novel Therapies and Diagnostic Tools

Florida has the second highest incidence of Alzheimer's disease (AD) in the nation with 580,000 people ages 65 and older living with AD. It is estimated that more than 720,000 Floridians will be living with AD by 2025.

Three leading Florida Atlantic University researchers are helping to combat this widespread neurological disorder with support from the Florida Department of Health (FDOH). The University recently received a $1 million grant from the FDOH's Ed and Ethel Moore Alzheimer's Disease Research Program, established to improve the health of Floridians by stimulating research into the prevention, diagnosis, treatment, care management and cure of AD.

"With this important grant, our researchers will shed light on the biological functions of this disease by taking advantage of synthetic chemistry strategies; provide an innovative online screening tool for older drivers with cognitive decline; and gain a deeper understanding of the role of brain cholesterol in Alzheimer's disease," said Gregg Fields, Ph.D., vice president for research at Florida Atlantic.

The three researchers each received $350,000 in support of their novel approaches to combat AD.

Mare Cudic, Ph.D., is an associate professor in the Department of Chemistry and Biochemistry, and director of the Honors in Chemistry Program in the Charles E. Schmidt College of Science. Her research explores the link between two emerging topics — glycosylation and neuroinflammation — in the occurrence and development of AD. Protein glycosylation plays a vital role in mediating a plethora of biological functions. Because most known AD-related molecules are either modified with glycans or play a role in glycan regulation, glycobiology represents a novel insight into understanding AD and developing potential new therapeutic approaches. Results from this work will shed light into a relatively unexplored area in AD and open avenues for development of novel therapeutic strategies to curb the alarming surge of AD and other neurodegenerative diseases.

Ruth Tappen, Ed.D., is the Christine E. Lynn Eminent Scholar and professor in the Christine E. Lynn College of Nursing. Her research focuses on developing and testing a rapid, easily administered screening test of older drivers who are experiencing cognitive decline. Fit2Drive Online provides an objective, evidence-based prediction of an older adult's ability to pass an on-road driver test, which is the gold standard of older driver evaluation. The project entails cognitive tests, which are evaluated to identify those with the greatest power to predict on-road driving performance requiring the smallest number of items and/or shortest testing time. The selected tests, comprising Fit2Drive Online along with the algorithm for predicting ability to pass the on-road test, are uploaded on tablets and tested on study participants. In a psychometric study of the new test's diagnostic accuracy, results — published in the Journal of the American Medical Directors Association — showed the Fit2Drive algorithm demonstrated a 91.5% predictive accuracy. This novel screening tool benefits individuals with cognitive decline, their family caregivers and their primary health care providers.

Qi Zhang, Ph.D., is an associate professor in the Department of Chemistry and Biochemistry in the Charles E. Schmidt College of Science, and a faculty member of the David and Lynn Nicholson Center for Neurodegenerative Disease Research. His research is focused on brain cholesterol and dysregulation that triggers dysfunction and neurodegeneration. Since 1906, research has been focused on proteins and genes pathologically or genetically linked to AD. However, more and more new evidence has revealed abnormalities in brain lipids, especially cholesterol, which is highly enriched in the brain and crucial for neuronal function and survival. Moreover, an isoform of the cholesterol transporter APOE is the most common hereditary risk factor in AD. Zhang's team will develop novel imaging methods to explore brain cholesterol in a mouse model, employ genome editing in human stem cells, and harness the power of multi-omics, an integrative approach combining different "omic" measurements such as transcriptomics and lipidomics. The project is expected to provide essential insight into brain cholesterol, AD pathogenesis and potential therapeutic strategies.

"For decades, scientists around the world have been working diligently to advance our understanding of Alzheimer's disease and other related dementias and to develop effective therapies," said Randy D. Blakely, Ph.D., executive director of the FAU Stiles-Nicholson Brain Institute, the David J.S. Nicholson Distinguished Professor in Neuroscience, and a professor of biomedical science in the Charles E. Schmidt College of Medicine. "Drs. Cudic, Tappen and Zhang are among these dedicated scientists who are poised to tackle this devasting disease with their unique approaches."

Artist's Rendering

FUELING STUDENTS' PASSIONS

Grant Grows Innovation at FAU Lab Schools

Florida Atlantic University Laboratory Schools received a $2 million grant from The Marcus Foundation to launch the Marcus Research and Innovation Center at the A.D. Henderson University School and FAU High School campus in Boca Raton. The Center will serve as a training ground for the schools' students, preparing them to learn to investigate and address the future.

With more than 12,000 square feet of research space, the labs in the Marcus Research and Innovation Center will focus on bioimaging, neuroscience, ocean science and conservation, along with a health care pipeline for teaching, high-performance computing and rapid prototyping methods.

"We are grateful to The Marcus Foundation for its strategic investment in our students, educators and community," said FAU President Stacy Volnick. "This impactful grant will facilitate the development of our students' passions, expand our research and pioneer the critical discoveries of tomorrow."

The new center will house and expand the current programs at the FAU Laboratory Schools, where students are introduced to research as early as kindergarten. To date, the schools have produced 78 student publications in peer-reviewed journals, six patents and more than 1,500 citations worldwide.

In addition, this space will support the FAU Laboratory Schools' Stiles-Nicholson STEM Teacher Academy, where middle and high school instructors benefit from experiential professional learning opportunities; and the Cane Institute for Advanced Technologies, where students research cybersecurity, autonomous vehicles, robotics, virtual reality, augmented reality, automation and artificial intelligence.

"This generous grant will accelerate the transformational re-engineering of education already in progress at our lab schools," said Joel Herbst, Ed.D., superintendent of Florida Atlantic Laboratory Schools. "The Marcus Research and Innovation Center will serve as a blueprint for developing researchers and a globally competitive workforce, as well as train the school leaders and educators of tomorrow."

THE STINKY SEAWEED STRUGGLE

$1M Grant to Help Battle Blooms

The emergence of a massive expanse of seaweed, known as the Great Atlantic Sargassum Belt, has wreaked havoc on ecosystems and economies throughout Florida, the Gulf of Mexico and the Caribbean in the past decade. Conversely, this stinky brown seaweed also provides vital habitats for marine life, including loggerhead sea turtles.

As a major Florida attraction, clean and healthy beaches are imperative for the state's tourist-based economy. But eliminating vast piles of seaweed on the shores every year while protecting these critical habitats proves a precarious struggle.

Decomposing Sargassum produces hydrogen sulfide and ammonia, which can result in potential human and environmental health impacts. Once it deluges beaches, removing, disposing and repurposing the seaweed also presents many logistical and economic challenges. This causes problems to arise when it isn't cleaned up in a timely manner.

To address this challenge, Florida Atlantic University Harbor Branch Oceanographic Institute researchers received a $1.3 million grant from the Florida Department of Emergency Management for a project to assess the feasibility of in-water harvesting of this floating brown seaweed in Florida. They also are examining both environmental and ecological impacts of Sargassum inundations in the state.

"Sargassum is becoming a devasting mainstay in parts of Florida's coastal communities, particularly in the Florida Keys, where massive blooms continue to recur," said Brian Lapointe, Ph.D., principal investigator and research professor at FAU Harbor Branch. "Economically, a 'severe' Sargassum event could have more than a $20 million impact in just the Keys alone. Environmentally, these blooms can potentially harm humans, exacerbate eutrophication resulting in die-offs of seagrasses and corals, and kill recreational and commercially important species."

As part of the project, Lapointe and his team are using drones, GoPros and other remote vehicles to survey Sargassum sites above water, measuring mat sizes and collecting high-resolution aerial images. They also are examining changes in beach structure, as well as Sargassum thickness and biomass per square meter. Additionally, they are conducting a trial removal using dip nets to explore harvesting methods that minimize harm to marine life, under permits from agencies like the Florida Fish and Wildlife Commission and National Oceanic and Atmospheric Administration.

Due to the expanding size and duration of blooms in the Great Atlantic Sargassum Belt, regions are investigating new ways to utilize excess Sargassum biomass for economic ventures like biofuels and bioplastics. Addressing concerns over arsenic content, the FAU Harbor Branch researchers are studying how arsenic accumulates in Sargassum through field samples and lab experiments to better understand its implications for potential industrial uses.

To gain insight into the impacts of Sargassum inundations on water quality, the researchers also are measuring pH, dissolved oxygen, temperature, dissolved nutrients and fecal indicator bacteria in inundation sites.

"Data from this timely research will help to inform managers whether it is better to harvest Sargassum in water as opposed to on the beach and help them better plan for removing vast amounts of seaweed from our beaches and preventing aggregations," said James M. Sullivan, Ph.D., executive director of FAU Harbor Branch.

"Economically, a 'severe' Sargassum event could have more than a $20 million impact in just the Keys alone. Environmentally, these blooms can potentially harm humans, exacerbate eutrophication resulting in die-offs of seagrasses and corals, and kill recreational and commercially important species."

– Brian Lapointe, Ph.D.

FAU CHRISTINE E. LYNN COLLEGE OF NURSING

Experience caring in action

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Florida Atlantic University's Christine E. Lynn College of Nursing is recognized for its highly ranked programs by U.S. News & World Report.

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Master of Science in Nursing

- Advanced Holistic Nursing (Online)
- Nurse Educator (hybrid)
- Nurse Administration and Financial Leadership (Online)
- Nurse Practitioner (adult/gerontological nurse practitioner, family nurse practitioner)

Doctor of Nursing Practice (DNP)

- Online, part-time post graduate program with classes held one weekend day per month
- Full-time BSN to DNP program in family, adult/gerontological, or psychiatric mental health nurse practitioner

Doctor of Philosophy (PhD)

- Online, with classes held one weekend day per month

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The baccalaureate, master's and DNP programs at Florida Atlantic University's Christine E. Lynn College of Nursing are accredited by the Commission on Collegiate Nursing Education. It is the only university in the U.S. to have all its degree programs endorsed by the American Holistic Nursing Credentialing Center.

BUILDING THE FUTURE

Integrating AI into a School of Architecture

Florida Atlantic University's School of Architecture is uniquely designed — from its curriculum to its facilities. Unlike most other schools of this nature, it is one step ahead — successfully integrating artificial intelligence (AI) throughout its professional architecture program.

Because of this latest innovative endeavor, the school recently was honored with the Tambellini Future Campus Award for Innovation in Artificial Intelligence and Technology Integration.

"As a School of Architecture, we believe there is an ethical responsibility to prepare students to help shape the future of professional practice," said Joseph Choma, Ph.D., director of the School of Architecture. "It is quite obvious that AI will become a ubiquitous tool within the foreseeable future. Therefore, it is in our opinion, that AI should be learned as a requirement to complete a professional degree in architecture."

The vision of the School of Architecture at Florida Atlantic is to combine innovative research with professional practice constraints. As part of that vision, the school has transformed traditional design studio spaces into new research labs, which are also teaching labs. These include the Creative AI Lab, Environmental Design and Natural Materials Lab, and the Foldable Structures and Materials Lab.

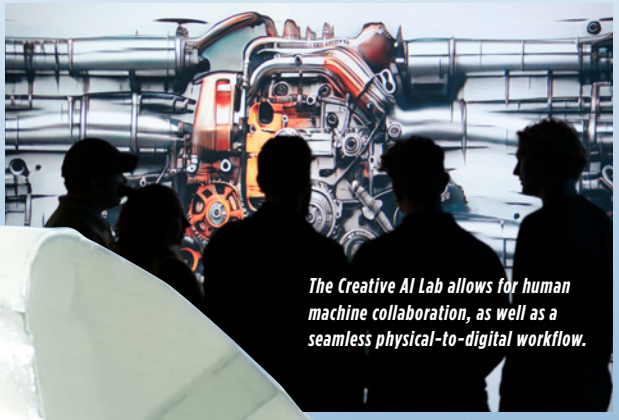
The Creative AI Lab includes an immersive 180-degree floor-to-ceiling screen, eight 3D scanners mounted to the ceiling, AR/VR equipment, and a powerful server to compute large datasets instantaneously. The lab is a spatial instrument designed to change the way students think about human-machine collaboration. For example, students can manipulate physical architectural models, such as tensile fabric structures, by changing boundary conditions. Then those physical models can be scanned in real time, inputted into a self-organizing map and projected on the large immersive screen. The AI can provide a new range of design possibilities, which can then be sent to the AR/VR goggles to help advise the students on how to transform their physical models.

The School of Architecture is one of the first of its kind to require all undergraduate students within their professional program to learn AI at an advanced level, Choma said. Students learn how to create 3D datasets by using self-organizing maps to interpolate that data, and then designing workflows to objectively evaluate the range of possibilities.

"We perceive a fundamental shift in the profession from designing buildings to designing workflows to help tackle wicked problems associated with the built environment," Choma said. "This could include reducing the carbon footprint of how we build or design for climate adaptation and hydro-generated urbanism. As a school, students and faculty embrace pragmatic constraints as poetic design opportunities, while tackling the most challenging problems of our time."

Undergraduate students interact with the Creative AI Lab.

Undergraduate students watch an AI-generated animation on an immersive screen in the Creative AI Lab.



The Creative AI Lab allows for human machine collaboration, as well as a seamless physical-to-digital workflow.

FACULTY AWARDS

In 2023-24, School of Architecture faculty members earned multiple awards, including:

- **Joseph Choma, Ph.D.:** 2023 ACADIA Innovative Research Award of Excellence from the Association for Computer Aided Design in Architecture
- **Jeffrey Huber:** 2024 Tau Sigma Delta Gold Medal, awarded to a professional with a record of high distinction in design in the field of architecture, landscape architecture or the allied arts
- **Daniel Bolojan:** 2024 Digital Futures World Young Award
- **Jean Martin Caldieron, Ph.D.:** selected as a Fulbright U.S. Scholar for 2024-25 for Cote d'Ivoire
- Four faculty members earned 12 design awards at the 2024 convention for AIA Florida, a chapter of the American Institute of Architects. **Jeffrey Huber** received nine awards while **Daniel Bolojan**, **Shermeen Yousif**, **Ph.D.**, and **Dustin White** each received one award.

From left, Katelyn Tambellini Ilkani, president and COO of Tambellini Group; Vicki Tambellini, founder and CEO of Tambellini Group; and Joseph Choma, Ph.D., director of Florida Atlantic's School of Architecture.

This lightweight foldable composite pop-up structure was designed and fabricated as part of an industry-sponsored research agreement with Google.

From left, students Nicholas Smith, Samantha Hicks, Shannon Gallup and Sara Burgoa

FOOD IS MEDICINE

Planting Seeds Today for a Healthier Tomorrow

Recent statistics from the Florida Department of Health show that 1 in 10 Palm Beach County residents lacks access to sufficient quality food and nearly 23% of the county is classified as a food desert. When four Florida Atlantic University medical students heard this alarming news, they decided to take action. They initiated Project Grow, a student-led community garden on the Boca Raton campus, to cultivate a healthier, more sustainable community through the philosophy that "food is medicine."

Project Grow serves as a source of fresh produce for the community combined with a living classroom where students grow fruits and vegetables, as well as develop knowledge, resilience and a deeper connection to the environment.

"Project Grow has taught me that understanding our communities and barriers to health goes beyond the classroom and hospital," said Madison Goon, co-founder of the project.

Goon and the three other students work to address food insecurity at the teaching space, where volunteers also learn about local farming, seasonal crops and the principles of good nutrition.

From left, Sara Burgoa, Shannon Gallup and Samantha Hicks

In 500 hours, more than 100 volunteers transformed a once-neglected greenhouse and gardening shed into functional spaces with 10 raised beds, eight fruit trees and a variety of in-ground vegetables.

Medical students also use the garden-grown produce to educate patients at the Caridad Center in Boynton Beach about integrating gardening into their lives to provide sustainable, affordable and nutritious meals.

As the largest free clinic in Florida, according to the National Association of Free and Charitable

August Sevchik, left, and Austin Lent

Harvesting Success

Project Grow's recent milestones highlight its impact including:

- Receiving the Palm Beach County Medical Society's 2024 Heroes in Medicine Award, which acknowledged Project Grow's commitment to community education and food security
- Hosted an Oral Health Fair at the Caridad Center, educating 60 patients on the importance of diet in maintaining oral health through interactive activities like preparing crunchy veggie wraps and calcium-rich smoothies
- Presenting at several prestigious conferences, including the Southern Group on Educational Affairs annual conference and the sixth annual Chapman Regional Conference at UCF College of Medicine, inspiring other universities to replicate the project

Blossoming

Project Grow board members Jash Patel, Maya Khazem and Emmanuel Guirguis will continue the growth and future plans of the garden, including:

- The creation of a sensory garden for children on the autism spectrum
- Hosting structured learning sessions during high school workdays

Clinics, the Caridad Center serves 18% of low-income adult minorities in Palm Beach County.

During the recent Chronic Disease Prevention Health Fair Day at Caridad, Florida Atlantic students conducted workshops emphasizing the importance of diet in managing chronic diseases. These workshops covered topics like self-care, back-to-school readiness and nutrition education for breast cancer survivors, combining store-bought ingredients with garden produce to prepare more than 400 meals for Caridad Center patients.

YOUNG LEARNERS

Medical students also invite local students in kindergarten through 12th grades to participate in garden nutrition education classes, while promoting healthy eating habits and environmental stewardship in young learners. The goal of this educational outreach is to emphasize the importance of good nutrition and seasonal eating, inspiring a new generation to appreciate the benefits of a garden-to-table lifestyle.

"Project Grow has been an incredible journey of learning and community building," said Sara Burgoa, a Project Grow co-founder. "It has allowed us to make a tangible impact on our community's health while fostering a deeper understanding of nutrition and sustainability."

FROM GARDEN TO KITCHEN

"Central to the philosophy behind Project Grow is the belief that food is medicine and that good nutrition forms the bedrock of sustainable health," said Lisa Martinez, Ph.D., associate professor of medicine and faculty advisor for Project Grow."This concept is not just a theory, but a way of life that the project brings to the community through practical, hands-on experiences."

Students offer meal preparation workshops, during which participants learn to create meals based on the garden's bounty, including plump tomatoes, crisp cucumbers and fragrant basil. Participants also learn about the health benefits of these foods. For example, tomatoes are rich in antioxidants that can fight inflammation, while leafy greens are packed with vitamins essential for overall health.

"By bridging the gap between gardening and cooking, Project Grow offers a holistic approach to health. It's not just about growing food, it's about understanding its journey from the garden to the plate and appreciating its role in fostering well-being," Martinez said. "The dedication of our students to community health and education exemplifies the core values of our institution and sets a standard for future initiatives."

THE SILENT STRUGGLE

New Study Highlights Alarming Trend of Teens Cyberbullying Themselves

Adolescents worldwide have embraced social media and online platforms for self-expression and to explore their identity. This freedom, however, can lead to risky behaviors, especially with limited adult supervision. Digital self-harm is a recent, emerging trend in which individuals anonymously post or share hurtful content about themselves online — a behavior that can be mistaken for mistreatment by others, yet the perpetrator and victim are the same person.

To address this growing issue, researchers from Florida Atlantic University and the University of Wisconsin-Eau Claire analyzed three independent national surveys (2016, 2019 and 2021) of teens in the United States ages 13 to 17, to assess the prevalence of digital self-harm. They explored two measures of digital self-harm: if teens had anonymously posted something mean about themselves online in their lifetime, and if they had anonymously cyberbullied themselves online in their lifetime.

Results of the study, published in the Journal of School Violence, revealed that a meaningful proportion of U.S. youth has been involved in digital self-harm. Between 2019 and 2021, approximately 9 to 12% of 13- to 17-year-olds engaged in digital self-harm, an increase of more than 88% since 2016. This upward trajectory highlights the need for targeted interventions and support systems — especially given that research has shown a strong association between digital self-harm and traditional self-harm and suicidality.

The study included three demographic variables: gender, race and sexual orientation, and examined whether individuals who experienced cyberbullying were more likely to engage in digital self-harm.

Among the study's key findings:

- In 2016, 6.3% of students anonymously posted mean content about themselves online, while 4.1% anonymously cyberbullied themselves. Male students were more likely than females to anonymously cyberbully themselves. Non-heterosexual students were significantly more likely than heterosexual students to engage in both forms of digital self-harm.

- In 2019, rates increased, with 9% anonymously posting mean content and 5.3% anonymously cyberbullying themselves. Non-heterosexual youth continued to exhibit higher rates of digital self-harm.

- In 2021, rates increased further, with 11.9% anonymously posting mean content and 9.3% anonymously cyberbullying themselves. Female and non-heterosexual youth were significantly more likely to engage in digital self-harm.

- Students who experienced cyberbullying were five to seven times more likely to have digitally self-harmed compared to students who had not been cyberbullied.

- Students from racial backgrounds other than white were more likely to anonymously post mean things about themselves online. Hispanic students were more likely than white students to anonymously cyberbully themselves.

- Female and non-heterosexual youth are consistently more likely to engage in digital self-harm compared to male and heterosexual youth.

"Digital self-harm has been linked with major issues such as bullying, depression, eating disorders, physical harm, sleep disturbances and even suicidal tendencies," said Sameer Hinduja, Ph.D., co-author, professor at Florida Atlantic's School of Criminology and Criminal Justice, co-director of the Cyberbullying Research Center, and a faculty associate at the Berkman Klein Center at Harvard University. "With increasing global attention from youth-serving professionals on this phenomenon, it's clear that digital self-harm is a significant public health issue that warrants further research to identify solutions that can serve as protective factors to forestall its incidence as well as its impact."

Several motivations that contribute to digital self-harm — such as self-hate, means to be funny, to seek attention, the desire to look cool, to show resilience and toughness, or a cry for help — have previously been identified.

"It's also crucial to understand why young people engage in digital self-harm and help them develop healthier coping mechanisms," Hinduja said. "Moreover, it's essential that parents, educators and mental health professionals working with young people extend support to all targets of online abuse in informal and conversational, as well as formal and clinical settings."

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From left: James VanZwieten Jr., Ph.D., co-director, FPL InETech; Stella Batalama, Ph.D., dean, FAU College of Engineering and Computer Science; FAU President Stacy Volnick, Ph.D.; Juliet Roulhac, FPL director of external affairs, Broward and Southwest regions, and director of corporate philanthropy, NextEra Energy, Inc.; Manny Miranda, FPL executive vice president of power delivery; Yufei Tang, Ph.D., director, FPL InETech; and Carter Nichols, FAU undergraduate student in electrical engineering.

TRANSFORMING THE ENERGY SECTOR

FPL and FAU Engineering Unveil First-of-its-kind AI-enabled Center

An innovative public-private partnership is boosting cutting-edge research in smart technologies, energy sector products and workforce development demanded by modern-day power delivery.

Florida Atlantic University's College of Engineering and Computer Science and Florida Power & Light Company (FPL) recently unveiled the FPL Center for Intelligent Energy Technologies (InETech), thanks to a $1 million gift from NextEra Energy Foundation, FPL's charitable arm. The first-of-its-kind artificial intelligence-enabled center is housed at the state-of-the-art Engineering East building on the University's Boca Raton campus.

The FPL InETech Center is designed to mimic FPL's control center for smart grid — a complex power generation, transmission and distribution network — that uses leading-edge technology to predict and prevent future outages. FPL's smart grid includes about six million smart meters and more than 217,000 other intelligent devices installed throughout its system. Through strategic investments, FPL has made the energy grid stronger, smarter and more storm-resilient while reducing outage times and restoration costs associated with severe weather events.

"This exciting partnership between Florida Atlantic and FPL is a giant step forward to address the current and future needs of the energy industry, as we work together to initiate new ideas and insights that will benefit our communities," said FAU President Stacy Volnick. "Importantly, this partnership will support and elevate young scientists and engineers, by equipping them with the high-level skills needed to transform the energy sector."

The centerpiece of the FPL InETech Center is made up of 18, 55-inch screens wall-to-wall and individually controlled to provide real-time power grid visualization. This high-tech display is complemented with a suite of premier technologies and high-performance computers that allow researchers and students to work at the forefront of AI-enabled smart grid optimization, renewable energy research and big data analytics. For example, inspired by the popular generative AI model ChatGPT, one of the center's recent pending patents introduces a tool designed to retrieve power grid data and assist grid operators in making quicker and more informed decisions.

"The FPL/NextEra Energy Foundation gift will have a multiplier effect on Florida Atlantic's successes in state-of-the-art research and development, and workforce development for the state of Florida and the nation in engineering and computer science disciplines, particularly as they apply to the energy sector," said Stella Batalama, Ph.D., dean of the College of Engineering and Computer Science. "We are incredibly grateful for the support and generosity of FPL and the NextEra Energy Foundation as we transform the energy landscape in South Florida and well beyond."

The four-year collaboration is designed to foster student recruitment and engage undergraduate, graduate and post-doctoral students in pioneering energy projects.

"The FPL InETech Center will provide our students with an immersive learning experience and access to real-world technologies and hands-on simulations that will help them to develop the skills needed to fill high-demand jobs across the region," said Yufei Tang, Ph.D., director of the FPL InETech Center and associate professor in the Department of Electrical Engineering and Computer Science. "Advanced equipment will enable them to analyze, explore and simulate data associated with the complex design and operation of microgrids and also will provide a platform to replicate power grids and other energy sources."


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GOING FOR GOLD

Students Earn Prestigious Goldwater Scholarship

Three Florida Atlantic University students have been named 2024 Goldwater Scholars. This is the third consecutive year Florida Atlantic students have earned this honor.

The trio of students, Natasha Mayorga, Cristian Pena and Dana Smith, was among just 438 college students from across the United States to earn the Barry Goldwater Scholarship, a prestigious national research fellowship for undergraduate students. They were selected from a pool of 1,353 science, engineering and mathematics students nominated by 446 academic institutions.

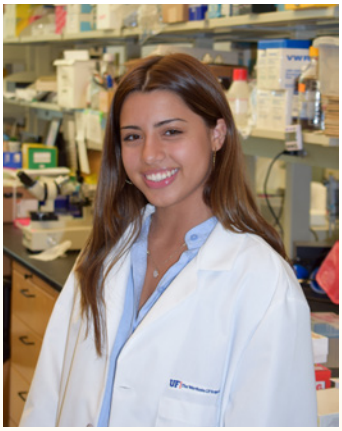
"This coveted award highlights their exceptional academic and research accomplishments, including all three scholars being published authors by their junior year," said Donna Chamely-Wiik, Ph.D., associate dean for undergraduate research and prestigious fellowships, and associate scientist in the Department of Chemistry and Biochemistry in the Charles E. Schmidt College of Science. "To have multiple undergraduate students receive this prestigious fellowship three years in a row demonstrates the FAU faculty's continued excellence in research and preparing the next generation of cutting-edge STEM researchers."

Seven Florida Atlantic students have been named Goldwater Scholars in the past three years. Previous Goldwater Scholarship honorees include David Baldwin and Michael Green (2023), and Kate Maier and Samantha Zaninelli (2022).

"FAU's emphasis on undergraduate research and mentoring is being recognized nationally through our students receiving the Goldwater Scholarship, which will help us continue to recruit promising undergraduates," Chamely-Wiik said. "Goldwater Scholar recipients are highly coveted at prestigious graduate programs across the nation. Our scholars have also gone on to win additional prestigious fellowships, such as the National Science Foundation Graduate Research Fellowship and the Udall Scholarship, bringing additional accolades to our institution."

CRISTIAN PENA

DANA SMITH



NATASHA MAYORGA

Natasha Mayorga

Natasha Mayorga is a biochemistry and data analytics major at the Harriet L. Wilkes Honors College and is dual-enrolled at FAU High School. Her research centers around human drug-seeking behavior and its reliance on the association of specific environmental triggers with memories associated with drug use. Her research experience includes an internship at the Herbert Wertheim UF Scripps Institute for Biomedical Innovation & Technology in Jupiter. Her research mentor is Courtney Miller, Ph.D., a member of the Florida Atlantic/Memorial Cancer Institute Cancer Center of Excellence.

Mayorga said her goal is to earn a doctorate in neuroengineering. She plans to explore parallels between electrical and neural circuitry in the brain-computer interface, with a commitment to public engagement in educational scientific programs.

"This recognition reaffirms my passion for the neuroscience research I've been conducting thus far and further encourages me to continue integrating computational analysis into my experience," Mayorga said. "As part of the Goldwater community, I am more eager than ever to continue on my journey toward a career exploring the brain-computer interface."

Cristian Pena

Cristian Pena is a mechanical engineering major in the College of Engineering and Computer Science and is dual-enrolled at FAU High. He also works as an undergraduate research assistant with his research mentor Mike Kim, Ph.D., an associate professor in the Department of Ocean and Mechanical Engineering.

Pena spent the summer studying at Columbia University's Summer Undergraduate

> To have multiple undergraduate students receive this prestigious fellowship three years in a row demonstrates the FAU faculty's continued excellence in research and preparing the next generation of cutting-edge STEM researchers."
>
> *– Donna Chamely-Wiik, Ph.D.*

Research Experience program, a 10-week collaboration created to foster career exploration at the frontiers of engineering research in New York City.

His goal is to earn a doctorate in computational fluid dynamics, and to conduct research in aerospace applications and contribute to advancements in aerospace technology at a national laboratory.

"Words cannot describe how grateful I am for this honor," Pena said. "This award not only recognizes my past endeavors but also emboldens my commitment to pushing the boundaries of exploration and technology. Right now, I'm working on some really cool research focusing on how we can capture CO_2 using seawater. It's fascinating stuff that I believe can make a big difference in environmental engineering and beyond."

Dana Smith

Dana Smith is a civil engineering major in the College of Engineering and Computer Science. Her undergraduate research experience began with the National Science Foundation's Freshman-learning Environment and Academic Research Network program, where she met her research mentor, Jinwoo Jang, Ph.D., associate professor in the Department of Civil, Environmental and Geomatics Engineering, and a member of Florida Atlantic's Institute for Sensing and Embedded Network Systems Engineering.

Smith also worked as a research intern at the Wall of Wind at Florida International University. Currently, she is the streetscape lead for an ongoing Florida Atlantic research project titled "Artificial Intelligence and Sensing for Smart Cities" as a part of the National Science Foundation's Engineering Research Center for Smart Streetscapes.

Her goal is to earn a doctorate in civil engineering and become a leading researcher specializing in data-driven structural health monitoring and smart cities.

"I am beyond thrilled to receive such a prestigious award and honored to be recognized as a Goldwater Scholar," she said. "I am just so thankful that I was able to make my family, friends, mentors, and school proud in such an extraordinary way."

REVOLUTIONIZING CANCER TREATMENT

Improving Cancer Outcomes with Digital Twins

WAZIR MUHAMMAD, PH.D.

Wazir Muhammad, Ph.D., assistant professor in the Department of Physics in Florida Atlantic University's Charles E. Schmidt College of Science, received a $701,000 grant from Precess Medical Derivatives, Inc., for a project that aims to revolutionize cancer treatment by making it more personalized and effective.

The project, "Deciphering Digital Twins of Cancer Patients for Personalized Treatments," uses artificial intelligence to analyze data and enhance cancer characterization and treatment to improve patient outcomes. It will help to address the challenges of data quality, complexity and integration into clinical workflows.

The three-year project will require a large, coordinated effort among physicians, radiologists, medical physicists, modelers, clinicians, computational scientists and software engineers to create a prototype of a dynamic digital twin for cancer patients. The digital twin will use observational data to represent the patient's current state and predict future transitions. It will combine simulation, model inference, data assimilation and high-performance computing to connect scales and processes.

"Using personal health data, genetic information about the tumor, and patient treatment and follow-up data, digital twins will simulate diagnoses and treatment options to help physicians choose the most effective treatments and monitor responses over time," Muhammad said. "The goal of the model is to provide optimized treatment plans, aid diagnosis and follow-up, and draw on patients' data including health history, cancer histology, genomic and molecular profiling, prior treatment history, and radio-sensitivity index to improve patient outcomes."

The American Cancer Society estimates more than 2 million new cancer cases in 2024. Approximately 50% of all cancer patients in the U.S. receive radiation therapy as part of their treatment regimen.

"This consequential grant awarded to Dr. Muhammad is an important investigation into the development of personalized radiation treatment and will serve to empower health care providers to tailor therapies to each patient's unique cancer profile," said Valery Forbes, Ph.D., dean of the College of Science. "This novel approach holds promise to enhance treatment efficacy as well as minimize side effects, ultimately improving outcomes and quality of life for individuals battling cancer."

FLORIDA ATLANTIC IN THE NEWS

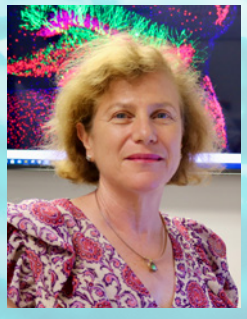
"In general, shark attacks are very rare and it doesn't happen very often at all, but it seems like there's been a lot. Just recently in the last few weeks we've had this spate of bites, but still in reality it's a small number. And I think part of the problem is that when you have a small number of bites in close temporal proximity, people tend to ramp that up and assume that there's something bigger going on. But in general, we're not much different than we have been in the past in terms of total number of bites overall."

Stephen Kajiura, Ph.D., professor of biological sciences in the Charles E. Schmidt College of Science, to ***USA Today*** about whether or not shark attacks are on the rise.

"Drinking alcohol can make you more likely to fall because it affects your balance, concentration and awareness. It's also worth noting that as individuals age, the effects of alcohol are increased. This is because older adults often have a higher percentage of body fat to body water ratio, thus increasing the concentration of alcohol in the bloodstream. Furthermore, alcohol metabolism decreases with age, exacerbating this effect, because older adults don't process alcohol as efficiently as they used to."

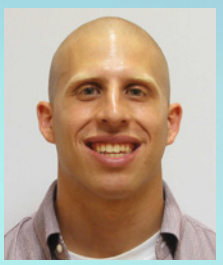
Richard Shih, M.D., senior researcher and professor of emergency medicine in the Charles E. Schmidt College of Medicine, to ***U.S. News & World Report*** for a story about how even moderate drinking in senior citizens increases the risk for brain bleeds after a fall.

"I started to take it more seriously. Whether exercise can cause new neurons to grow in adult humans — a feat previously thought impossible, and a tantalizing prospect to treat neurodegenerative diseases — is still up for debate. But even if it's not possible, physical activity is excellent for your brain, improving mood and cognition through 'a plethora' of cellular changes."



Henriette van Praag, Ph.D., associate professor of biomedical science in the Charles E. Schmidt College of Medicine and an investigator in the FAU Stiles-Nicholson Brain Institute, to the ***New York Times*** on her discovery on how exercise can spur the growth of new brain cells in mature mice, which has changed her approach to exercise.

If you're aiming for muscle growth, training closer to failure might be more effective. In other words, it doesn't matter if you adjust training volume by changing sets or reps; the relationship between how close you train to failure and muscle growth remains the same."



Michael C. Zourdos, Ph.D., professor and chair of the Department of Exercise Science and Health Promotion in the Charles E. Schmidt College of Science, in ***Australian Men's Health*** discussing his finding that if your goal is to build strength, then working close to failure doesn't appear to have a significant advantage. For muscle mass gains, however, the closer you get to failure, the more muscle growth tends to occur.

Floridians' acceptance of climate change as real makes sense. We have climate and weather really in our faces. The kinds of climate change effects that we're expecting — warmer temperatures, stronger storms, more flooding — are happening here and not in Kansas or Wyoming. It's just more in our faces here."

Colin Polsky, Ph.D., associate vice president for Broward Campuses and professor of geosciences in the Charles E. Schmidt College of Science, to the ***Sun Sentinel*** on his latest climate survey that shows 90% of Floridians think climate change is real — much higher than across the United States.

Living through these experiences helped our study participants use their inner strength and muster the ability to adapt and bounce back."

Patricia Liehr, Ph.D., interim dean for the Christine E. Lynn College of Nursing, in a ***Washington Post*** story about how older adults bounced back after the COVID-19 pandemic and became more resilient.

This is a very serious development for our banking system as commercial real estate loans are repricing in a high interest rate environment. With commercial properties selling at serious discounts in the current market, banks eventually are going to be forced by regulators to write down those exposures."

Rebel Cole, Ph.D., the Lynn Eminent Scholar Chaired Professor of Finance in the College of Business, to ***Florida Realtors*** as more banks risk failure as commercial real estate loans reprice.

Our faculty is the 'secret sauce' and our school's success can be duplicated anywhere — if administrators cede some control. Give [teachers] the freedom to do what they do best, which is to impart knowledge, to teach beyond the textbook. When that happens, teachers create hands-on programs that help students 'not only show their understanding but gain more depth.'"

Joel Herbst, Ed.D., superintendent of schools, A.D. Henderson University School and FAU High School, to the ***Associated Press*** on being a top school by showing teachers appreciation by giving them more freedom.

FLORIDA ATLANTIC IN THE NEWS

It's easy to classify these attempts as 'uncool,' but I give props to those young people who take a risk and attempt to improve the climate and culture at school by utilizing a popular medium for good. I'd love to see more strategically designed approaches to promote civility instead of contributing to the extant toxicity that is currently rampant both online as well as offline."

Sameer Hinduja, Ph.D., professor in the School of Criminology and Criminal Justice in the College of Social Work and Criminal Justice, co-director of the Cyberbullying Research Center, and a faculty associate at the Berkman Klein Center at Harvard University, to ***Inside Higher Ed*** on the University of North Carolina System's decision to ban several social media apps over cyberbullying.

You want to minimize your time outside during the peak. Even a few degrees can make a difference. Anyone doing an outdoor activity who feels their heart racing, palpitation, or shortness of breath should stop immediately and get indoors in the shade to cool off. Drink water and fluids with electrolytes, which can be crucial for some people."

Branson Collins, M.D., assistant professor and director of the FAU Marcus Institute of Integrative Health in the Charles E. Schmidt College of Medicine, to the ***Sun Sentinel*** on dehydrated, nauseous and sunburned Floridians who are flooding emergency rooms when temperatures rise.

We don't want to stop any of the industries in the region. Farming is the vast majority of residents' livelihood, and a mainstay of the economy. We do want to see if there are health-related issues stemming from the varied factors we are examining. If so, there are things we can do to help educate the residents to protect their health, and partner with the agricultural companies to adopt farming practices that protect health. The ultimate goal is to empower folks to age in place and avoid early admission to a nursing home or other long-term care setting."

Lisa Wiese, Ph.D., associate professor in the Christine E. Lynn College of Nursing, to ***WLRN Public Media*** on whether local environmental factors contribute to dementia.

Loneliness is a normal feeling to have sometimes in life, but chronic loneliness may increase the risk of stroke based on someone's lifestyle decisions and behaviors. When feeling lonely, it is still important to make healthy choices and take steps to reduce risk of stroke, such as following a good diet and exercising, and taking appropriate prescribed medications."

Michael Dobbs, M.D., chair of the Clinical Neurosciences Department, associate dean of clinical affairs, professor of clinical neurosciences and the FairfaxWood Endowed Chair of Clinical Neurosciences in the Charles E. Schmidt College of Medicine, to the ***United Press International*** on a new study revealing that chronic loneliness may increase stroke in older adults.

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RANKINGS AND RECOGNITIONS

FLORIDA ATLANTIC CONTINUES ITS ASCENT IN NATIONAL RANKINGS

Florida Atlantic University is now ranked No. 103 among the nation's "Top Public Schools" by U.S. News & World Report. This is a nine-spot jump since last year and a 37-spot jump since the University was first ranked in 2020 at No. 140. U.S. News & World Report also ranked Florida Atlantic No. 189 among "Top National Schools," a 20-spot jump since last year and an improvement of 92 spots since 2020.

In recognition of its commitment to ensure that all students succeed, Florida Atlantic is ranked No. 32 in the nation for Social Mobility by U.S. News & World Report, which measures how well schools graduate low-income and first-generation students.

Florida Atlantic also is ranked No. 21 for Pell Grant Graduation Performance, which is based on the proportion of students who receive Pell Grants and how their graduation rates compare to non-Pell recipients.

In other rankings, Florida Atlantic moved up five spots to No. 41 among more than 400 public and private national universities in Washington Monthly's annual College Guide, which is based on social mobility, research, and community and public service. Additionally, Florida Atlantic climbed seven places in the Best Bang for the Buck: Southeast category, ranking No. 6. The Best Bang for the Buck rankings recognize the Top 50 schools in each region based on how well they help low- to moderate-income students earn degrees at affordable prices and achieve upward economic mobility.

"Florida Atlantic's rise in these rankings is a testament to our commitment to offer an accessible, high-quality education," said FAU President Stacy Volnick. "We are proud of the efforts of everyone involved in the success of our students and honored to be recognized by U.S. News & World Report and Washington Monthly for these achievements."

U.S. News & World Report

#103 TOP PUBLIC UNIVERSITIES

#189 TOP NATIONAL UNIVERSITIES

#32 SOCIAL MOBILITY

#21 PELL GRANT GRADUATION PERFORMANCE

BEST UNDERGRADUATE PROGRAMS

#23 INTERNATIONAL BUSINESS

#130 BACHELOR OF SCIENCE IN NURSING

#147 UNDERGRADUATE BUSINESS PROGRAMS

BEST GRADUATE PROGRAMS

#41 NURSING MASTER'S

#78 DOCTOR OF NURSING PRACTICE

#76 PUBLIC AFFAIRS

#83 SOCIAL WORK

#98 ENVIRONMENTAL ENGINEERING

#107 EDUCATION

Washington Monthly College Guide

#6

BEST BANG FOR THE BUCK – SOUTHEAST

#41

NATION'S BEST UNIVERSITIES

The Wall Street Journal

THE WALL STREET JOURNAL.
AMERICA'S BEST COLLEGES 2025
IN COOPERATION WITH COLLEGE PULSE AND statista

#40

BEST VALUE

Forbes

#84

TOP PUBLIC UNIVERSITIES

#44

TOP UNIVERSITIES IN THE SOUTH

College Transitions

#1 IN FLORIDA

#17 IN THE U.S.

NATION'S BEST HONORS COLLEGES

Florida COLLEGIATE PURPLE STAR CAMPUS

Collegiate Purple Star Campus

RECOGNIZED BY THE FLORIDA DEPARTMENT OF EDUCATION FOR COMMITMENT TO SERVING MILITARY VETERANS

The Princeton Review

#39 IN THE NATION

BEST ONLINE MBA PROGRAMS

The Financial Times

#2 IN THE U.S.

EXECUTIVE EDUCATION PROGRAM RANKINGS

Fortune

#39

TOP EXECUTIVE MBA PROGRAMS

POWERFUL PARTNERSHIP

NASA Selects Florida Atlantic Engineering for Coveted Program

Florida Atlantic University's College of Engineering and Computer Science is one of eight colleges in the nation selected to work on NASA's coveted 2024 University Nanosatellite Program – CubeSat Launch Initiative (CSLI) to foster innovation and expertise in the small satellite sector.

CUBESAT

A CubeSat is a class of research spacecraft called nanosatellites, which are about the size of a 4-inch cube and typically weigh less than 5 pounds. CSLI partnered with the U.S. Air Force and U.S. Space Force for the 2024 Mission Concept Program.

"We are incredibly excited and proud to have been selected to work with NASA and the U.S. military to help revolutionize the space domain with tiny, yet powerful and small satellite technology," said Stella Batalama, Ph.D., dean of the College of Engineering and Computer Science.

Florida Atlantic University's team members include Oscar M. Curet, Ph.D., associate professor in the Department of Ocean and Mechanical Engineering and a member of Florida Atlantic's Center of Connected Autonomy and Artificial Intelligence (CA-AI) and George Sklivanitis, Ph.D., Schmidt Research Associate Professor, a fellow of Florida Atlantic's Institute for Sensing and Embedded Network Systems Engineering (I-SENSE) and a senior member of CA-AI, as well as Vitas Diktanas, a doctoral student in mechanical engineering with a concentration in aerospace; Sky Rueff, an undergraduate student in mechanical engineering; and Jonathan Mazurkiewicz, an undergraduate student in computer engineering.

OSCAR M. CURET, PH.D.

GEORGE SKLIVANITIS, PH.D.

The program is designed to refine small satellite project proposals to increase students' chances of sending their technology into space. The partnership aims to prepare students to work in the space industry while simultaneously enhancing small satellite expertise among faculty members at U.S. universities.

"Importantly, this initiative offers participating students invaluable systems engineering training specific to spacecraft development and is part of NASA's broader strategy to engage and retain students in STEM fields to build a robust pipeline of talent in the aerospace sector," Batalama said.

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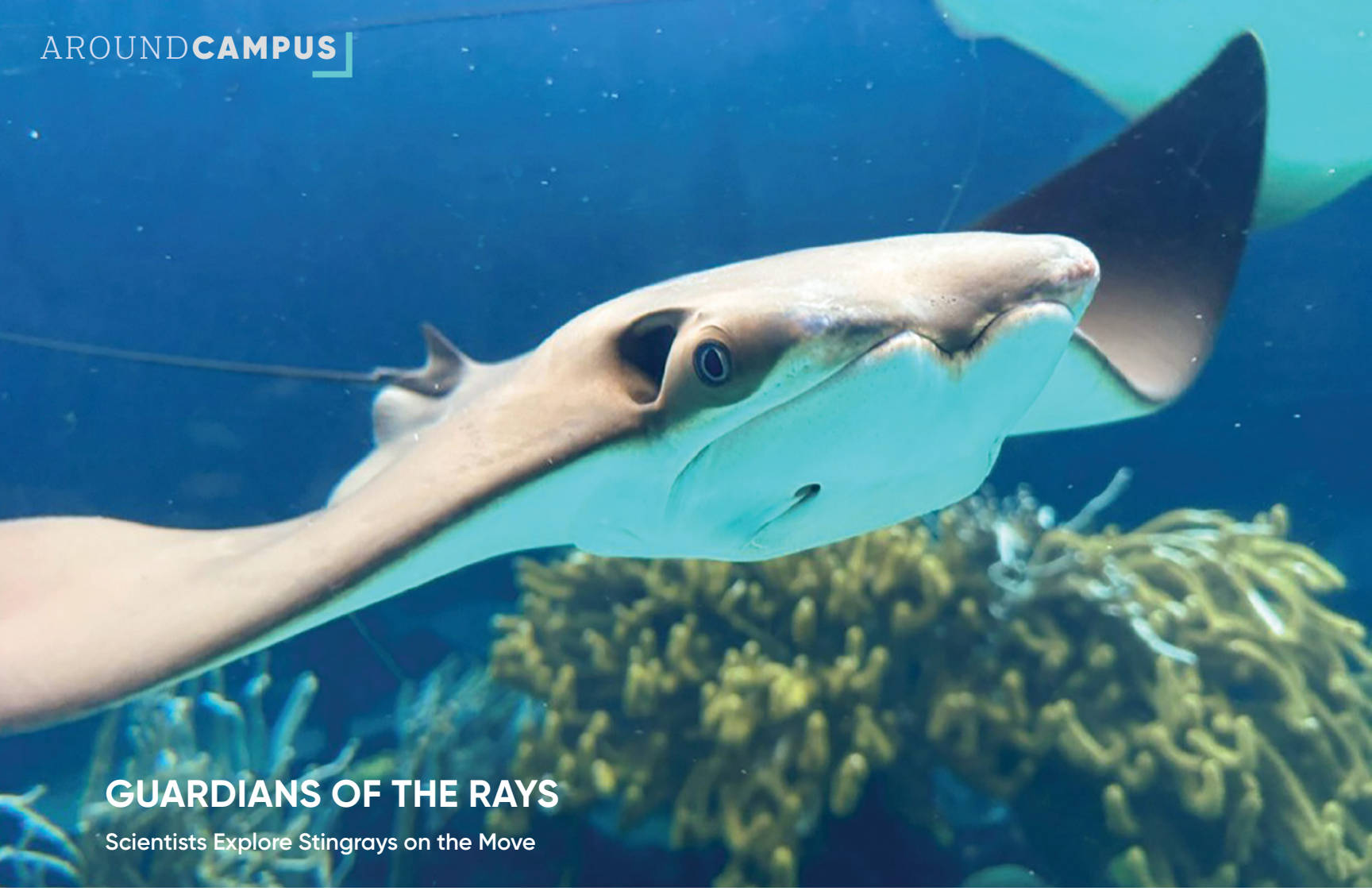


GUARDIANS OF THE RAYS

Scientists Explore Stingrays on the Move

Two studies exploring the Atlantic cownose ray (Rhinoptera bonasus), whitespotted eagle ray (Aetobatus narinari) and giant manta ray (Mobula birostris), are revealing the dynamic nature of marine ecosystems in Bermuda and Southeast Florida.

Florida Atlantic University scientists are unraveling the mysteries of these graceful rays on the move and paving the way for informed decisions to protect future generations.

For hundreds of years, natural history records have identified the whitespotted eagle ray as the sole ray species in Bermuda, until now. Researchers from FAU Harbor Branch Oceanographic Institute have discovered another species and a novel migration pattern using citizen science, photographs, on-water observations and the combination of morphological and genetic data. The study is the first to provide evidence that the Atlantic cownose ray has recently made a new home in Bermuda.

Because cownose rays are highly migratory and prefer tropical and temperate seas, they are typically restricted to continental shelves. Bermuda, which is comprised of multiple islands, is located in the northwest region of the Sargasso Sea. It is separated from the continental United States by about 1,000 kilometers.

Findings, published in the journal Frontiers in Fish Science, presented intriguing questions about the rays' presence as seasonal visitors or full-time residents. Based on the islands' mild sea temperatures and remoteness, researchers suggest that cownose rays will likely reside in Bermuda for extended periods.

"We don't exactly know how many Atlantic cownose rays are actually present in Bermuda and whether it's a single group that keeps getting re-sighted in various locations or whether the species is more broadly distributed across inshore sounds and harbors," said Matt Ajemian, Ph.D., lead author, associate research professor and director of the Fisheries Ecology and Conservation Lab at FAU Harbor Branch.

Advanced genetic analysis from tissue samples of five individual cownose rays between 2021 and 2022 revealed interesting behaviors including pupping and potential mating activities, suggesting a rapidly growing population establishing itself in Bermuda's waters.

Oceanographic phenomena, including shifts in wind patterns and storm activities, may have played pivotal roles in facilitating this migration. Ajemian draws parallels with historical events like the shipwreck of the Sea Venture in 1609, suggesting that adverse weather conditions might have similarly guided cownose rays toward Bermuda's inviting waters.

> In the end, we don't know if it was a single event or a combination of conditions that brought these animals here, but either way it's an incredible trip."
>
> *– Matt Ajemian, Ph.D.*

"Perhaps these Atlantic cownose rays encountered bad weather just like the Sea Venture did and found their new paradise in Bermuda," Ajemian said. "In the end, we don't know if it was a single event or a combination of conditions that brought these animals here, but either way it's an incredible trip."

The collaborative study's findings indicate a sustained presence of cownose rays in Bermuda since 2012, prompting calls for further research into their ecological impact and interaction with native species like the whitespotted eagle ray. Given their low reproductive rate and potential competition for resources, understanding these dynamics is crucial for effective conservation management.

Meanwhile, in Southeast Florida, extensive aerial surveys conducted by researchers in Florida Atlantic's Charles E. Schmidt College of Science are providing a birds-eye view of the abundance of two important ray species in this region. The surveys, from Miami to the Jupiter Inlet between 2014 and 2021, are helping to quantify the distribution and abundance of giant manta rays and whitespotted eagle rays.

In Florida waters, giant manta and whitespotted eagle rays are protected species. To ensure effective management, it is crucial to collect data regarding where they are found and how many there are.

Findings of the study, published in the journal Environmental Biology of Fishes, revealed consistent sightings of rays, with giant manta rays showing a preference for southern waters and whitespotted eagle rays distributed more evenly along the coast. Despite encountering human-populated areas like Fort Lauderdale and Miami, these charming creatures displayed resilience in their habitat choices.

The study also explored factors influencing ray abundance, revealing no clear correlations with sea surface temperatures or chlorophyll-a concentrations, which can lead to harmful algal blooms. However, understanding seasonal variations and habitat preferences is critical for mitigating human-induced threats to these rays.

"The presence of these large, slow-moving giant manta rays in the nearshore environment makes them susceptible to injuries caused by human interactions, including boat propeller injuries and entanglement with fishing gear," said Stephen Kajiura, Ph.D., senior author and professor of biological sciences. "A knowledge of their seasonal distribution and abundance will help to identify and protect key habitat areas. Data from our study may contribute valuable information that can be used to effectively manage both of these charismatic species in Florida and elsewhere."

TROUBLING TRENDS

Vaping Among U.S. Adolescents Increases

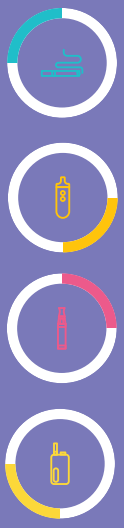
With their allure as a safer alternative to traditional cigarette smoking, a troubling trend in electronic vapor products (EVPs) use has emerged. Findings of a new study show alarming increases in the daily use of EVPs, also known as e-cigarettes or vaping devices, in U.S. adolescents.

Researchers at Florida Atlantic University's Charles E. Schmidt College of Medicine analyzed data from the Youth Risk Behavior Survey for ninth through 12th grades among 57,006 subjects from 2015 (earliest available data) to 2021 (most recently available data) from the U.S. Centers for Disease Control and Prevention.

Results of the study, published in the Ochsner Journal, show that daily use of EVPs increased from 2% in 2015 to 7.2% in 2019, an increase of more than threefold. Although the percentage decreased to 5% in 2021, it was still more than a two-and-one-half increase since 2015. The researchers speculate that the effects of COVID-19, which included lockdowns and remote schooling, may have contributed to the decrease in 2021 but cautioned that further research is warranted.

EVPs contain many substances beyond nicotine, including propylene glycol, glycerin, flavorings and potentially harmful chemicals such as formaldehyde and metals, which could pose significant health risks such as respiratory disease, cardiovascular disease and cancer. Vaping also is strongly linked with a serious medical condition that damages the lungs due to the vitamin E acetate, an additive used in tetrahydrocannabinol-containing e-cigarettes.

"Almost 100% of e-cigarettes sold in the U.S. contain nicotine, and the use of these products by adolescents may lead to future abuse of and addiction to additional substances," said Panagiota "Yiota" Kitsantas, Ph.D., senior author and professor and chair of the Department of Population Health and Social Medicine in the Schmidt College of Medicine. "EVP use is not a safer alternative to smoking but may have contributed to the decline in regular tobacco product use. EVP use also raises concerns about new health risks, including nicotine addiction."



By the Numbers

Despite the significant decrease in traditional cigarette smoking among U.S. adolescents, the rising popularity of electronic vapor products poses new and troubling challenges. Florida Atlantic research shows an increase of more than threefold from 2015 to 2019, pointing to critical and public health concerns.

Findings show:

2015: The percentage of EVP use was higher in boys **(2.8%)** than girls **(1.1%)**

2021: The percentage of EVP use was higher in girls **(5.6%)** than boys **(4.5%)**

2021: The percentage of EVP use was higher in whites **(6.5%)** than Blacks **(3.1%)**, Asians **(1.2%)** and Hispanics/Latinos **(3.4%)**

White and Black adolescents had the highest increases of about threefold between **2015** and **2021**.

In all four survey years, daily EVP use was highest in grade **12** where most students are ages **17** to **18.**

CONGRATULATIONS TO FLORIDA ATLANTIC UNIVERSITY'S

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From First-Generation Student to *Fearless* Leader

Ranked as one of the nation's top schools for social mobility by U.S. News & World Report, Florida Atlantic is a leader in generational change. And it's reflected every day in our own leadership: **President Stacy Volnick, Ph.D.,** is a three-time Owl and proud first-generation college graduate.

Where *Discovery* Comes to Mind

As the executive director of the Florida Atlantic Stiles-Nicholson Brain Institute, **Randy D. Blakley, Ph.D.**, is leading the way in neuroscience research and education.

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Florida Atlantic Harbor Branch Oceanographic Institute prioritizes solution-oriented research addressing critical issues affecting coastal zones, oceans and human well-being. Research scientists take a global approach, conducting studies worldwide in varying climates, ecosystems and cultures, studying everything from tiny deadly bacteria and harmful algal blooms to critically endangered North Atlantic right whales.

Engineering advanced technology is critical to providing enhanced security across the nation. Harbor Branch works with major defense contractors as well as the U.S. Department of Defense on coastal security projects to improve the Navy's ability to detect foreign enemies and other ocean-borne threats.

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AMAZING ACCOLADES AND AWARDS

Florida Atlantic 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 Florida Atlantic's campuses.

J. A. SCOTT KELSO, PH.D., the Glenwood and Martha Creech Eminent Scholar Chair in Science and founder of Florida Atlantic's Center for Complex Systems and Brain Sciences in the Charles E. Schmidt College of Science, was awarded a prestigious Global Chair by the University of Bath, which is ranked the No. 6 best university in the United Kingdom. The aim of the Global Chair is to bring globally renowned scholars and world-leading expertise to the University of Bath to engage in high-profile research and network-building and to promote world-class international research collaborations and strategic global networks. Kelso will collaborate with colleagues at the Bath Institute for the Augmented Human and its Institute for Policy Research.

SUE GRAVES, ED.D., associate professor in the Charles E. Schmidt College of Science, received the National Strength and Conditioning Association's Career Impact Award. The award is presented annually to one outstanding mid-career or later professional whose significant contributions have impacted the field of strength and conditioning.

GREGG FIELDS, PH.D., vice president for research, was named a Fulbright Specialist Program grantee by the United States Department of State's Bureau of Educational and Cultural Affairs (ECA). The Fulbright Specialist Program, part of the larger Fulbright Program, was established in 2001 by the ECA. It pairs highly qualified U.S. academics and professionals with host institutions abroad to share their expertise, strengthen institutional linkages, hone their skills, gain international experience and learn about other cultures while building capacity at their overseas host institutions.

LINCOLN SLOAS, PH.D., associate professor and graduate program coordinator in the School of Criminology and Criminal Justice in the College of Social Work and Criminal Justice, was named a member of The Honor Society of Phi Kappa Phi, the oldest and most prestigious all-discipline honor society in the United States. Membership in Phi Kappa Phi is a recognition of academic excellence, with rigorous selection criteria and an esteemed international community that includes notable figures such as former U.S. presidents, Nobel Prize laureates, and CEOs of leading corporations.

ARMIEL SURIAGA, PH.D., assistant professor in the Christine E. Lynn College of Nursing, won the Top Abstract Award at the 2024 Cannabis Clinical Outcomes Research Conference in May. His team's research was titled, "What are the odds of dying from drug intoxication among cannabis users who also used kratom, alcohol, and opioids?"

Beth M. King, Ph.D.

Angela S. Prestia, Ph.D.

Lisa A. Wiese, Ph.D.

BETH M. KING, PH.D., associate professor; **ANGELA S. PRESTIA, PH.D.,** adjunct professor; and **LISA A. WIESE, PH.D.,** associate professor; all from the Christine E. Lynn College of Nursing, were named 2024 Fellows of the American Academy of Nursing (AAN), in recognition of their substantial and sustained impact on health and health care. With more than 3,000 fellows, the AAN represents nursing's most accomplished leaders in policy, research, administration, practice and academia.

AMY WRIGHT, PH.D., research professor at Harbor Branch Oceanographic Institute, received the Paul J. Scheuer Award in Marine Natural Products. The biennial Scheuer award is considered the foremost accolade in the field of marine natural products chemistry. Wright's discoveries have advanced the development of new treatments for cancer and other deadly diseases.

MARK ROSE, PH.D., professor in the Dorothy F. Schmidt College of Arts and Letters, received the Lifetime Achievement Award from the Business History Conference, a scholarly organization devoted to encouraging research, writing and teaching about business history and about the environment in which businesses operate. Rose was recognized for his contributions to the work of the Business History Conference and to scholarship in business history.

Cammi Clark, Ph.D.

Kasia Bytnar

Paige Arriola

CAMMI CLARK, PH.D., senior director of research communications; **KASIA BYTNAR** and **PAIGE ARRIOLA**, both assistant directors of multimedia for research communications, recently earned two awards from the University and College Designers Association: one for the Science in Seconds video series and one for the Science Behind the Photo video series. Each series segment showcases faculty members explaining the science behind their research, helping viewers better understand how Florida Atlantic researchers are changing the world.

WHERE ENGINEERING AND MEDICINE MEET

New Department of Biomedical Engineering to Advance Health Care Innovation

A new Department of Biomedical Engineering was recently established in Florida Atlantic University's College of Engineering and Computer Science, in recognition of a rapidly growing field. Biomedical engineering merges principles from electrical and mechanical engineering, biology, computer science and medicine to tackle health challenges and enhance health care delivery. The new department is focused on three key areas: biomaterials and tissue engineering, smart health systems and bio-robotics.

"The impetus to create this new department was spurred by the significant projected growth of job opportunities related to this field nationally, statewide and in particular, in Southeast Florida," said Stella Batalama, Ph.D., dean of the College of Engineering and Computer Science.

The United States Bureau of Labor Statistics estimates a projected growth of 5% from 2022 to 2032 for employment of bioengineers and biomedical engineers, faster than the average for all other occupations (3%). As of May 2023, the median annual wage for bioengineers and biomedical engineers was $99,550.

"Our Department of Biomedical Engineering provides students interested in both engineering and the medical fields with innovative curricula that focuses on technical knowledge, advanced research methods and instrumentation, integration of computer science knowledge, and internship opportunities," said Javad Hashemi, Ph.D., inaugural chair and professor of the new department, associate dean for research, and a professor in the College of Engineering and Computer Science.

Florida Atlantic's four-year biomedical engineering program is one of the first programs in the nation to offer the opportunity for studying and integrating artificial intelligence into a 4+1 bachelor's and master's program. In this program, the students receive a bachelor's degree in biomedical engineering and a master's degree in artificial intelligence.

Did You Know?

The new Department of Biomedical Engineering at Florida Atlantic's College of Engineering and Computer Science will grow from 25 students enrolled by the end of year one to more than 200 students by year four.

The department is located on the Boca Raton campus with courses and laboratory work also available on the John D. MacArthur Campus in Jupiter.

JAVAD HASHEMI, PH.D.

> "From cancer to neurological disorders to cardiovascular disease, our biomedical engineers will be the masterminds behind innovative AI-powered technologies and therapies that are changing the landscape of medicine and health care as we know it."
>
> *– Javad Hashemi, Ph.D.*

"From cancer to neurological disorders to cardiovascular disease, our biomedical engineers will be the masterminds behind innovative AI-powered technologies and therapies that are changing the landscape of medicine and health care as we know it," Hashemi said.

Faculty members in the College of Engineering and Computer Science are already performing state-of-the-art research and development around health and medicine sponsored by key government funding agencies including the National Institutes of Health, the National Science Foundation, the Florida Department of Health and other philanthropic entities. Sponsored research topics include advanced biomedical devices for point-of-care testing, tissue engineering, hybrid bio-robotics for assistive technologies, opto-electronics and bio-photonics, and processing and analyzing of bio-signals for detection of pathology.

Florida Atlantic's existing engineering research has created fertile ground for the formation of this new department and further boosts the college's expanding research program. The interdisciplinary nature of biomedical engineering also magnifies research excellence university-wide through collaborations with the Christine E. Lynn College of Nursing, Charles E. Schmidt College of Medicine and Charles E. Schmidt College of Science.

"The Department of Biomedical Engineering is an exciting addition to our programs within the college and builds on our existing strengths and resources, our stellar faculty and the outstanding collaborations we have across the university," Batalama said. "Biomedical engineering students will learn from faculty across many engineering departments and will be part of cross-disciplinary collaborations on campus and throughout the community."

$2.6M GIFT TO EXPAND HILLEL SPACE

Florida Atlantic University recently received $2.6 million from Hillel of Broward and Palm Beach for the renovation and expansion of the Hillel space in the S.E. Wimberly Library on the Boca Raton campus.

Plans for the new space include a modernized area to study, learn, socialize and host events, including large Shabbat dinners; as well as a secured main entrance and a covered outdoor seating area to accommodate additional programming for the benefit of students, alumni and the community.

In honor of the lead donor, Boca Raton philanthropist Debbie Newman Bernstein, the expanded space will be named The Newman Bernstein Hillel at Florida Atlantic University. Bernstein is president and director of The William and Anita Newman Foundation, a family foundation that primarily supports Jewish organizations in Florida and New York. It was established by her parents, William and Anita Newman, in 1985.

"We are grateful to Hillel of Broward and Palm Beach and to Debbie Newman Bernstein for this generous gift that will support vibrant Jewish student life on our Boca Raton campus," said FAU President Stacy Volnick. "We are dedicated to ensuring that all students feel welcome at Florida Atlantic, and this gift will enable the University to meet the growing needs of our Jewish students."

Hillel of Broward and Palm Beach provides a meeting point for Jewish life at Florida Atlantic, as well as at four other area universities: Broward College, Lynn University, Nova Southeastern University and Palm Beach State College. The organization's mission is to enrich students by engaging them in meaningful experiences that foster connections to Judaism and Israel.

"Building a home for FAU's Jewish students is particularly meaningful for Debbie, as it combines her passion for nurturing the next generation along with her father's unwavering support for Israel and the Jewish community," said Brandey Edelson, board chair of Hillel of Broward and Palm Beach. "This extraordinary achievement not only addresses the immediate needs of Jewish students at FAU but also strengthens our commitment to creating a supportive and thriving environment across all campuses in our region. At this moment in history, it is more critical than ever to provide a safe and welcoming space on campus for Jewish students and the wider FAU community. While we've made significant progress, there is still much work ahead to ensure that every Jewish student feels secure, supported and empowered."


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GLOBAL ADVANTAGE

Standing, from left, Eloise Findlay of Jamaica; Nehansh Alwala and Dheeraj Vullangula of India; Luana Santos Lima of Brazil; Shaik Kashif and Laya Yellanki of India; Gonzalo Vivian of Argentina; Olawale Oladokun and Awele Dumebi Enwemnwa of Nigeria; Mateusz Wiktor Filip of Poland; Samantha Elizabeth Ortiz of Ecuador; and Saideva Goud Nathi of India. Sitting, from left: Rutvikkumar Rushikumar Dave and Jaya Sai Adithya Reddy Lankela of India.

Florida Atlantic's commitment to student success drives a substantial increase in international enrollment

BY **ALYSE COOKE**

International students have a significant impact on the institutions they attend. And at Florida Atlantic University, the investment in recruitment and support for these students has provided positive results for its campuses and its region.

As one of the most diverse public universities in the nation, Florida Atlantic serves students from more than 110 countries around the world. International and domestic students benefit from this multicultural community by gaining exposure to a wide variety of perspectives, ideas, traditions and approaches. In a globalized economy, where businesses and organizations operate across national borders, graduates of Florida Atlantic gain social and educational advantages that bolster professional success.

The South Florida community benefits from these students, as well. The National Association for Foreign Student Affairs reported that Florida Atlantic's international student enrollment had a $36.3 million economic impact in the state in 2022-23. Additionally, the University's international enrollment created 323 jobs supporting regional growth in major industries such as education, retail, transportation and telecommunications.

INCREASING ENROLLMENT

In recent years, Florida Atlantic has seen a consistent uptick in international student enrollment — with a 105% increase from spring 2022 to spring 2024 alone. And while it's not uncommon for students from around the world to pursue education in the United States, their decision to attend Florida Atlantic is driven by a strategically important initiative of the university: student success.

Florida Atlantic's Center for Global Engagement was created to advance the University's international student strategies. In this centralized area, students, alumni, faculty and staff benefit from the holistic support of departments including Global Academic Services, International Student Services (ISS), International Enrollment Services, the Intensive English Institute and FAU Education Abroad.

"The Center for Global Engagement has become an epicenter for international student success while adding tremendous value to the University," said Mihaela Metianu, Ed.D., assistant provost for global engagement. "Its growth has not only allowed us to recruit more students, but also to support them throughout their academic journeys toward degree completion and career attainment."

Understanding the hurdles that international students tend to face during the application and enrollment stage, staff members in the Center for Global Engagement take a dynamic, multi-pronged approach to educating students and

their families. From academic eligibility to visa approval, this communication begins early and occurs regularly to ensure a smooth progression for all involved.

To provide a personal touch, the center hosts nearly 100 events for new and current students each year, as well as more than 40 international events for potential and admitted students in top enrollment locations such as India and Bangladesh. In addition to these in-person opportunities, students receive comprehensive support from dedicated staff members who offer guidance during and after the enrollment process.

"The most challenging part of being an international student was the initial transition to a new country," said Shaik Mohammed Kashif, a graduate student in the College of Engineering and Computer Science. "Thankfully, FAU has a supportive environment for international students, which was crucial to me as I transitioned from Kurnool, Andhra Pradesh, India to the United States."

As a result of the University's enhanced strategies, including cross-departmental services, Florida Atlantic's international enrollment has grown to include more than 2,000 students. Additionally, with the increasing levels of support available through the Center for Global Engagement, there are more opportunities than ever for international students to achieve their academic and career goals.

From left, Rahman Abdul and Sai Kiran Pagadala of India, Awele Dumebi Enwemnwa of Nigeria, Akari Yoshida of Japan, Juan Esteban Restrepo Wagner of Colombia, Miyu Shingaki of Japan, Nora Hannah Gutzwiller of Switzerland, Avinaash Devasena Ganesh and Tathireddy Venkata Mahesh of India.

Australia

Charlotte Perkins

A CULTURE OF ACHIEVEMENT

Despite challenges such as language barriers and adapting to new teaching methods, international students excel at Florida Atlantic.

"My greatest achievement so far is having a 4.0 GPA for both semesters of my freshman year," said Charlotte Perkins, an undergraduate student in the College of Education and a member of the women's golf team, from Sydney, Australia. "The ability to earn a high-level degree and play collegiate golf is not an option in my country, so it's amazing to be able to fulfill my dreams and aspirations at FAU."

To prepare international students for rigorous coursework at Florida Atlantic, the University offers workshops on communication, plagiarism and academic readiness before they begin classes. The Intensive English Institute also provides language instruction for non-English speakers, which helps students develop both language proficiency and cultural competency. Moreover, students have access to an array of tutoring services in all subjects through the Center for Teaching and Learning.

"Before starting my master's program, I joined FAU's Intensive English Institute to enhance my language skills, which has equipped me with the confidence to attend classes in English," said Gonzalo Vivian, a doctoral student in the College of Engineering and Computer Science, from Córdoba, Argentina. "The resources at Florida Atlantic have significantly contributed to my academic success and career readiness, and the curriculum and faculty mentorship have provided me with essential skills and knowledge in my field."

Gonzalo Vivian

Throughout their studies, international students are guided toward success with virtual or in-person advising from ISS. These sessions are offered in addition to the academic advising appointments by University Advising Services and each college.

Argentina

"FAU is preparing us very well for success as students and for success in our careers," Perkins said. "With the help of our advisors and other faculty, we are always supported and know who to go to if we need any help."

Across the University, members of the faculty and staff also partake in training opportunities that enhance their ability to support international students in academic and professional endeavors. Combined, these resources ensure a holistic and accessible path to achievement that instills confidence in current and future students.

PROFESSIONAL PAYOFF

Future career outcomes understandably weigh heavily on international students' minds during the decision-making process. Market research firms and publishers with a pulse on the global education sector such as ICEF Monitor, Etio and QS Insights Magazine have identified employability as a top priority for university selection, along with additional considerations for degree value in a global market. These sentiments also are consistent among Florida Atlantic's students.

"Career services and career outcomes were extremely important to me as an international student," Kashif said. "I chose to attend Florida Atlantic University because of its strong emphasis on practical learning and opportunities for experience through internships and projects."

Given the importance of professional readiness, the Center for Global Engagement has developed a strong partnership with the FAU Career Center to promote international student success. While all Career Center staff members are trained to provide effective career guidance to international students, the center also has a dedicated liaison who works directly with the Office of International Students to ensure quality and continuity across departments.

"As a former international student who navigated the complex path of becoming a proud U.S. citizen, starting with the F-1 visa, I empathize with international students and can provide firsthand advice on successfully launching a professional career in the U.S.," said Cristina López, director of experiential learning and internships.

With an F-1 visa, students may enter the U.S. to study full time at an accredited institution. During their first academic year, F-1 students may only work on campus and may be subject to certain requirements and restrictions. After their first academic year, they are eligible for three types of off-campus employment: curricular practical training (CPT), optional practical training (OPT) and a STEM optional practical training extension. It is imperative that F-1 students maintain their visa status throughout their enrollment to remain in the country and their program, and to qualify for employment.

"International students come from diverse cultures and backgrounds, and it is our responsibility as university officials to understand and support them as they navigate the educational and employment systems in the U.S.," said Mariana Carrasquel, assistant director of experiential learning and internships, and Career Center liaison to ISS.

As such, before each new cohort of international students arrives at Florida Atlantic, the Career Center and ISS deliver a series of workshops to encourage student employment and impart vital career resources. Staff members also check in with students at the completion of their first semester to deliver guidance on career planning and job opportunities. Additionally, the Career Center and Center for Global Engagement host CPT and OPT workshops each semester, providing tailored career plans and information about the necessary policies and regulations that international students must follow to secure employment.

"A significant difficulty of being an F-1 international student is finding a full-time job or internship due to work permit restrictions," Vivian said. "However, FAU's supportive environment and resources are invaluable in navigating these

> International students come from diverse cultures and backgrounds, and it is our responsibility as university officials to understand and support them as they navigate the educational and employment systems in the U.S."
>
> – Mariana Carrasquel

Mihaela Metianu, Ed.D., assistant provost for global engagement

Mariana Carrasquel, assistant director of experiential learning and internships, and Career Center liaison to ISS

Cristina López, director of experiential learning and internships

challenges and have helped me secure a graduate assistantship working with data analytics."

At Florida Atlantic, international students may enroll in either a for-credit or non-credit professional internship course, which fulfills CPT requirements. The Career Center assists by providing step-by-step instructions to register for the course and complete the CPT application. Typically, international students at Florida Atlantic complete two off-campus internships with the CPT before earning their degree. Upon graduation, most students seek full-time employment with the OPT opportunity. At University career fairs, the Career Center staff helps international students streamline their efforts by clearly identifying which organizations offer CPT and OPT opportunities.

"During my time as a student, the Career Center assisted me with my resume, and I attended multiple career fairs where I met with many great companies," said Didem Killic Senay of Istanbul, Turkey, who earned a professional MBA from Florida Atlantic's College of Business in 2023. "This support was instrumental in helping me secure on-campus positions as a graduate student worker, several off-campus internships and my current OPT employment as an executive specialist at Wells Fargo Advisors."

From 2023 to 2024, the Career Center helped international students secure CPT internships with more than 160 employers in a range of industries, including finance, engineering, health care and technology. Additionally, international student graduates gained OPT positions with 225 employers, including Amazon, Citrix Systems, Tesla and the National Institute on Aging.

Success is a standard outcome for international students at Florida Atlantic, and it is propelled by highly effective strategies and support systems. While focused recruitment efforts have increased global enrollment overall, the University's emphasis on academic and career excellence is what ultimately ensures that international students complete their degrees and attain strong job outcomes. As these initiatives continue to attract a diverse set of exceptional students, Florida Atlantic remains steadfast in its commitment to transforming lives through education, both locally and globally.

In Hot Water

Trailblazing Trio Leads the Fight to Save Florida's Sea Turtles

BY **GISELE GALOUSTIAN**

In a state known for its pristine beaches and diverse marine life, three Florida Atlantic University researchers have devoted their careers to understanding and protecting vulnerable sea turtles. Jeanette Wyneken, Ph.D.; Sarah Milton, Ph.D.; and Annie Page, DVM, Ph.D., make up a talented trio that bring a unique skill set to each of their conservation efforts.

A prevailing catalyst that propels their research focus is escalating temperatures and its repercussions. For sea turtle hatchlings in particular, survival is already an uphill battle. On average, about 1 in 1,000 survives to adulthood. Many are lost to misadventure and often become prey for other organisms. Now, extreme heat is taking their chances for survival to new levels.

Loggerhead sea turtle hatchling

Jeanette Wyneken, Ph.D.

Jeanette Wyneken, Ph.D.

For more than three decades, Wyneken, a professor in the Department of Biological Sciences in the Charles E. Schmidt College of Science, has been studying the impacts of local environmental conditions on sea turtle development, sex ratios and dispersal. Her long-term research of nest temperatures and primary sex ratios demonstrate how species differ in their responses to changing climate and weather conditions.

"The sex of sea turtles is determined by the temperature at which the eggs incubate. This process is referred to as temperature-dependent sex determination. Higher temperatures result in more female hatchlings and lower temperatures result in more male hatchlings," Wyneken said.

Her students coined the phrase "hot chicks and cool dudes" to help others understand the system.

Florida is home to five species of sea turtles: green, leatherback, loggerhead, Kemp's ridley and hawksbill — all of them protected species. The most commonly found sea turtles in South Florida are green, loggerhead and leatherback turtles. In fact, Florida hosts about 90% of all the Atlantic loggerhead nests. Most of the loggerhead nesting takes place on the east coast of Florida in Brevard, Indian River, St. Lucie, Martin and Palm Beach counties.

In 2002, Wyneken and her students began monitoring loggerhead sea turtle nest temperatures. Within a few years, they added similar studies of green and leatherback sea turtle nests in Palm Beach County to check the temperature

Loggerhead sea turtle hatchling

A loggerhead hatchling emerges from its egg.

Green sea turtle hatchling

of the incubating eggs. The objective is to understand local nest temperatures and resulting sex ratios. Ideal temperature range for a nest under the sand is about 75 to 85 degrees Fahrenheit.

"In our first year, we found that 65% of the loggerhead hatchlings were female, which we now attribute to cooler beaches because of a lot of rain," Wyneken said. "However, the following year, which was much drier, females accounted for about 95% of the mix, and the next year it was hot and dry longer, producing 98% females."

Since then, Wyneken and her team of up-and-coming biological scientists have found between 98% to 100% female nests in most years, a very worrisome discovery. This sex ratio imbalance means not just that South Florida is no longer "where the boys are," but is instead a wake-up call that the world is getting hotter and it's not just affecting sea turtles.

"Sea turtles serve as sentinels, offering invaluable insights into climatic change and its effects on marine ecosystems, thereby serving as pivotal indicators of environmental change," Wyneken said.

Wyneken's groundbreaking research doesn't just take place in the field. Housed in the Gumbo Limbo Environmental Complex in Boca Raton, the FAU Marine Science Lab — which she spearheads — provides a unique backdrop for scientific inquiry and discovery, as well as public outreach. Each year, hundreds of loggerhead, leatherback and green sea turtle hatchlings spend several months in the lab before they are released into the ocean.

Leatherbacks are one of the most unique of all sea turtle species. They are distinguished by their smooth, "leathery" looking carapaces, or shells. Wyneken's lab is one of only two in the world that houses leatherback hatchlings.

During nesting season, sea turtles usually lay between four and 10 clutches, with each clutch containing between 70 and 140 eggs, depending on the species. Wyneken typically collects about 10% of the hatchlings from a test nest to study. They're raised in her lab until palm-sized, anywhere from 3 to 7 months old, and big enough to determine the sex.


Sarah Milton, Ph.D.


A loggerhead sea turtle hatchling is measured in the lab.

"Generally, sea turtles are characterized by being long-lived and late-maturing, so they are not sexually differentiated until approaching sexual maturity — most take more than 25 years to become sexually mature," Wyneken said. "It is especially challenging to identify the sex of hatchling sea turtles because they lack external sex-specific characteristics and have heteromorphic sex chromosomes — no X or Y."

Wyneken and colleagues from the Université Paris-Saclay in France developed a new method to integrate the effect of thermal fluctuations on embryonic development to then identify when sex determination occurs and predict sex ratios with much better accuracy than prior models. Results of the study were published in the journal Ecological Modeling.

"Our long-term concern is that sea turtle populations could become increasingly imperiled," Wyneken said. "Gauging primary sex ratios in these species is critical because it assesses their vulnerability under both current and future changing climate constraints."

Wyneken also was part of an internationally collaborative study with researchers from Germany to delve into how fluctuating rainfall impacts the size of loggerhead and green sea turtle hatchlings. This is important because larger hatchlings, which move faster, spend less time on risky beach sands and therefore are more likely to survive. Results of the study were published in the journal BMC Ecology and Evolution.

The research, which spans data from 37 beaches worldwide — a longitudinal study in Florida and experimental studies on the Cape Verde Islands — shows that precipitation plays a crucial role in determining hatchling body size. Rainfall cools the beach surface and enhances the moisture needed for egg development, making it a better predictor of body size than air temperature.

The impact of rainfall also varies between species. For loggerhead turtles, heavier rainfall results in hatchlings with smaller carapaces but greater weight, while green turtle hatchlings grow smaller carapaces without a change in body mass.

"Findings from our study highlight the need for more localized data on how regional weather influences incubation and hatchling development," Wyneken said. "These data are essential for refining conservation strategies to protect sea turtles amidst global warming."

Sarah Milton, Ph.D.

For more than 30 years, Milton, a professor and chair of the Department of Biological Sciences, has been investigating the effects of environmental stressors on animal physiology and adaptive mechanisms of survival. Her research related to sea turtle physiology and conservation includes a variety of projects ranging from the energetics of hatchling disorientation and the impacts of climate change on turtles' nest success, to developing therapeutic treatments for sea turtles exposed to toxic red tides and determining the effects of the chemicals in plastics on turtle health.

> The shape or morphology of the hatchlings, their performance and nest success were all influenced by nest temperature."
>
> – Sarah Milton, Ph.D.

Leatherback sea turtle hatchling

Her latest study, published in the journal Endangered Species Research, focused on leatherbacks. The species is listed as vulnerable and is experiencing population declines from natural and anthropogenic threats — including climate change.

Milton's pioneering study was the first in the United States to examine the effects of incubation temperature on leatherback hatchling performance. Sea turtle eggs and hatchlings are more susceptible to dying when temperatures hit scorching levels. Notably, they need to be in good physical shape to crawl from the nest to the water and avoid being preyed upon by crabs, raccoons and other predators.

"The objective of this study was to examine the relationship between nest incubation temperatures and hatching success, emergence success, hatchling morphology and locomotor performance," Milton said.

What she discovered is that even those sea turtles that do survive South Florida's baking sun are likely to do poorly on physical performance tests. They are less healthy than other species and don't crawl as fast.

For the study, researchers placed temperature data loggers in 13 leatherback turtle nests along 9.6 kilometers of coastline in Juno Beach on the day they were laid during the early, middle and late South Florida nesting seasons — which for leatherbacks begins in March and ends in June. They identified the overall mean incubation temperature and the maximum temperature for each nest.

Mean nest temperatures ranged from 84 to 90.5 degrees Fahrenheit and were significantly higher in the mid and late season compared to early-season nests. Nests incubating at hotter temperatures had a shorter incubation period, which means embryo developmental time is reduced, and hatchlings are unable to convert as much of the yolk mass to body tissue growth. This makes the hatchlings both shorter and "thicker."

"The shape or morphology of the hatchlings, their performance and nest success were all influenced by nest temperature," Milton said. "Mid- and late-season hatchling masses differed significantly from each other, where mid-season hatchlings weighed more."

To evaluate hatchling morphology, researchers used digital calipers to measure carapace length and width, body depth and flipper length. Body mass was determined using a digital scale.

"Nests with lower temperatures produced longer hatchlings, while the highest nest temperatures produced hatchlings with thicker body depths," Milton said. "Flipper length also correlated with temperature. Hatchlings from the highest nest temperatures had shorter flippers compared to hatchlings from mid-season nests that had longer flippers."

Annie Page, DVM, Ph.D.

Incubation temperatures affected hatchling performance. Upon emergence, hatchlings were tested for righting ability (flipping over when placed on their back) and crawling speeds.

Righting response scores were significantly lower in hatchlings from late-season, hotter nests. Those hatchlings were smaller and/or had a larger body depth and thus struggled to right themselves. However, 30% of all 119 of the hatchlings tested across the season could not right themselves even one time.

"Unlike self-righting, we didn't find a correlation between incubation temperature and crawling, nor between crawling speed and hatchling size," Milton said. "Crawling speed did not significantly differ between early, mid- and late-season nests."

Hatching and emergence success were correlated with temperature, where the mid-season nests were the most successful. The leatherback turtle nests in this study had an overall lower hatching success (45%) than loggerhead (73%) and green sea turtles (70%).

"There could be a temperature 'sweet spot' for incubation since the mid-season nests had both higher hatching and emergence success and better hatchling physical performance," said Milton. "While leatherback turtle nests are laid in the cooler months in South Florida and are deeper than nests of other species, temperatures can still rise surprisingly high. Increasing temperatures due to climate change pose a significant threat to a species that already has lower nest success than other species that share the same nesting beaches."

Extreme heat isn't the only obstacle facing Florida's sea turtles. Various factors such as habitat conditions, pollution levels and human activities, in tandem with climate change impacts, present both acute and chronic challenges to their health.

In Florida, sea turtles face various health complications such as fibropapillomatosis (FP), a viral disease that causes the growth of tumors on the skin, eyes and internal organs. This condition is particularly prevalent in green sea turtles. Sea turtles also are impacted by debilitating internal parasites as well as external parasites like leeches that can attach to their shell or skin, potentially impacting their overall health.

Additionally, sick turtles tend to not be able to clean themselves of barnacles and some become covered by hundreds of these small invertebrates. Debilitated turtles often are covered with so many barnacles that they are informally known as barnacle bills. That name gives rehabilitation veterinarians an alert as to what to expect. Furthermore, ingestion of marine debris such as plastics and other jetsam mistaken for food can lead to intestinal blockages, internal injuries, toxic effects and malnutrition.

Annie Page, DVM, Ph.D.

Page, an associate research professor and clinical veterinarian at FAU Harbor Branch Oceanographic Institute, has focused her extensive research on the epidemiology, pathogenesis, eco-immunology and ecology of diseases affecting marine organisms. Her expertise includes wildlife medicine and rehabilitation, molecular diagnostics, disease ecology and veterinary pathology as well as conservation biology, environmental and public health, microbiology, immunology, toxicology and genomics.

Page, in collaboration with colleagues from the Loggerhead Marinelife Center, conducted the world's most comprehensive


Green sea turtle

Leatherback sea turtle hatchlings

health assessment of nesting green sea turtles in 2020 in Juno Beach, which is home to one of the largest aggregations of nesting green sea turtles in Florida. Although this high-profile turtle population has routinely been monitored for nest counts since 1989, an in-depth health assessment of these turtles had never been conducted prior to her study.

"After loggerheads, green sea turtles are the second most common sea turtle species to nest on the coast of Florida," Page said. "Since sea turtles are indicators of ecosystem health in their habitats, assessing their well-being is crucial in any coastal ecosystem health survey that encompasses areas where they develop, forage or nest."

> "Effective conservation measures cannot take place unless the animals we are trying to protect represent a healthy population."
>
> – *Annie Page, DVM, Ph.D.*

A total of 4,343 green turtle nests were documented on Juno Beach in 2017, which was one of the busiest nesting years on record for this beach. For the study, Page and her team collected blood samples from 60 female green sea turtles that nested on Juno Beach that year.

Researchers evaluated a broad suite of biological data, including measures of reproductive success and morphometrics, as well as diagnostic data including hematology, plasma chemistry, plasma protein fractions, haptoglobin, corticosterone, measures of oxidative stress, antioxidative capacity, and innate immunity. They also tested for two herpes viruses of green turtles, ChHV5 and ChHV6, which are implicated in FP and respiratory and skin disease, respectively.

Results, published in the journal Endangered Species Research, showed that all 60 turtles included in the study were in good body condition with no external FP tumors. Five of the 60 turtles (8%) tested positive for ChHV5 and all turtles were negative for ChHV6. Of the 41 turtles tested for antibodies to ChHV5 and ChHV6, 29% and 15% tested positive, respectively, and 10% tested positive for antibodies to both viruses.

Notably, there were no statistically significant differences between health variables for nesting turtles that tested positive for ChHV5 DNA versus those that tested negative; and also no differences between turtles that tested positive for ChHV5 or ChHV6 antibodies and those that did not.

"The good news from our study is that it appears that these viruses are endemically stable in Florida's adult green sea turtles for the time being," Page said. "The fitness of the turtles we examined is likely representative of the health of the ecosystems in which they forage and the oceanic corridors through which they migrate."

For the study, Page differentiated between previous viral infection and recent infection/reactivation. She then analyzed the results together with health measures to see if either infection state was linked to noticeable physiological changes.

"Chronological and longitudinal studies of biology, physiology, and overall health in both free-ranging and captive sea turtle populations are critical for supporting large-scale efforts to promote sea turtle population recovery," Page said. "Effective conservation measures cannot take place unless the animals we are trying to protect represent a healthy population."

As human activities continue to affect sea turtle population recovery, data from this study provide a valuable resource for evaluating the impacts of various stressors such as habitat degradation on the population over time and will help inform wildlife and environmental policy management.

Conservation threats to sea turtles in Florida are numerous. From habitat encroachment and pollution, to disease, illegal harvesting, artificial beach lighting and coastal armoring; as well as human interactions such as entanglement, hook ingestion and boat strike trauma, sea turtles have a difficult journey ahead.

Through their research, teaching, advocacy and community outreach, Florida Atlantic's turtle trio is inspiring a new wave of young scientists and conservationists, and reinforcing the importance of evidence-based science to preserve endangered and vulnerable species.

Marine Science Lab Receives $1.6M

BY **ANGIE FRANCALANCIA**

Florida Atlantic University received $1.6 million from the Glenn W. Bailey Foundation to extend its Marine SEA (Science, Education and Arts) Scholars Program in the Charles E. Schmidt College of Science's Marine Science Laboratory.

Doctoral student Emily Turla

"The continued support of our students through this gift from the Glenn W. Bailey Foundation allows them to learn as they work in the lab with researchers and become ambassadors sharing Florida Atlantic University marine biology discoveries to broad audiences," said Jeanette Wyneken, Ph.D., director of the Marine Science Lab and professor of biological sciences in the College of Science.

Housed in the Gumbo Limbo Environmental Complex in Boca Raton, the program provides students the unusual opportunity to conduct research before an audience of more than 200,000 annual visitors who observe the lab's ongoing activities from its gallery. The students also become ambassadors of community outreach focused on FAU Marine Science Lab studies, discoveries and activities.

The Marine Science Lab's faculty and students investigate topics including sea turtle development and physiology, shark and ray sensory biology, seagrass ecology and octopus behavior.

The goal of the program is to develop well-rounded, skilled and knowledgeable individuals who are motivated to understand science through participation in established studies at the Florida Atlantic Marine Science Lab, as well as through engagement in public education and outreach activities, and enhanced effective communication of science to broad audiences. An initial gift from the Bailey Foundation established the program in 2020, and the latest gift will extend it for five more years.

The Marine SEA Scholars program supports five full-time undergraduate students through tuition reimbursement and a stipend to work 20 hours per week in the Marine Science Laboratory, as well as a postdoctoral fellow and three graduate students through stipends.

"We are excited and grateful to be able to continue offering the opportunities this gift provides," Wyneken said.

Innovating the Future

How Florida Atlantic's College of Business Works to Shape the Entrepreneurs of Tomorrow

BY **AMBER BONEFONT**

John Thomerson with his wirehaired terrier, Daisy, whose hind-quarters paralysis inspired his Potty Pal invention.

Florida Atlantic University senior John Thomerson's journey with entrepreneurship started three years ago. When an email inviting students to attend an upcoming entrepreneur boot camp landed in his inbox, curiosity got the best of him. How could the camp help with his business idea? So he signed up to participate.

"I saw this email and thought, 'Why not take advantage of what it has to offer?'" Thomerson said. "The bootcamp covered everything I needed to know as a budding entrepreneur from how to build out a business, create a pitch deck, and having a realistic business plan."

Fast forward to today, and Thomerson is getting ready to graduate with $56,000 in non-diluted funding for his patent-pending pet health care venture, Potty Pal, along with a broad networking base fostered by the years he has spent in Florida Atlantic's entrepreneurial ecosystem. Potty Pal was inspired by Thomerson's wirehaired terrier, Daisy, who suffered from hind-quarters paralysis. The Potty Pal device provides support to help dogs with similar challenges relieve themselves.

"Everything with the entrepreneurship program exceeded my expectations," Thomerson said. "The beautiful thing about the program is that it is interdisciplinary in nature. There's an effort to span all areas of the university so that everyone can participate in the innovation ecosystem."

Innovation and Growth

The entrepreneurship program, housed in the College of Business, is a multi-pronged approach to fostering the next generation of business leaders in South Florida and beyond. The Department of Management Programs offers a concentration in entrepreneurship with three core classes: an introduction to entrepreneurship; a focus on financing a business; and a consulting project in which students work directly with start-up companies.

"The strength of this program lies in our creation of an ecosystem where students are given hands-on experience and real-world information outside of a traditional class structure that supports student entrepreneurs through all stages of starting and launching a business," said Ethlyn Williams, Ph.D., chair of the Department of Management Programs.

The Adams Center for Entrepreneurship serves as the core of this ecosystem. Led by Kevin Cox, Ph.D., director and senior instructor, the center engages with students and the South Florida business community through avenues like the Entrepreneurship Bootcamp and the Shrimp Tank podcast; offers mentorship opportunities for aspiring student business

Daniel Gropper, Ph.D.

Ethlyn Williams, Ph.D.

Kevin Cox, Ph.D.

Roland Kidwell, Ph.D.

William Paczkowski, Ph.D.

John Thomerson speaking at e-Fest, a three-day undergraduate entrepreneurship competition and networking event.

"The strength of this program lies in our creation of an ecosystem where students are given hands-on experience and real-world information outside of a traditional class structure that supports student entrepreneurs through all stages of starting and launching a business."

– Ethlyn Williams, Ph.D.

creators by pairing them up with experienced business professionals; and hosts the Business Pitch Competition, where students across all majors can pitch their business ideas for the chance to win seed funding for their budding ventures.

"Students have access to seasoned entrepreneurs and business professionals as mentors willing to offer their expertise at all steps along the way for their ventures. We're committed to upholding an ecosystem that supports student founders from the idea stage to launching the company," Cox said. "Students can take a designated academic service learning course and are paired up with early-stage companies to work directly with founders, making the work our students do critical for these start-ups."

Cultivating a Spirit of Entrepreneurship

An entrepreneurial spirit has long been part of the foundation of Florida Atlantic, with the College of Business striving to partner with all entities in the university to keep that spirit thriving. When he arrived in 2013, Daniel Gropper, Ph.D., dean of the College of Business, saw an opportunity to build on this system.

"There was a lot of strength and potential in the College of Business with the Adams Center for Entrepreneurship and across the university in the other colleges," Gropper said. "We needed to build up our faculty expertise on the academic side, with recognized senior scholars, newer faculty, and experienced business mentors to support our students and what was going on in the business community. We built upon what our predecessors had done and added to the academic reputation of the entrepreneurship programs."

"I now know where I can go in five years because I've been able to work with companies and have a blueprint of how to start."

– Joseph Watson

"You can have an amazing product, but the venture won't go anywhere if you don't know how to pitch it."

– Vivian Yu

The college focused on three key parts to achieve the current entrepreneurial ecosystem: the recruitment of leading researchers and rising stars in the field of entrepreneurship; the emphasis of research in entrepreneurship, small businesses and family businesses; and further development of student competitions and existing outreach programs.

From those efforts came an interdisciplinary system that serves the college and community well:

- Tech Runway, with the Venture Program, is the incubator for startup companies, allowing students to gain hands-on experience with emerging ventures.
- The Adams Center for Entrepreneurship offers mentorship and pitch competitions for students to work through their creation process.
- The Shrimp Tank podcast engages with the flourishing business community in the region. Faculty members offer a robust academic curriculum that gives students the necessary theoretical framework.

"Good researchers make good teachers when they bring their work into the classroom, and they talk about the practical applications of the theoretical work they are doing," said Roland Kidwell, Ph.D., DeSantis Distinguished Professor of Management and Entrepreneurship. "All of this works cohesively with our student resources, the local community and research goals. We have been successful in seeing how these pieces fit together."

The entrepreneurship program broke into The Princeton Review's Top 50 four years ago and has steadily moved up in the rankings. This year, the undergraduate program is ranked No. 24 in the nation and the graduate program is ranked No. 42.

A vital factor of the success of this program is how it applies to all students, not just those in the College of Business — and how professors emphasize real-world applications students can model in their businesses, according to William Paczkowski, Ph.D., entrepreneurship instructor in the Department of Management Programs.

"Students in my class are learning by doing. I encourage them to enter the Business Pitch Competition to learn how to ask the right questions. Are they applying the right concepts versus regurgitating information they've memorized from a textbook?," Paczkowski said.

Vivian Yu, a junior in Florida Atlantic's Dorothy F. Schmidt College of Arts and Letters, is pursuing entrepreneurship as a minor. She heard about the program from a friend, who suggested she enter it to sharpen her business skills as a future architect.

"I knew I needed that business perspective because, as an architect, you are selling your ideas," Yu said. "You can have an amazing product, but the venture won't go anywhere if you don't know how to pitch it."

IMPRESSIVE ALUMNI

More than 115 new businesses have been started by participants of Florida Atlantic's entrepreneurship program, with some of those companies gaining national recognition. Since 2018, five College of Business alumni have been named to the Forbes 30 Under 30 list, a ranking of notable young entrepreneurs determined to change the world.

Jan Bednar

Jan Bednar '14 founded Shipmonk, a tech-enabled fulfillment center that helps e-commerce companies ship orders internationally.

Andrew Cooper

Alex Schulze

Alex Schulze '17 and **Andrew Cooper '17** started 4Ocean, a sustainability brand that funds global cleanups through the sale of bracelets and other products.


Hannah Herbst

Hannah Herbst '20 developed Beacon, a device designed to provide a stable power source to developing countries by using untapped energy from any moving body of water.


Kyle Lansing

Kyle Lansing '20 created StrawFish, an environmentally friendly alternative to single-use plastics: affordable, biodegradable straws made from seashells.

"We are proud of the ingenuity of these alumni and the entrepreneurial legacy we are establishing at Florida Atlantic," said Daniel Gropper, Ph.D., dean of the College of Business.

Since participating in the program, Yu won runner-up in the Business Pitch Competition and has been able to finetune and start funding her own entrepreneurial venture, a crib made from wooden joinery that converts into other pieces of useable furniture as a child grows into adulthood.

It's a Mindset

"One thing that makes our program different is that we are encouraging everyone to have an entrepreneurial mindset across the college," said Kidwell. "If you are in health care or finance, that may not be a management or entrepreneurial track. Still, we have the resources to teach you this mindset and how to take calculated risks that will make you more marketable to jobs."

Florida Atlantic students have been making waves at national and local pitch competitions, emphasizing their creativity and ingenuity in creating pitches and potential companies. Two FAU High School dual-enrollees, Abigail Sinu and Noor Harbona, took first place for their biomedical technology at the Florida Venture Forum, while Thomerson's Potty Pal took first place in various competitions nationwide.

Alumnus Joseph Watson '24 is pursuing an MBA in the College of Business after graduating in the spring with a bachelor's in management. He won the Rising Star Award at the eMerge conference in Miami for talent and achievements. Currently interning at a tech startup in New York City, he credits Paczkowski's classwork style as an instrumental part of his learning.

"The different connections I have made, the networking I've done and the classes have all sparked my motivation. I now know where I can go in five years because I've been able to work with companies and have a blueprint of how to start," Watson said.

Leaders in the college agree that the future is bright for students coming out of the program, as Palm Beach County positions itself as "Wall Street South." The influx of companies from the Northeast setting up headquarters as well as office locations in the area has allowed the college to expand what it can do as a critical provider of local talent.

"The financial sector is growing rapidly in our area, and the ecosystem from Miami to Palm Beach County is becoming larger and more sophisticated," Gropper said. "We are uniquely positioned to serve that need through our students, faculty and partnerships."

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Gauging America's Political Fault Lines

Florida Atlantic PolCom Lab Informs Voters and the Media

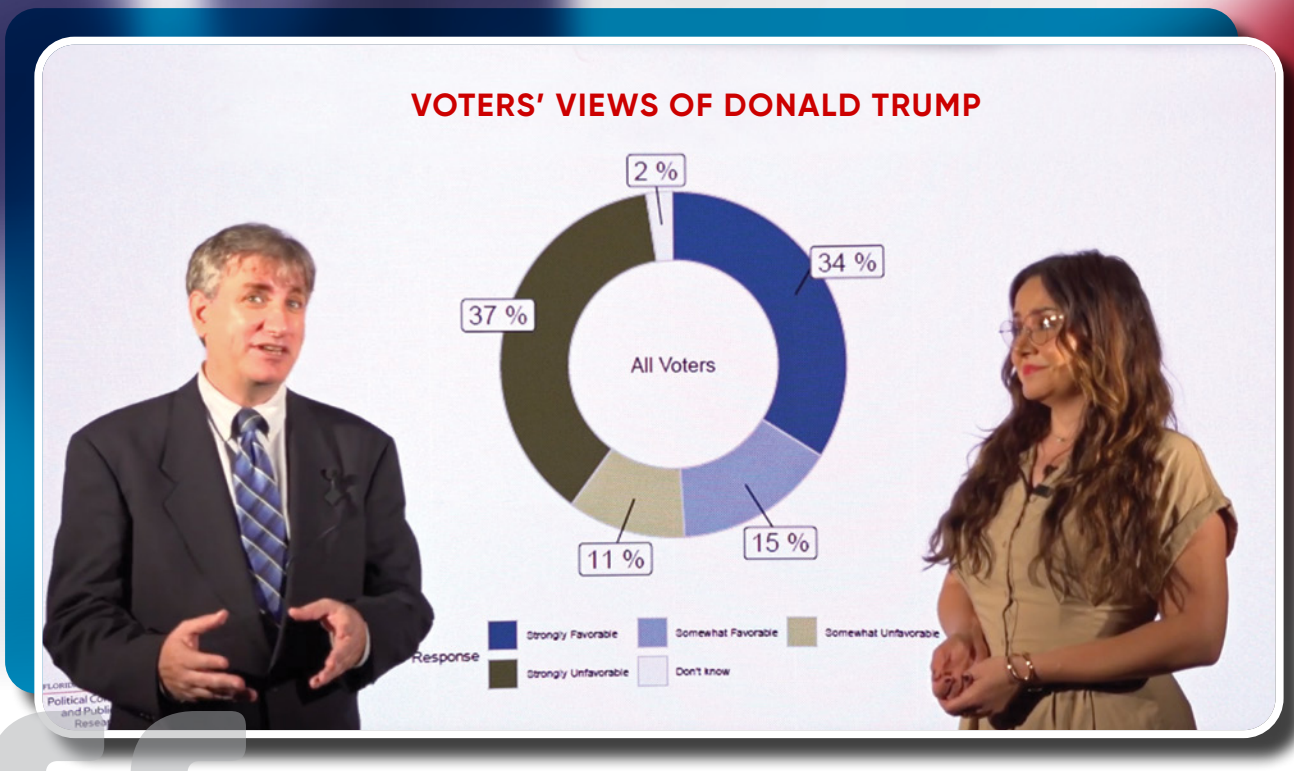
BY **JOSHUA GLANZER**

A common refrain heard today is that America has not been this politically divided since the Civil War. Red states vs. blue states, urban vs. rural, and "culture wars" seem to be fueling deeply entrenched disagreements on everything from gun rights to climate change, to abortion to Taylor Swift. And all this conflict occurs through a framework of decentralized social media and web platforms, with little to no editorial oversight, where facts often go unchecked and conspiracy theories thrive.

The political discourse created in this chaotic environment is distilled into a set of decisions made by voters during election years. Presidential election years, such as this year, increase the consequences of those decisions as the pressure applied by politicians and political parties to motivate their voters also increases.

Understanding the minds and feelings of voters and how they got their information from the media helped us better understand where the country might be heading during the recent election cycle. This is why Florida Atlantic University's Department of Political Science and School of Communication and Multimedia Studies — both housed in the Dorothy F. Schmidt College of Arts and Letters — established the FAU Political Communication and Public Opinion Research Lab (PolCom Lab) with Mainstreet Research USA.

"The PolCom Lab represents a collaborative effort to understand political communication and public opinion, especially in the rapidly evolving digital landscape," said Kevin Wagner, Ph.D., co-director of the PolCom Lab and professor of political science. "By combining rigorous academic research with real-world applications, we're not just observing political trends — we're actively exploring how emerging technologies like AI are



Kevin Wagner, Ph.D., and Luzmarina Garcia, Ph.D., discuss views on PolCom Lab's YouTube channel

> By combining rigorous academic research with real-world applications, we're not just observing political trends — we're actively exploring how emerging technologies like AI are reshaping democratic processes."
>
> *– Kevin Wagner, Ph.D.*

reshaping democratic processes. Our work provides insights for both the academic community and the broader public, helping to foster a more informed and engaged citizenry."

The members of Florida Atlantic's interdisciplinary team merge their collective experiences from the worlds of polling, political communication and journalism to investigate and analyze public opinion and political trends across the nation, and particularly in Florida — the nation's third-most populated state.

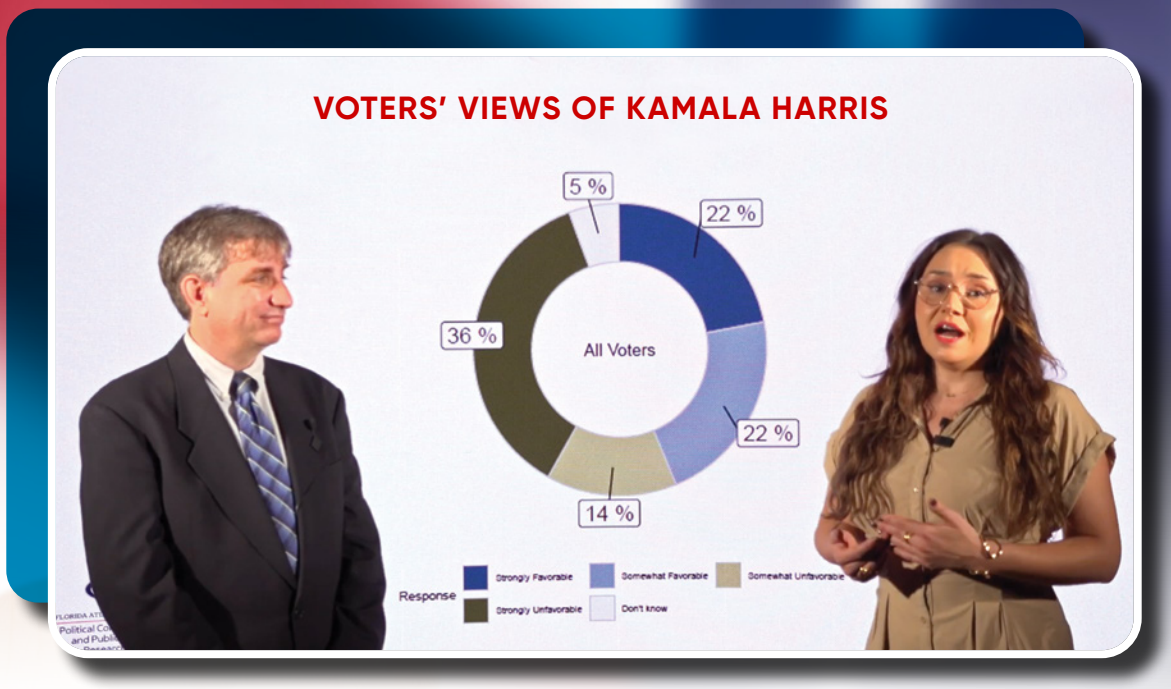
"Integrating film and media students, journalists and the latest media technology into our PolCom Lab is essential for its success," said Carol Bishop Mills, Ph.D., co-director of the PolCom Lab and professor in the School of Communication and Multimedia Studies. "This multidisciplinary approach enables us to go beyond traditional polling analysis. We're not just collecting data; we're producing news stories, crafting press releases, creating podcasts and developing video reports.

"By engaging with media in all its forms, we're able to disseminate our findings more effectively and provide a richer, more nuanced understanding of political communication. This hands-on experience also prepares our students for the realities of today's media landscape, where the ability to translate data into compelling, multi-platform content in our BrandStar Studios at Florida Atlantic is invaluable."

Generously donated by Pompano Beach-based production company BrandStar, a 30-foot eyebrow shaped LED Volume Wall, coupled with cutting-edge technology and Unreal Engine software, immerses students in state-of-the-art visual storytelling technology. The gift allows talented students to have access to tools that will differentiate them as they enter the workforce. They are learning alongside industry professionals while using the same technology used in the field.

This impressive visual tool is perfect for sharing poll data infographics. For example, students use the BrandStar Studios wall when they produce video presentations about poll results for the PolCom Lab's YouTube channel. The videos feature pollsters and local reporters discussing the latest results in front of large infographics, visually showing the story they are discussing.

Florida Atlantic's partner in the PolCom Lab, Mainstreet Research USA, is a Florida polling organization founded by Mainstreet Research, a firm based in Canada. Its team has decades of experience with polling across North America, including experience with daily tracking polls of Canadian



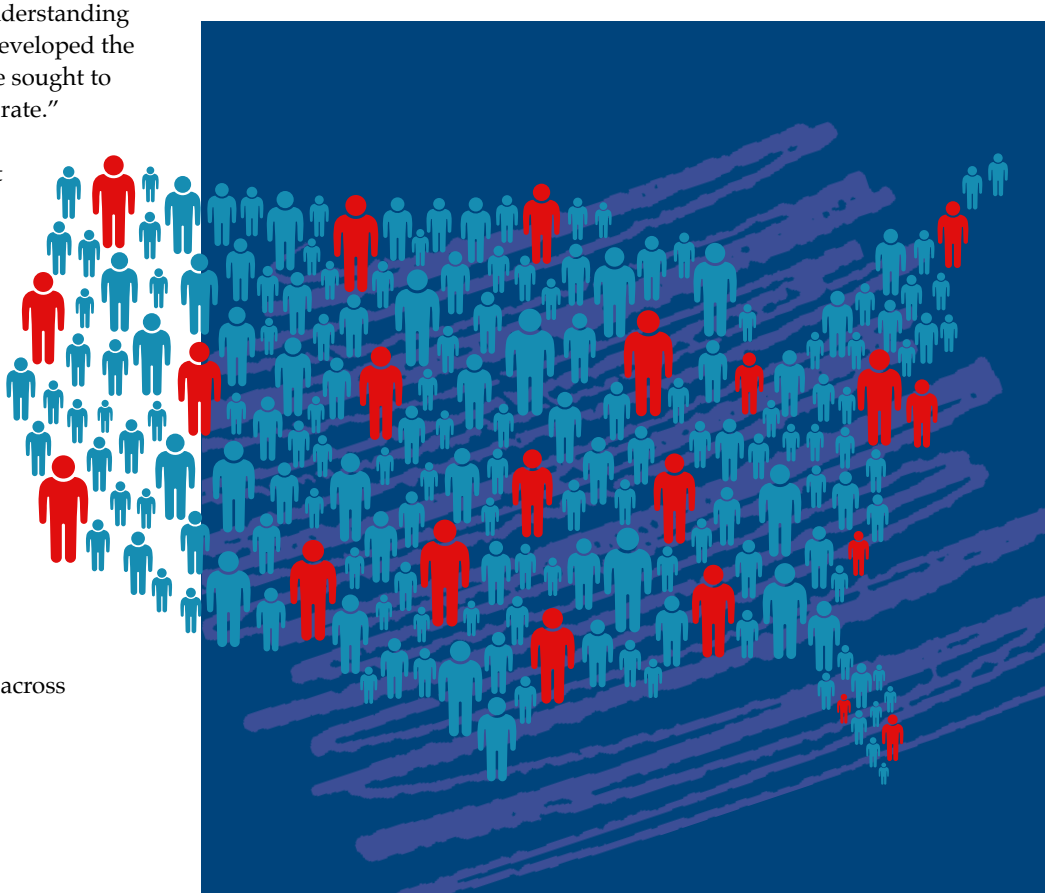
federal and provincial polls, as well as experience correctly forecasting surprise victories in high-profile U.S. elections. Fusing Mainstreet's respected data mastery with Florida Atlantic's localized strengths and extensive political science and communication expertise creates a substantial knowledge base. This union gives the PolCom Lab the foresight to stay ahead of shifting electoral trends.

"We were in the most interesting U.S. election cycle in at least 50 years," said Steven Pinkus, vice president of Mainstreet Research. "By collaborating with the team at FAU, we were very fortunate to add their formidable resources to our practical experience tracking elections. The FAU team brought a deep understanding of the American political context, and together we developed the scripts and subjects that we wanted to address as we sought to understand and explain what was driving the electorate."

For example, the team developed a unique tool built on daily polling during the last six weeks of the election, allowing them to track all the twists and turns of the election in real time. The public could also use Mainstreet's unique dashboard to gain an unprecedented understanding of what was happening, broken down by demographics and geographics. They could scan it at a glance, but also dig deep into the data to better understand what was happening from their personal perspectives — essentially a daily election primer.

Findings from the polls inform local, national and international media reporting, influence university curricula, and drive faculty, student and industry research. Additionally, polling insights make waves across the media landscape, spanning the political spectrum. Major national news outlets, such as Newsweek, MSNBC, Fox News, ABC News and Newsmax, as well as important media outlets across Florida, widely cited the findings of Florida Atlantic's PolCom Lab leading up to the presidential election.

This is because reporters are keen to understand the issues driving voters to the polls. For example, abortion was one of the top issues this election cycle that the FAU PolCom Lab tracked. It was a controversial issue and a state-by-state battle.



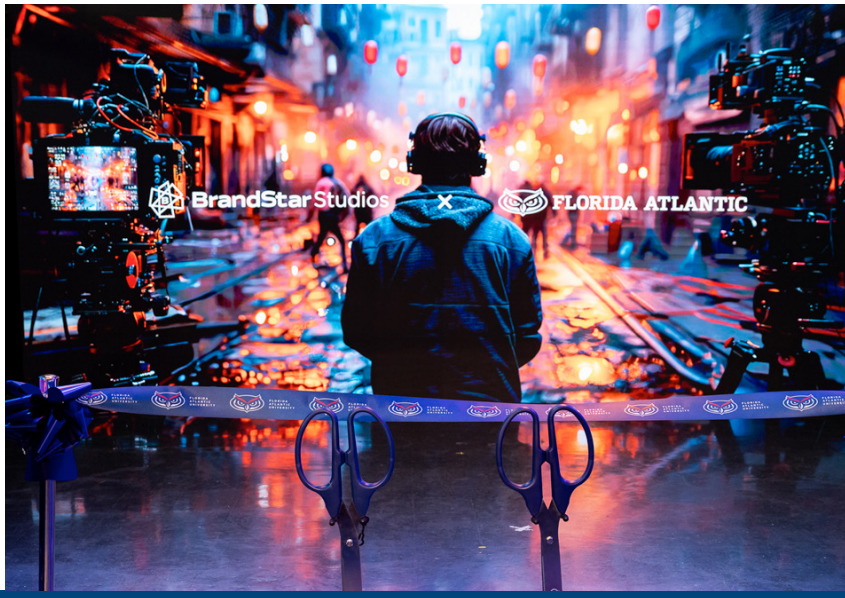
"Since almost one-third of respondents in recent polls do not know how they would vote if faced with the ballot initiative, this means that it could go either way," said Luzmarina Garcia, Ph.D., assistant professor of political science at Florida Atlantic and PolCom Lab-affiliated researcher, before the election. "There is some evidence of greater turnout in elections when people can vote on more emotionally charged issues, including same-sex marriage and, more recently, abortion. However, this has primarily been in mid-term elections, when there is no election for president. With this being a presidential year, many of the people who would turn out to vote on one of these ballot initiatives would probably turn out anyway to vote for a president."

The polls also went beyond "horse races" and pure policy questions, diving into the mindset and media habits of voters. One product of this exploration is the FAU/Mainstreet Happiness Thermometer, which shined a light on the emotions and psychology likely to influence voters as they headed to the polls.

"Happiness is important to understand as it influences the well-being and satisfaction of citizens, which in turn shapes their voting behavior," Mills said. "As demonstrated by Ronald Reagan's enduring question in the 1980 presidential election, 'Are you better off today than you were four years ago?,' capturing public sentiment toward governance and policy efficacy is critical — especially in today's political climate."

(continued)

> Happiness is important to understand as it influences the well-being and satisfaction of citizens, which in turn shapes their voting behavior."
>
> *– Carol Mills, Ph.D.*



REACHING VOTERS TO MAXIMIZE RESULTS

Florida Atlantic's PolCom Lab/Mainstreet Research polls use registered voter lists from state election authorities wherever available. When those lists are not accessible, they construct a representative sample frame of eligible, registered voters using vetted data providers. To field their surveys, they employ a multimode approach combining interactive voice response phone polling and text-to-online probability sampling. This mixed methodology allows the team to reach voters through multiple channels and maximize representativeness. It may also incorporate respondents from credible online panels to further enhance younger voter representation in the samples.

FAU PolCom's rigorous data collection process, probability-based sampling across modes, and online panel usage adheres to industry best practices. PolCom's method relies solely on random probability sampling techniques, with no predetermined partisan quotas or assumptions. This allows the initial sample's composition to be naturally determined through true randomization.

Following data collection, samples may be weighted for age, gender, race, education, region and past voter behavior to mirror the population being surveyed. This approach of random sampling followed by population-matching weighting eliminates biases from oversampling. The pollsters are guided by American Association for Public Opinion Research standards and ethics. Methodology details are provided in the full report for each poll on the PolCom website, www.fau.edu/artsandletters/fau-polcom-lab/.

The pollsters also looked at how voters consume media to form their opinions and cast their votes. They found that cable news networks remain a popular source of political news, with 40% of voters ranking this as their primary source for information. However, responses also showed a continued reliance on online media as a major source of political information, with 13% of respondents indicating they turn to social feeds, while 19% said they turned to other blogs and websites for political news.

"Political communication remains heavily influenced by the internet and digital media," said Robert E. Gutsche Jr., Ph.D., associate professor in Florida Atlantic's School of Communication and Multimedia Studies. "The problem remains, however, in understanding just how deeply voters rely on their politically affiliated messages and their true impacts on the legitimacy of journalism from more traditional outlets."

Wagner added that the lab's significant media reach and impact in its inaugural year underscore the important role it plays in bridging the gap between scholarly research and public discourse.

"As we continue to grow, the PolCom Lab will become a resource for people seeking to understand how information and media affect political attitudes, and the future of our democratic institutions."

ADVANCING ARTS

New Collaboration Brings Cutting-Edge Tech and Professional Mentorship to Students

From left: Mark Alfieri and Doug Campbell of BrandStar Studios; Carol Bishop Mills, Ph.D., professor in Florida Atlantic's School of Communication and Multimedia Studies; and Tom Shorrock, chair of Florida Atlantic's Department of Theatre and Dance.

A partnership between the School of Communication and Multimedia Studies (SCMS) at Florida Atlantic University and a local production company provides students — from multimedia studies to theater majors — access to cutting-edge production equipment that is helping them prepare for today's competitive job market.

Walter Burton, Ph.D., Florida Atlantic alumnus and adjunct professor, helped facilitate the collaborative effort between the Dorothy F. Schmidt College of Arts and Letters and BrandStar Studios, located in Pompano Beach. BrandStar's donation of a 21.6-foot-by 9.8-foot LED Volume Wall, coupled with in-camera visual effects and high-tech software, immerses students in real-time compositing experiences.

"From the initial meeting with BrandStar founders Mark Alfieri and Doug Campbell, it was clear this public-private partnership was going to be transformative for our college, and that the BrandStar team shares our values and commitment to cutting-edge public education for preparing students for the professions of tomorrow," said Michael Horswell, Ph.D., dean of the Dorothy F. Schmidt College of Arts and Letters.

Beyond equipment, BrandStar also committed to providing advisory services to SCMS professors and mentorship opportunities for students. This holistic approach ensures that Florida Atlantic graduates are equipped not only with technical skills but also with the guidance and support necessary for post-college success.

The impact of the studio extends beyond the realm of multimedia. Theater students will refine their acting and set design abilities through interactive engagement with technology increasingly prevalent in film, television and stage production.

"This partnership is going to have a huge impact on our students' ability to work with industry partners," said Tom Shorrock, chair of the Department of Theatre and Dance at Florida Atlantic.

By maximizing use of cutting-edge technology, graduates will gain access to lucrative opportunities in the entertainment industry, reinforcing the University's reputation for producing top talent.

"This gift allows our talented students to have access to the tools that will differentiate them as they enter the workforce," said Carol Bishop Mills, Ph.D., professor in the SCMS. "They will be learning alongside industry professionals while using the same technology used in the field, and will have access to competitive internship opportunities at South Florida's leading media production house."

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Commitment to Character

A New Look for the Men's Basketball Team

BY **BEN PAUL**

As he enters his first season as a head coach at the NCAA Division I level, John Jakus takes over the Florida Atlantic University men's basketball program committed to winning.

Jakus, 49, arrived in Boca Raton in March as the new face of a team that was just a year removed from one of the greatest seasons in college basketball history. Since 2022-23, the team amassed a 30-1 home record, a conference title, two NCAA Tournament appearances and a Final Four appearance. Those accolades, combined with strong fundraising efforts and a pristine location, positioned the program to attract top talent from around the world.

But there was one piece missing for Jakus: a roster. In the era of the fast-moving transfer portal, Jakus had to build a team from scratch with 10 newcomers in the span of weeks. Of the team's four returning Owls, junior forward Tre Carroll had the most playing time in the previous season at 7.8 minutes per game.

Jakus and his new staff quickly went to work. First came finding the schematic fits that included strong outside shooters, multiple-point guards and players with long wingspans.

"You have to start with your basic understanding of what works on the floor and then work your way backward from there," Jakus said.

Assistant Coach Jordan Fee and Leland Walker

Assistant Coach Isaiah Austin and Devin Vanterpool

> You have to make the character of your team the most important thing. And then after that, you can get aggressive with the level of talent you can bring in."
>
> ***– John Jakus, Head Men's Basketball Coach***

Then he had to make sure the potential Owls were the right fit and that they possessed character traits that would help build a winning culture — a more difficult task when given a short window of time to get to know players before they decide on their new schools.

"Our business is relationships over everything," Jakus said. "The reason we were able to sign 10 the way we did and from all around the world is we trust people to tell us the truth."

Jakus got the job done with six transfers and four players from the international pool. The new-look Owls spent the summer participating in intense practices and workouts while trying to build unity and family within the team.

"We spent months trying to make sure that playing at Florida Atlantic means something to our guys, that they really care about the place," he said. "When you get the care factor high, and your player development is good, then you can go into the season as a team, not a bunch of individuals. We'd like to be the most unified team in the country."

Faith and family are always at the forefront of Jakus' mind. He is learning to manage the time he has with his wife, Sara, and three children with the basketball family he is trying to build.

"Your family time is less. You and the people around you have to get used to that. You have to find the balance of taking care of the people around you and not always being busy, because there is always something to do," Jakus said.

It has been a long but rewarding journey to get to this point for Jakus, whose love of the sport traces back to birth, when his father gifted him a basketball in the delivery room.

While his playing career ended early in college due to injuries, Jakus found his calling as a coach at age 25, first with a junior varsity high school team. He then spent several formative years in Europe, where he learned the importance of player development, as well as different schematic advantages.

Jakus returned to the United States in 2012, where his learning continued at the collegiate level. He spent the next decade with two championship-level teams in Gonzaga and Baylor, the latter with whom he won the 2021 National Championship as an assistant coach. While neither university had as many accolades as some of the bigger programs, both competed with and won against the very best.

He attributes these teams' successes to strong identities.

"You have to make the character of your team the most important thing. And then after that, you can get aggressive with the level of talent you can bring in," Jakus said.

He now brings everything he has learned to Boca Raton, this time at the helm of a program. The biggest learning curve for Florida Atlantic in year one will be navigating expectations by coming together as a team.

"The biggest challenge is always internal," Jakus said. "You have to avoid the outside noise and be comfortable in the fact that you get better by what goes on in your own walls."

As he embarks on his career as a head coach, with many more lessons to learn along the way, Jakus said he will never forget the most important one: understanding what family and faith mean to him.

"If you let this thing interfere with your ability to put your faith and your family first, then you are going to end up upside down," he said. "There are all kinds of reasons why you can be consumed at work and put those two things on the side. Instead, I have kept them at the center, and then we build things out from there."


Niccolo Moretti


Sara and John Jakus


Kaleb Glenn

Home Run

Softball Team Celebrates Historic Season

BY **GENESIS SILVESTRE**

The Florida Atlantic University softball team recently made history when it won the program's first American Athletic Conference (AAC) title, as well as the University's first AAC title. It was the program's first regular season title since 2018.

The team's highly successful 2023-24 campaign ended with 41 wins — its first 40-plus win season since 2016 — as well as the Owls' first NCAA Regionals appearance since 2016.

In only her second season as a head coach, Jordan Clark registered her 50th career win and was recognized with the Coaching Staff of the Year award from the AAC.


Katelynn de Leon

In their first year in the AAC, the Owls also racked up numerous additional conference awards. Kiley Channell was named Rookie of the Year and selected to the All-Rookie Team, while sophomore Jesiana Mora was named Second Team All-Conference. Katelynn de Leon, Kamryn Jackson, Ainsley Lambert, Presley Leebrick and Trinity Schlotterbeck were named First Team All-Conference.

De Leon, who concluded her playing career at the end of the season, will remain at Florida Atlantic as an assistant coach.

Schlotterbeck spent the 2024 season as both a starting pitcher and one of the strongest hitters in the lineup. The graduate student from Maryland finished the season with a 16-7 record, a 2.67 ERA and 10 complete games in the circle, plus a .293 batting average. She led the Owls in home runs (10) and runs batted in (47) and set a program record with nine RBI and three home runs in a single game at Wichita State.


Trinity Shlotterbeck

Her tremendous season with the Owls resulted in a No. 67 ranking among the nation's Top 100 players and as the No. 2 two-way player by Softball America. She also was named a Softball America All-American and National Fastpitch Coaches Association All-American. Schlotterbeck's career has continued as she signed with the Texas Monarchs in the Women's Professional Fastpitch League. She became the ninth Owl to play professionally.

"This year certainly is one to remember, and this team was everything and more of what you dream of coaching," Clark said. "Thank you to the fans, staff, players and parents for helping us make waves in paradise. Get ready for another exciting season in the spring."

> It's an honor to represent our country. USA Baseball does a tremendous job with the facilities and how the players and staff are treated. It was a really enjoyable experience."
>
> ***– John McCormack, Head Baseball Coach***

All American

Coach Dons Stars and Stripes with USA Baseball

BY **SAM DEAN**

John McCormack, Florida Atlantic University's head baseball coach, recently represented the nation in USA Baseball's five-game International Friendship Series against Chinese Taipei. McCormack served as a hitting and bench coach for the Collegiate National Team (CNT), which swept the series and outscored Chinese Taipei 34-7 in the process.

Since 1978, USA Baseball has been the national governing body for amateur baseball. It represents the sport in the United States as a member of the U.S. Olympic & Paralympic Committee and internationally as a member of the World Baseball Softball Confederation.

"It's an honor to represent our country," McCormack said. "The whole process goes back to February when we started putting the team together. We followed different players throughout the season and through the NCAA Regionals, and then spent a few weeks with them. USA Baseball does a tremendous job with the facilities and how the players and staff are treated. It was a really enjoyable experience."

The CNT is comprised of non-draft-eligible players currently competing at the collegiate level. This was McCormack's third stint with USA Baseball. He served as a pitching coach for the 14 and under National Development Team in 2014 and as head coach of the Stripes team in the 2019 Stars and Stripes series, as part of the Athlete Development Program. McCormack's previous roles with USA Baseball kept him "in the queue" for future staff positions, which came to fruition this past summer with the CNT.

McCormack is preparing for his 17th season as head coach of Florida Atlantic baseball and his 35th season with the program. He holds a 540-351-2 career record as head coach. Under his direction, the Owls have won five conference titles and qualified for an NCAA Regional six times. McCormack also serves as second vice president for the American Baseball Coaches Association, and will become president in January 2026.

On Track

Building a Career, Program and Family as an Owl

BY **KATRINA MCCORMACK**

The early life of Alex Smolka is best described as nomadic. The head coach of the Florida Atlantic University men's and women's cross country teams, and women's indoor and outdoor track and field teams, was born in Vienna, Austria. Both sets of his grandparents were displaced to Vienna during World War II and his family lost eight members during the Holocaust.

The family moved four times while in Vienna and three more times in England, where he finished his final year-and-a-half of high school. That nomadic lifestyle ended in fall 1991 when, after obtaining his master's degree from Northeastern University, Smolka arrived at Florida Atlantic to assume the position of the assistant to the athletic director at the time.

Smolka's career quickly progressed at Florida Atlantic. After serving in his first role, he then oversaw the compliance office, where he was instrumental in developing athletic academic services, and later served as the athletic department's liaison to campus housing. He also served as the assistant cross country coach, and by 2002, he was the head coach for the men's and women's cross country teams, and the indoor and outdoor track and field teams.

"After all these years, I still think there is so much potential here," Smolka said. "I hate the idea of going somewhere that is always good, and I'm just there as a caretaker. I would much rather get close and not succeed but feel we have built up to our success."

Building that success was evident in 2023-24, when 85% of the cross country and track student-athletes achieved personal bests, and the team as a whole recorded more personal records than in any previous season. In the spring, the Owls trained on the newly resurfaced track at the Hagerty Family Track & Field Complex, which improved injury downtime and allowed the team to continue to develop.

As part of both the cross country and track programs for three decades, Smolka has helped student-athletes from more than 25 countries realize their goals. Today, those student-athletes are doctors, teachers, principals, coaches, lawyers, construction managers, television reporters/anchors and more.

"The program is improving steadily and getting more competitive with each passing year," he said. "The challenge has been that as we get more competitive, we keep moving to even more challenging conferences, but the future does look bright. I plan to keep doing what I love to do as long as I'm physically capable of doing it."

From left, top row: David Smolka, son; Jacob Smolka, son; Owlsley, mascot of Florida Atlantic; Tevya Smolka, son; Caroline Smolka, wife; and Johanna Smolka, daughter. Bottom row: Avi Smolka, son; Alex Smolka, head coach of Florida Atlantic's men's and women's cross country teams, and women's indoor and outdoor track and field teams; and Michaela Smolka, daughter.

OWL IN THE FAMILY

Alex Smolka, head cross country and indoor and outdoor track coach, has family ties to Florida Atlantic that span three generations. His mother, Dalia, took courses through the Osher Lifelong Learning Institute and his sister, Ruth, spent a year studying at Florida Atlantic. Smolka's son, Avi, was the first in the family to earn an undergraduate degree from Florida Atlantic; his daughters, Michaela and Johanna, quickly followed; while his other son, David, is a freshman. Michaela is currently the assistant director of traditional graduate programs in the College of Business. Smolka also has two future sons-in-law with ties to the University: Richard Meade, who played tennis for Florida Atlantic; and Robert Bush, who is working toward a degree. Smolka's youngest son, Jacob, shares his passion for attending athletic events with him, which includes traveling to the Desert Holiday Classic in Las Vegas in December 2023 to watch the Florida Atlantic men's basketball team upset Arizona 96-95 in double overtime.

From left, top row: Michaela Smolka, daughter; Jacob Smolka, son; and David Smolka, son. Middle row: Robert Bush, future son-in-law; Richard Meade, future son-in-law; and Caroline Smolka, wife. Bottom row: Johanna Smolka, daughter; and Alex Smolka, head coach of Florida Atlantic's men's and women's cross country teams, and women's indoor and outdoor track and field teams.

Holding Court

Tennis Challenging the Nation's Best

BY **KATRINA MCCORMACK**

After finishing the 2023-24 season nationally ranked, the Florida Atlantic University men's and women's tennis teams are expected to have another strong season. Both teams' incoming recruiting classes are ranked among the Top 5 in the nation.

"I am extremely excited about the group of young men and women joining our team," said Ricardo Gonzalez, head coach of both teams. "It is always exciting to see how these student-athletes continue to grow and mature throughout the years. They will get used to many changes and adapt quickly to a new environment, but I am happy to be a part of the journey."

Gonzalez has led the men's tennis team to more than 150 wins since 2012. He has nearly 40 wins with the women's team since taking the helm in 2022.

The men's team has been nationally ranked for the past five years, finishing their 2023-24 season with a 16-7 record and a No. 45 national ranking — the highest finish in program history. As perennial academic leaders, the team posted the highest grade point average among Florida Atlantic's men's teams during the Spring 2024 semester and was recognized by the Intercollegiate Tennis Association (ITA) as an All-Academic Team.

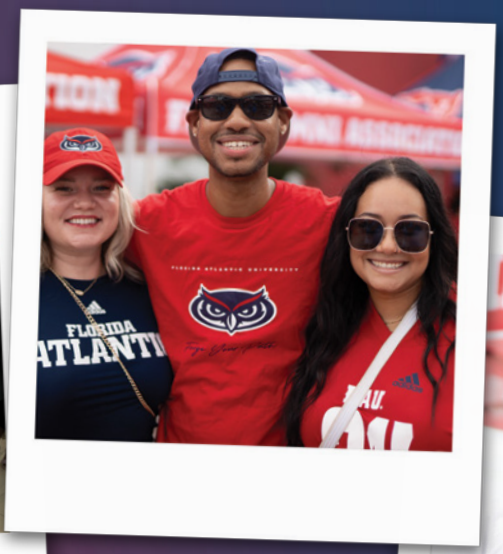
The women's team finished the 2023-24 season ranked No. 73 in the nation, with a 13-9 record and 11 consecutive wins, an all-time program high. The team returns four of its six starters from last season, including Panna Bartha, who was the 2024 American Athletic Conference Freshman of the Year.

This fall, the Owls played a mix of individual events and ITA tournaments. Beginning in January 2025, they will return to the Kimberly V. Strauss Tennis Center on Florida Atlantic's Boca Raton campus for dual-match play as they continue to compete with the nation's best.

Ricardo Gonzalez

Panna Bartha

Ricardo Gonzalez, left, and Alberto Colas



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Trailblazers Reunion

ALUMNI FROM WILKES HONORS COLLEGE FOUNDING CLASSES REUNITE AFTER 20 YEARS

BY **CHELSEY MATHESON**

Florida Atlantic University initiated a bold venture in 1999: a new northern Palm Beach County campus anchored by a free-standing honors college with a premier, comprehensive liberal arts education.

The Harriet L. Wilkes Honors College emerged from land donated by the John D. and Catherine T. MacArthur Foundation as one of the first stand-alone public honors colleges in the United States. Not only was the college a new endeavor for Florida Atlantic, but its newly minted John D. MacArthur Campus was also designed as a cornerstone of a new 2,000-acre, master-planned community in Jupiter called Abacoa.

The Honors College welcomed its first class of 77 freshmen in Fall 1999. Dubbing themselves the "trailblazers," these students and the founding faculty ignited the momentum for it to become one of the top-ranked honors colleges in the nation.

More than two decades after the original cohorts graduated, a group of the pioneering alumni recently organized a reunion. They traveled from all over the country back to Jupiter to reconvene at the site that served a foundational moment in their lives — and is an important part of the University's history.

When the first Honors College students arrived all those years ago, the MacArthur Campus consisted of just three administrative buildings, one incomplete residence hall and a utility building. The dining hall was then completed after classes had commenced. The shops and restaurants of what is now downtown Abacoa had yet to be completed. Because of the isolation and the general "newness" of everything around them, the alumni described their time at the college as a great experiment in which they were able to pave the way for the generations who came after.

"For me at the Honors College, my big takeaway was that you don't have to wait around for something to exist," said Leisy Maria Arencibia, a trailblazer and reunion

organizer. "You have the power to create it. If you want to get something off the ground, you have to be the fire. You have to ignite other people and create it, because it's not just going to get handed to you."

It was this industrious, self-starter attitude that inspired a group of six Honors College alumni to organize a multi-day event centered around the unique experience that brought them together. In addition to Arencibia, the planning committee consisted of Patricia Antonucci, Joanna Burchfield, Jennifer Chiampou, Joe Colucci and Jake Leech, Ph.D.

"I really credit the Honors College with continuing me on my path to wanting to be very accepting and accommodating and welcoming of everybody from all walks of life," said Antonucci, who entered her freshman year in the second class of students in 2000. "In a lot of ways, I think we were all very different, but we were all here together and we had this thing in common that we were at this weird experimental place. We got that shared experience, and it held us together."

The reunion was organized like an Honors College semester of classes. It kicked off with Honors [Re]Introduction to Academic Life – also known as a happy hour. Saturday activities included walking tours of the MacArthur Campus (Honors Sense of Place Across Time) and an on-campus reception and faculty panel (Honors Technology and Culture).

From starting their own clubs to forming a Jupiter campus student government to being the first students to engage with a brand-new curriculum, the trailblazers described a strong sense of ownership of their college experience and how those lessons have carried on through their lives and careers.

"I think the quality of education was head and shoulders above anything else my high school peers got [at college]," Leech said.

He cited small class sizes, the sincere engagement between students and faculty, and the opportunity to explore a variety of intellectual interests as tangible differentiators that prepared him for professional success. Leech is a senior program officer at ICLEI USA, a nonprofit organization devoted to solving sustainability challenges.

"The culture of the school was making sure that everyone gets to be part of the discussion and heard," Antonucci said. "I think that has served me well as a mediator, because it's all about the party's self-determination, how to respond, and how to make sure people feel comfortable and part of the conversation."

Arencibia is now an elementary school teacher, and credits how the Honors College's teaching model informed how she approaches education.

"What the Honors College gave me was the term interdisciplinary," she said. "You don't have to compartmentalize everything. Science and art can hold hands, and they have value."

For many of the alumni in attendance at the reunion, it was the first time returning to explore their old haunts and witness the expansion of both the MacArthur Campus and the surrounding community. Though a lot has changed, particularly the establishment of the campus's life sciences and biomedical research hub, the essence of the "small but mighty" Honors College they helped establish remained in place.

"We really did create our own culture that permeates to today," Arencibia said.

Making an Impact

ALUMNA'S INNOVATIVE TECHNOLOGY HELPS FIND SEXUAL PREDATORS

BY **WELLS DUSENBURY**

When Carly Yoost '09 was growing up, she witnessed her father's impact in law enforcement firsthand as he developed technology tools for online background investigations — which officers still use today.

After he passed away in 2013, Yoost made it her mission to carry on his efforts. That's when she and her sister, Desiree, co-created the Child Rescue Coalition, a nonprofit organization centered on building technology for law enforcement to hunt online predators.

Since then, the organization has trained officers in more than 100 countries, leading to the arrests of more than 15,000 predators. That technology also has allowed police to rescue more than 3,400 children from abuse and prevented the abuse of more than 750,000 children.

"I started this thinking I really believe in it, and I hope others do as well," said Yoost, who is also the board chair of Child Rescue Coalition. "People really care about this mission and this work, and also believe in the power of our technology and the work we're doing to identify predators and rescue children that are being harmed."

Child Rescue Coalition averages three arrests of predators each day. Two recent instances stand out for Yoost. Police officers utilized Child Rescue Coalition's technology in North Carolina to find the location of a predator who was trading illegal material outside his home. When police officers tracked down the residence, they learned it was being used as an in-home daycare.

"[Police] immediately went to the home. There was a child being brought to this person's home that day for the first time," Yoost said. "The officer really believed, 'What if I hadn't come sooner and intervened when I did? Would this child have been abused?' That was an amazing early eye-opening case."

The second instance hit closer to home, when Child Rescue Coalition's technology brought police directly to a sexual predator who was working as an instructor at a gymnastics facility in Boca Raton.

Over the past decade, actress Blake Lively has served as an ambassador to the organization. So it's no surprise that Yoost and Child Rescue Coalition have received global acclaim for their work, including:

- The M&A Advisors' 40 Under 40 Emerging Leaders Award in 2015
- The 211 South Florida Child Abuse Prevention & Awareness Award in 2015
- L'Oreal Paris Women of Worth National Honoree 2016-17
- The Florida Atlantic University President's Distinguished Service Medallion in 2019
- Florida Atlantic's Charles E. Schmidt College of Science Distinguished Alumni Award in 2023

"It's really inspiring to see how Carly has created such a meaningful impact and a safer space for children, not only in our community, but across the world," said Katie Burke, Ph.D., '08, '10, '15, '17, assistant vice president of alumni and community engagement. "To see how many predators have been taken off the street thanks to her organization is truly remarkable. She makes me proud to be an Owl."

Yoost, who lives in Palm Beach County with her two children, said she frequently gives back to Florida Atlantic, speaking to students at various colleges about how they can make an impact and a difference.

She also enforces to students the importance of surrounding themselves with people who share their passion and encourage them to chase their dreams.

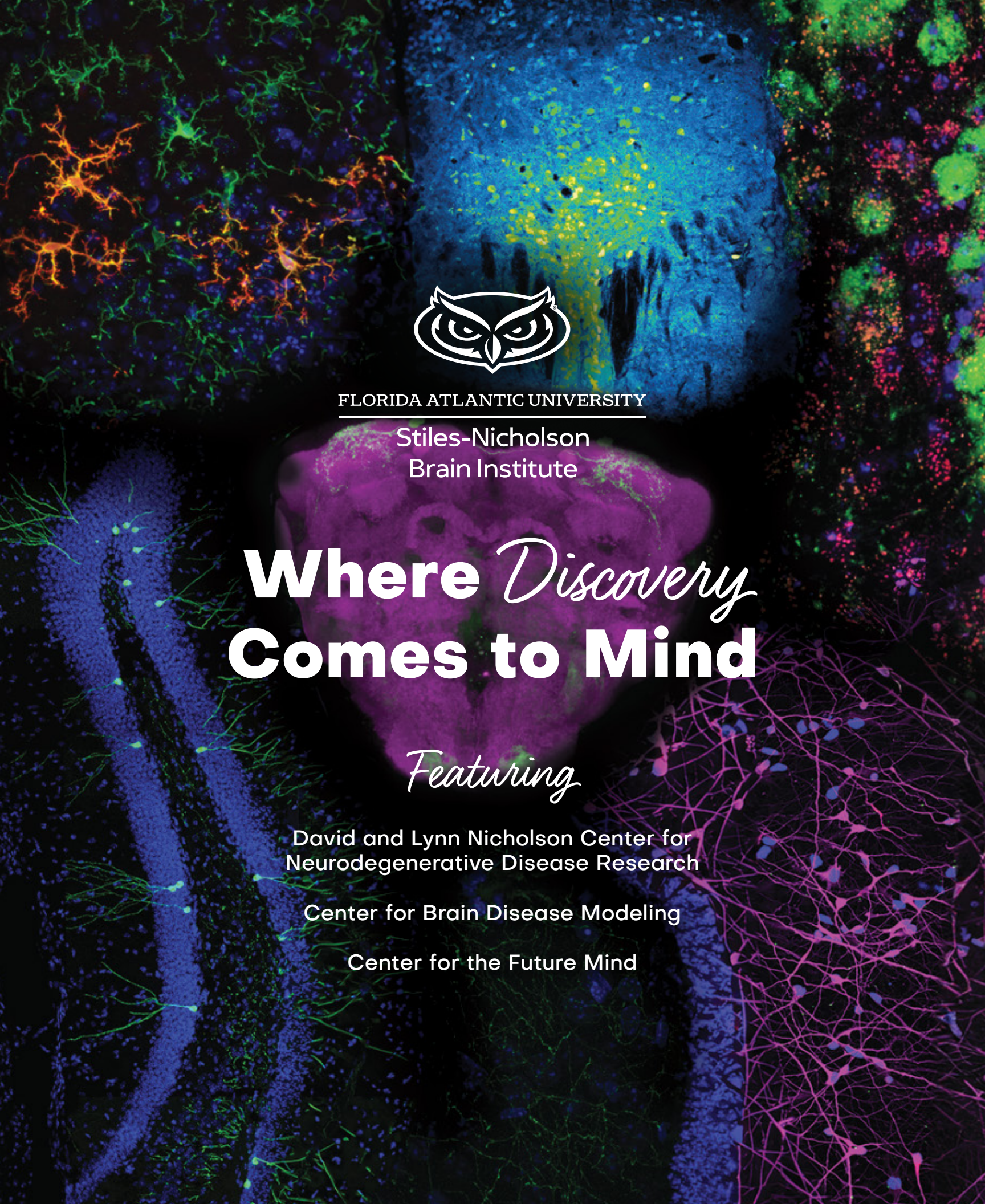
"Keep using your voice, keep being passionate," Yoost said. "Because you will build and find your people who want to get really involved and care so much about the work that you do. I think that feels really hard in the beginning, and all of a sudden, you just create momentum and it really begins building."

Keep using your voice, keep being passionate. Because you will build and find your people who want to get really involved and care so much about the work that you do."

- Carly Yoost '09

Carly Yoost and FAU President Stacy Volnick, Ph.D.

Blake Lively and Carly Yoost



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CLASS NOTES

1970s

Phillip L. Parker, bachelor's in political science '73, and his wife, Donna, celebrated their 50th wedding anniversary in July on a train trip through the Canadian Rockies. The Parkers met while he was a student at Florida Atlantic University. They were set up on a blind date by his Lambda Chi Alpha fraternity brother, **Dave Rexrode** '72, and his future wife, **Sally Matthews** '73. Parker lives in Dayton, Ohio. Prior to retiring, he was the CEO of the Dayton Area Chamber of Commerce.

1990s

Nicole (Ervin) Flothe, bachelor's in nursing '96, and **James Flothe,** bachelor's in business '96, are the proud parents of three. Their son, Nathan, is carrying on the family tradition of attending Florida Atlantic as a member of the Charles E. Schmidt College of Medicine class of 2028. Nicole works as a nurse for AmeriCare and James is the U.S. trainer for GK Software, a global software company.

Brian Hyman, bachelor's in communication '97, authored "Recovery with Yoga: Supportive Practices for Transcending Addiction," recently published by Shambhala Publications. He has been a yoga teacher at Cliffside Malibu in California since 2012.

Lois Gray, bachelor's in elementary education '99, received the 2024 William T. Dwyer Award for Excellence in Elementary Education. The Dwyer Awards is an annual program recognizing outstanding educators from public and private schools in Palm Beach County. Gray teaches fourth grade at Seminole Trails Elementary School in West Palm Beach. She has taught students in kindergarten through fifth grades for more than 25 years.

2000s

Rhianna C. Rogers, Ph.D., bachelor's in anthropology '02, master's in history '04, doctorate in comparative studies '10, was appointed by the United States Secretary of the Treasury as the inaugural chief diversity, equity, inclusion and accessibility officer for the Department of the Treasury in Washington, D.C. Prior to this, Rogers was the director of the RAND Corporation's Center to Advance Racial Equity Policy in Santa Monica, California.

Ryan Walter, bachelor's in criminal justice '04, and his wife, Katie, welcomed a son, Ryder CJ Walter on June 30. Ryder weighed 7.5 pounds and was 20.5 inches long. Walter is a senior director at Associated Energy Group Fuels, an aviation fuel provider.

Patience Bryant, Ph.D., bachelor's in multimedia studies '05, recently joined California State University, Fullerton, as the inaugural executive director for Black student academic success. Bryant also is a member of the FAU Alumni Association Board of Directors.

Matt Stock, Ph.D., bachelor's in kinesiology and exercise science '06, received the Journal of Strength and Conditioning Research Editorial Excellence Award from the National Strength and Conditioning Association. Stock is an associate professor and director of the Institute of Exercise Physiology and Rehabilitation Science at the University of Central Florida.

2010s

Halston Shannon, bachelor's in business administration '17, master's in education '18, recently became engaged to Ruth Denord. Shannon is an entrepreneur and graphic designer through his company Halston Shannon Visual Artistry & Branding, LLC, in Pembroke Pines. Denord is pursuing a bachelor's in social work at Florida Atlantic.

Michaela Smolka, bachelor's in communication studies '18, was awarded the 2023-24 Excellence and Innovation in Advising Award from Florida Atlantic. Smolka is the assistant director of traditional graduate programs in the College of Business.

2020s

Beth Bowers, Ph.D., doctorate in integrative biology '23, secured a role as a post-doctoral researcher at the Smithsonian Environmental Research Center, and recently published a study in the journal, Methods in Ecology and Evolution.

Michael Forrest, bachelor's in mechanical engineering '23, signed with Italian basketball club Estra Pistoia. He last played in Switzerland, where he averaged 18.9 points per game with five rebounds per game and four assists per game. Forrest was a member of the 2022-23 men's basketball team that advanced to the Final Four of the NCAA Tournament.

Alexander Mohammed, bachelor's in biology '23, accepted a job offer at the National Institutes of Health, where he will be a medical support assistant.

Abigail Eccles, bachelor's in geosciences '24, continues her academic journey at the Colorado School of Mines, where she will study space resources with the goal to work for NASA after completing her internship with the organization.

Rahjanni Iusi, master's in social work '24, was recently selected as a Broward College commencement speaker. As a military intelligence analyst and paratrooper in the special operations community, Iusi faced the rigors of military service, exposing her to the harsh realities of combat and its toll on mental well-being.

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 photo (at least 300 dpi) to FloridaAtlanticMag@fau.edu.

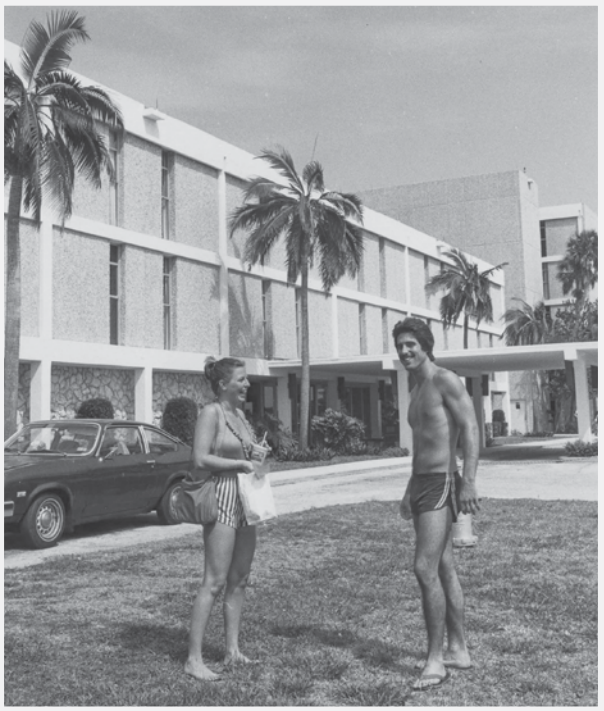
TIMEMACHINE
A LOOK BACK

HOME SWEET HOME

Student housing has come a long way since Florida Atlantic University's first residence halls opened in the mid-1960s.

Today's state-of-the-art residence halls, which house nearly 5,200 students on the Boca Raton and Jupiter campuses, have all the comforts of home. Amenities include private bathrooms, fitness centers, study lounges, multipurpose rooms for socializing, computer labs, laundry facilities, barbeque grills, sand volleyball courts, and even a pool.


Welcome Fisene,
Owls!



Division of Public Affairs
Florida Atlantic University
777 Glades Road, AD-10, Suite 101
Boca Raton, FL 33431

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