



Office of Admissions
111 Lake Hollingsworth Drive
Lakeland, FL 33801-5698



DISCOVER A WORLD OF POSSIBILITIES

Explore the sciences at
Florida Southern College.

Do you have an interest in understanding life, down to the molecular level? Are you looking for a solid foundation in the biological or physical sciences? Are you fascinated by the world's aquatic environment? **Florida Southern's rigorous science programs will change the way you think about the world around you through distinctive research opportunities, problem solving, specialized training, and engaging lab and fieldwork.**





PROGRAMS

Collaborate with professors and peers along your journey.

BIOCHEMISTRY AND MOLECULAR BIOLOGY (BMB)

This major's interdisciplinary nature builds expertise in chemistry, biology, physics, and mathematics, and it serves as an excellent springboard for further study and careers in the vast fields of health technology and pharmaceuticals.

BIOLOGY

Our biology students are known for publishing original research, participating in fieldwork internationally, and going on to study at the nation's top medical, dental, and veterinary schools. Our program is equipped with state-of-the-art research labs and honored with elite internship opportunities at internationally recognized facilities such as the Houston Methodist Orthopedics & Sports Medicine Clinic, New York's Brookhaven National Laboratory, the National Institute of Health (NIH) in Maryland, and the Bimini Biological Field Station in the Bahamas.

BIOTECHNOLOGY

Biotechnology is an ever-growing field with a variety of career opportunities including medicine, agriculture, biofuels, and pharmaceuticals. Regardless of their final career goals, students studying biotechnology are excited about improving global health and wellness. At Florida Southern, students benefit from a customized experience where they design and implement their own original research project using advanced data analysis programs and computer simulations.

CHEMISTRY

Students in chemistry study with faculty members who are nationally recognized for their excellence in providing engaged learning experiences. Students take courses in emerging topics such as forensic chemistry and nanotechnology. With the support of their professors, they develop research experiments and present their findings at national conferences.

CITRUS AND HORTICULTURAL SCIENCE

FSC is known throughout Florida's citrus industry for the quality of our program — the only one of its kind in the nation. Many of our students become grove managers, consultants, and researchers in the citrus industry. A significant number also pursue graduate degrees from institutions such as the University of Florida and the University of California, Berkeley.

ENVIRONMENTAL STUDIES

Students in the environmental studies program benefit from real-world expertise as they prepare for careers with governmental agencies and environmental organizations. They spend time in the lab and in the field, investigating issues such as climate change, natural areas management, water and air pollution, soil erosion, and waste management. Our partnership with Duke University enables eligible students to seamlessly transition into graduate programs in Environmental Management or Forestry.

MARINE BIOLOGY

What better place to study marine biology than in Florida? Our students are in close proximity to top marine research facilities on the Gulf of Mexico and the Atlantic Ocean. They also study abroad in places such as Costa Rica, Jamaica, and the Bahamas, and return to our small classes to complete research alongside passionate faculty. Students also have the opportunity to intern with organizations such as the Duke University and Mote Marine Laboratories.

MEDICAL LABORATORY SCIENCES

Through a unique partnership with Lakeland Regional Health, students learn to analyze patient specimens that allow care providers to diagnose illnesses. After completing foundational courses, students spend a year at Lakeland Regional gaining experience in the hematology, microbiology, immunohematology and molecular pathology labs.

“There are so many professors with diverse backgrounds and interests, from herpetology to genetics. It was very interesting to see their enthusiasm for different aspects of science.”

— Leyna Stemle '18, Environmental Studies and Marine Biology major, and 2018 Fulbright Award Recipient

“Reaching your goals requires success both inside and outside of the classroom. Our faculty is committed to helping you gain the experience and enhance the skills you need. We’re with you every step of the way.”

— Dr. Nancy Morvillo, Professor of Biology and Pre-Medicine Studies Coordinator

PRE-PROFESSIONAL PROGRAMS

Make a positive and consequential impact.



PRE-PROFESSIONAL PROGRAMS

We offer intensive pre-professional training that will prepare you for graduate and professional school. You will develop analytical skills that are applicable in virtually any field, and you'll go on to pursue careers that are in high demand through the following pre-professional opportunities:

- Pre-Dental
- Pre-Engineering
- Pre-Medicine
- Pre-Occupational Therapy
- Pre-Optometry
- Pre-Pharmacy
- Pre-Physical Therapy
- Pre-Physician Assistant
- Pre-Veterinary Medicine

PARTNERSHIP ALLOWS ENGINEERS TO EARN TWO DEGREES

Florida Southern has established a partnership with **Washington University in St. Louis**, enabling students to obtain bachelor's and engineering degrees at an abbreviated rate. Depending on your goals, options are available to complete the program in five years with a 3+2 track or six years with a 4+2 track.

GRADUATE OPPORTUNITIES

Florida Southern also has established collaborative agreements to provide qualified students preferred admission into the following graduate programs:

- **Lake Erie College of Osteopathic Medicine (LECOM):** Through a partnership with one of the nation's most renowned medical colleges, students who are passionate about healthcare may be granted early acceptance to pursue the pre-med, pre-pharmacy, and pre-dental tracks. Those who meet all the academic requirements while earning their undergraduate degrees will be guaranteed acceptance into Lake Erie's graduate programs at its campuses in Pennsylvania and Florida.

- **Duke University:** Our partnership with Duke University's Nicholas School of the Environment enables students to receive a bachelor's and master's degree in environmental studies through a unique 3+2 track program. Over the course of five years, students complete their core liberal arts and foundational courses at FSC then transition to Duke's master's program where they can choose from seven specialized concentrations that provide an accelerated launch into their field.

STUDENT INVOLVEMENT

Engage in your curriculum.
Experience what lies beyond the books.

LEARN BY DOING

We believe that practice makes perfect, and at Florida Southern, we are driven to help students apply what they have learned in the classroom to real-life scenarios. After raising money to send much-needed supplies to the Irma-ravaged British Virgin Islands, Dr. Kristian Taylor, Assistant Professor of Marine Biology, brought a group of Rho Rho Rho, the National Marine Biology Honor Society students to the islands to help plant seeds and saplings along the beach of Spanish Town in Virgin Gorda. Under the direction of Dr. Gabe Langford, Assistant Professor of Biology, biology students have had the opportunity to spend a summer at Oklahoma State examining parasites with powerful electron microscopes — another rare opportunity for undergraduates. Whether it's venturing to the Caribbean for in-depth shark analysis or restoring local marsh systems, you'll spend your years at Florida Southern gaining valuable experience that will be integral in your career success.

NATIONWIDE PRESENTATIONS

Part of being a scientist is sharing your findings with the larger community. Not only do our students publish their research in peer-reviewed journals, but they are also often invited to present at national conferences. Most recently, chemistry students presented research at the American Chemical Society National Meeting in Dallas, Texas; the Southeastern Regional Meeting in Nashville, Tennessee; the Association of Southeastern Biologists Conference in Athens, Georgia; and the Bahamas National Trust (BNT) biennial conference in Nassau, Bahamas.



SMALL WORLD INITIATIVE

Through our partnership with Yale University's Center for Scientific Research, our students contribute to a unique and sustainable path to replenish the antibiotic pipeline by researching and identifying soil bacteria that can be used in antibiotics. Through the Small World Initiative, students like Blake Crosby '17 are helping to resolve the worldwide health crisis of the rising resistance to antibiotics. Now a graduate student at the University of Florida's College of Dentistry, Blake credits his undergraduate research experiences with giving him an advantage over other dental school candidates. "The experience taught me many techniques that I'm able to apply now in my scientific studies."

CLUBS AND ORGANIZATIONS

- Alpha Gamma Rho, the national agricultural social/professional fraternity
- American Chemical Society
- American Medical Student Association, a chapter of the American Medical Student Association (AMSA)
- Beta Beta Beta, affiliated with the American Association for the Advancement of Science
- Gamma Sigma Epsilon, the national chemistry honor society.
- Pre-Dental Society

CUSTOM LEARNING RIGHT AWAY

Florida Southern's small science classes allow students to customize their studies to address both regional and international problems that are of interest to them. Whether you plan to go to a professional or graduate school or to start a career in a fast-paced emerging field, you can get involved in research projects as early as your freshman year. Florida Southern's faculty is committed to cultivating your curiosity and helping you develop the skills for lifelong leadership.

GET FUNDED FOR YOUR OWN RESEARCH

While engagement in your discipline begins at Florida Southern, it doesn't end there. The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. Through the REU program, students have completed research at the University of Chicago, the University of New Mexico. Others have pursued projects with the National Oceanic and Atmospheric Administration, Duke's Marine Laboratory, and with the National Cancer Institute.

AREAS OF STUDENT RESEARCH

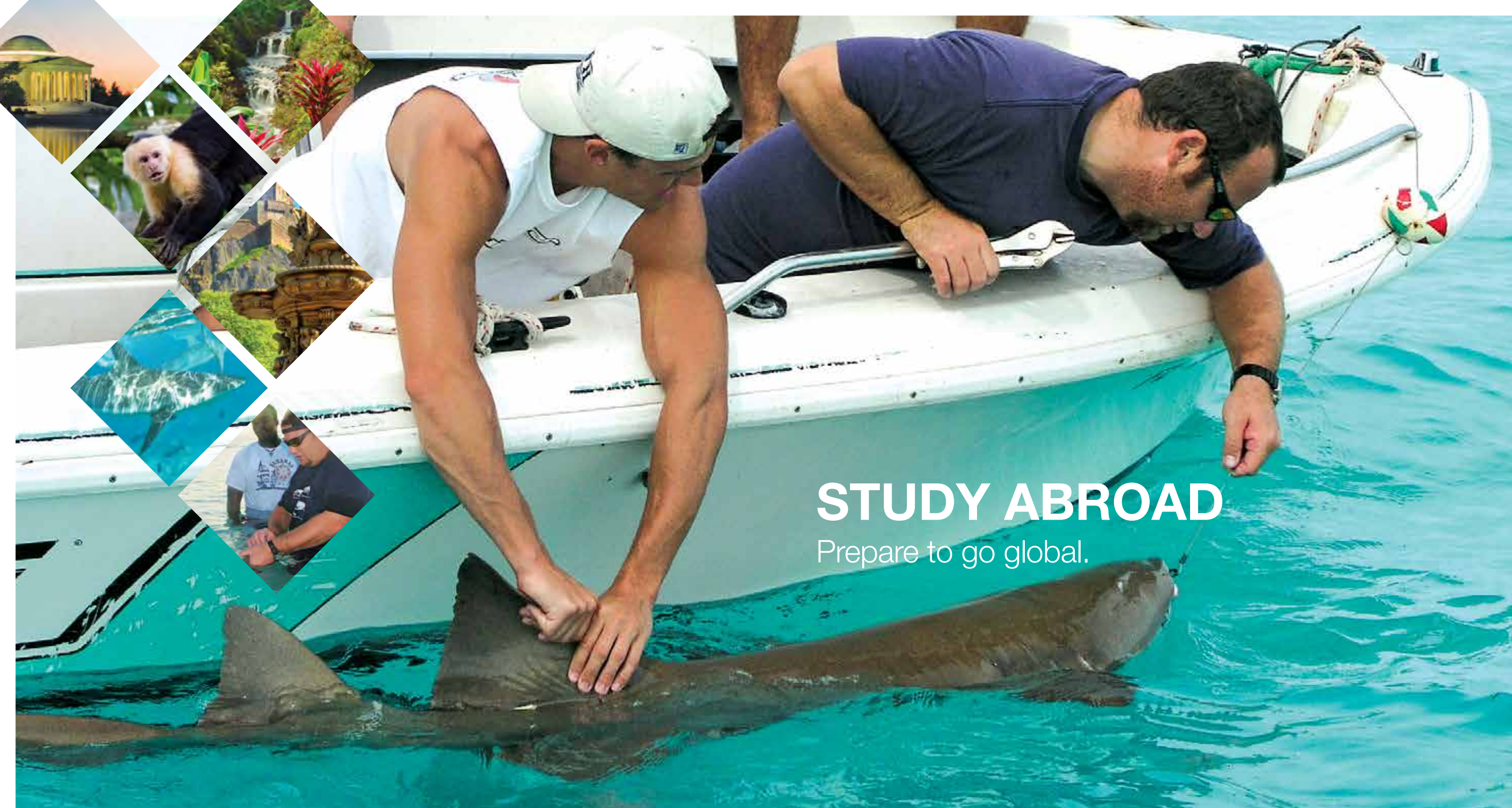
- Animal behavior
- Computational chemistry/nanophotonics
- Cultivation of new, heartier varieties of *Dracaena* (*Dracaena fragrans*) plants
- Effects of plasticizers and pesticides on cells
- Green chemistry
- Metal organic frameworks
- Microbial flora from the gastrointestinal tract of the Florida manatee
- Organic synthesis of flavonoids
- Paper-based microfluidics
- Parasite diversity and stomach contents of the sharpnose shark
- Population genetics of coastal green anoles
- Proteomics
- Quantum transport studies
- Rose genetics
- Shark and ray community composition and dynamics
- Shark migration and behavior
- Species interactions on an ecological level

RESEARCH

Get your feet wet
and your hands dirty.

“Using an interactive approach allows students to start asking questions instead of just memorizing scientific facts, enabling them to gain a broader understanding of the subject matter. Students excel when presented with real-world challenges.”

— Dr. Gabe Langford, Associate Professor of Biology



STUDY ABROAD

Prepare to go global.

GUARANTEED TRAVEL

As a full-time undergraduate student, you're guaranteed a travel experience that will immerse you in different cultures and exotic environments. These "Junior Journeys" are offered for course credit during May Term, Summer Term, and fall and spring breaks, and are guided by our knowledgeable faculty.

DESTINATIONS INCLUDE:

Bahamas	Galapagos Islands
Belize	Hawaii
Bermuda	Italy
Caribbean	Jamaica
Costa Rica	Mexico
Ecuador	South Africa
England	Switzerland
France	Washington, D.C.

"There is nothing quite like an experience that allows you to see that your goal is tangible and that making an impact is within your reach. Studying abroad was without a doubt one of the most amazing opportunities I have ever had."

— Elise Pullen '17, currently pursuing a master's degree in wetland studies at Coastal Carolina University

GRADUATE SCHOOLS AND INTERNSHIPS

Build your network through our family.

“Our students are presented with many ‘aha’ moments, in which material in class is connected to something they never thought was related at all.”

— Dr. An-Phong Le,
Associate Professor
of Chemistry



TURN YOUR PASSION INTO REALITY

Demand in scientific fields of study is at a record high. The U.S. Bureau of Labor Statistics expects a 20 percent increase in jobs within the medical sciences by 2026, with spikes in the job market for environmental and biological sciences as well. Studying at Florida Southern will allow you to turn your passion for the sciences into real opportunities.

INTERNSHIPS

- Bimini Biological Field Station, Bahamas
- Brookhaven National Laboratory, Ecology Unit, Long Island, NY
- Duke University Marine Lab
- Florida Chemical Company, Inc.
- Florida Department of Forestry
- Florida Fish and Wildlife Conservation Commission
- Houston Methodist Orthopedics & Sports Medicine Clinic, TX
- Joint Implant Surgeons, Inc., OH
- Lakeland Chemical Specialties, Inc.
- Lakeland Regional Health
- Mote Marine Lab, Sarasota, FL
- Nature Conservancy of Southwest Florida
- Publix Super Market's Quality Control Laboratory, Lakeland, FL
- The Rhino Orphanage, South Africa
- Sampson Chiropractic and Sports Injuries, Crystal River, FL
- University of Florida's Citrus Research and Education Center

GRADUATE AND PROFESSIONAL SCHOOLS

- Auburn University
- Boston University
- Columbia University
- Duke University
- Emory University
- George Washington University
- Lake Erie College of Osteopathic Medicine
- Ohio University
- Trinity School of Medicine
- Tufts University
- Tulane University
- University of California, Berkeley
- University of Canterbury, New Zealand
- University of Florida
- University of Miami
- University of Pennsylvania
- University of South Florida
- Vanderbilt University
- Virginia Polytechnic Institute and State University

OUTCOMES

Find success beyond FSC.

FUTURE SECURED

During your senior year, finding employment or the right graduate or professional school will be on the very top of your to-do list. Your reputation as a Florida Southern graduate will be your ticket to success on either path. While the demand in this field is very high, it is also competitive, and employers are looking for experienced and exceptional students to fill their positions. The same is true for medical, dental, veterinary, and pharmaceutical schools. Since FSC's science programs maintain high placement rates in all areas after graduation, the transition will surely seem like a breeze for you.



“During my sophomore year at FSC, I started conducting research that opened many doors for me, including participation in a summer research program at Duke University.”

— Grace Beggs '15, currently pursuing a Ph.D. in biochemistry at Duke University



SUCCESS STORIES

- Leyna Stemle '18, a 2018 Fulbright recipient is currently studying sea turtles in Ghana. When she returns, she will enter the Ph.D. program in marine biology at the University of Miami.
- Jackson Marshall '17 is currently a research associate at the Janssen Pharmaceutical Companies of Johnson & Johnson.
- Amanda Long '17 is pursuing a graduate degree in horticulture at the University of Florida.
- Grace Donovan '16 is working towards a Doctor of Physical Therapy at Eastern Washington State.
- Lianna Derringer '14 earned her PharmD from Lake Erie College of Osteopathic Medicine and is now a pharmacist with Publix Super Markets.
- Katherine Manning '14 is studying at the University of Tennessee College of Veterinary Medicine.
- Felicia Wong '14 is a project coordinator for the Legal and Advocacy Division at the Jamaica Environment Trust.
- Divya Puri '13 earned her Doctor of Dental Medicine from Nova Southeastern and is working as a pediatric dental resident at the University of Connecticut Health Center.
- Stephanie Meyers-Davis '12 completed her Ph.D. from the USF College of Medicine in Molecular Pharmacology with a 4.0 GPA. She is now a Postdoctoral Scholar at the University of Kentucky in Lexington where she collaborates with physicians in the neurology department and works on clinical research projects.
- Matthew Cicanese '12 is currently an Explorer at National Geographic where he participates in expeditions traversing over 1,000 miles of Iceland's various ecosystems, documenting the biodiversity of lichen species and culture surrounding lichens.
- Sarah Grossman '12 received her Master of Sciences of Pharmacy with a concentration in forensic science from University of Florida and is now a Field Systems Support Specialist at Beckman Coulter Research and Discovery Laboratory.
- Brent Willobee '12 earned his M.D. from George Washington University School of Medicine and is now a surgical resident at University of Miami Hospital.
- Nickson Henry '01 earned his Doctor of Optometry from Salus University and went on to establish the Henry Vision Center in the Atlanta metro area.
- Saleem Josephs '00 continued his education at Columbia University, earning a master's in public health as well as an MBA in finance. He served as a vice president at Merrill Lynch, and is currently the CEO of Cascada Dental Spa in New York.



EXPERIENCE FLORIDA SOUTHERN

Want to know why publications like *U.S. News*, *The Princeton Review*, *Fiske*, and *Forbes* consider us one of the country's best colleges?

See for yourself! Join us on campus to witness the world of opportunities here at FSC and meet with our distinguished science faculty. Take the first steps today so you can excel tomorrow!

Schedule your visit at flosouthern.edu/visit