

SPECTRUM

FLORIDA STATE UNIVERSITY COLLEGE OF ARTS & SCIENCES

Winter 2019





From the Dean

Earth Sciences building, which is scheduled to open late next year. Our humanities disciplines continue to soar, with faculty members publishing over 45 books last year and students collaborating in research projects at a record pace.

Campus highlights include a continued rise for FSU in ranking of public research institutions. I am especially pleased with the college's central role in helping FSU on this upward trajectory. The university closed its Raise the Torch campaign June 30 by announcing, and celebrating, a record gift total that exceeded \$1.1 billion. I want to thank every single person who helped us reach this mark with contributions, whether via monetary gifts or contributions through other means.

In the following pages you will see articles highlighting the college's heritage strengths in the humanities and sciences, and explore the personal perspectives of current students, esteemed alumni, and distinguished faculty. You will also find ways that you can engage with us to launch the next generation of A&S graduates.

Let us know what you think of our new look by taking a quick survey at <https://bit.ly/2F6Vr4K>, and take a moment to share your latest news at as-dean@fsu.edu.

As always, please stay in touch, and thank you for being part of the College of Arts and Sciences family.

Welcome to this edition of Spectrum magazine, the alumni publication of the Florida State University College of Arts and Sciences. We are excited to show you our redesigned format and share with you broad coverage of academic excellence across the college.

Last academic year was a spectacular success for the college, both in its productivity and recruitment activities. Our faculty members continue to excel in teaching and research, reaching greater heights each year, and our students are bright and alive with energy.

The college graduated more than 2,800 students, recruited 50 new faculty members, and generated nearly \$65 million in external research funding. This fall saw the launch of a new interdisciplinary undergraduate major in Neuroscience and excitement surrounds the progress on our new

A handwritten signature in black ink that reads "Sam Huckaba". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Sam Huckaba
Dean, College of Arts & Sciences

SPECTRUM

FLORIDA STATE UNIVERSITY COLLEGE OF ARTS & SCIENCES

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Alumni Alight

Arts and Sciences grads are making a difference at home and abroad.

18

Student Success

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Faculty Forays

Arts and Sciences professors are driving the the future of education and research.

On the cover: *The Florida State University seal installed in the Beth Moor Lounge of the Longmire Building. Presented by members of the Class of 1919 on the occasion of their 50th anniversary.*

A gift that gives back



Named endowments fund endowed professorships, graduate fellowships, lectureships and provide travel funds for students and faculty to present scholarly activity at professional conferences. These endowments also fund the needs of the college in perpetuity while honoring the donor's philanthropic wishes, and can provide a lasting tribute to an individual of the donor's choice.

Establishment of a charitable gift annuity is one of the most popular ways to fund an endowment. This innovative gift vehicle brings benefits to the donor including:

- Income generation for the donor or a loved one
- Charitable tax deduction
- Tax-favored payments that last a lifetime
- Reduction in capital gains taxes
- Flexibility to choose the start date for income payouts

Several years ago, alumnus Rado Pribic and his wife, Mary Lou, created an endowed scholarship fund in the Department of Modern Languages to honor Rado's parents, both of whom were faculty in the department. Recently, the Pribics funded a charitable gift annuity in the amount of \$60,000 that will eventually be added to the Nikola and Elisabeth Pribic Scholarship.

"It gives me great pleasure to know I'm investing in the futures of Florida State University students. The fact that I am able to honor my parents while doing so is an added benefit of giving. As a successful grad, I feel an obligation to give back, as every alumnus should."

At FSU, you can establish a charitable gift annuity with a gift of \$25,000 or more, and you can also use the annuity to establish a non-endowed fund. For more information, or to make a gift, contact Nancy Smilowitz, the college's assistant dean for development, at 850.294.1034 or nsmilowitz@fsu.edu.

**The information in this article is not intended as legal or tax advice. For such advice, consult an attorney or tax advisor.*

Nole Notes

The top news from around the college

FSU rededicates Hoffman Teaching Lab

Florida State University and the College of Arts and Sciences celebrated the 86-year relationship between the university and distinguished alumna and chemistry faculty emerita **Kitty Hoffman** with a rededication of the **Katherine B. Hoffman Teaching Laboratory** in October.

The building, which opened in 1969 and was dedicated to Hoffman in 1984, is set to undergo renovations that will reconfigure spaces to encourage a more collaborative approach to teaching and learning and enhance eLearning capabilities. The 72,000-plus square-foot edifice is currently home to lab and classroom spaces for Chemistry, Biochemistry, and other Arts and Sciences departments.

"This is a huge investment in STEM education and research at Florida State," said FSU Provost Sally McRorie. "We're lucky to have faculty and staff ... who are committed to ensuring our students have an unparalleled educational experience."

Investments such as the Hoffman Teaching Lab renovations, along with the new Earth, Ocean and Atmospheric Science building, are a critical part of the university's plan to push Florida State into the top 25 public universities in the U.S. and make it an even more attractive place for students to study and to begin their STEM-based careers, McRorie said.



FSU Provost Sally McRorie and College of Arts and Sciences Dean Sam Huckaba are joined by Senior Associate Dean Lois Hawkes, chemistry faculty emerita Kitty Hoffman, Norris Hoffman and Chemistry chair Geoff Strouse at the rededication.

A&S celebrates role in boosting U.S. News rankings

As Florida State University continues its meteoric rise to No. 26 among public universities in the latest **U.S. News & World Report** rankings, FSU's College of Arts and Sciences has played an important role in the university's climb to national preeminence.

Class size and student-faculty ratio are key metrics used by *U.S. News* in determining its rankings. In both areas, the College of Arts and Sciences — FSU's largest college, with approximately 8,700 undergraduate and 1,800 graduate students as of 2017 — has led the way, thanks to multi-year efforts to increase faculty ranks while reducing class sizes.

From the 2011-12 academic year to 2017-18, Arts and Sciences increased its total number of tenured and tenure-track faculty from 416 to 473. This has helped improve the student-to-faculty ratio.

"The impact of these faculty hires is magnified when one considers every FSU undergraduate student takes courses in the College of Arts and Sciences as part of core general education requirements," said Dean Sam Huckaba. "In fact, approximately 47 percent of all FSU undergraduate credit hours are earned within the college."





Chemistry professor Thomas Albrecht-Schmitt

Chemist wins national award for nuclear chemistry research

Thomas Albrecht-Schmitt, the Gregory R. Choppin Professor of Chemistry, received a major award from the American Chemical Society for his work in nuclear chemistry in September.

The Glenn T. Seaborg Award for outstanding contributions to radiochemistry will be presented at the American Chemical Society conference in March, and recognizes Albrecht-Schmitt's research at the fringes of the Periodic Table. This work includes studies on plutonium, berkelium and californium, and shows the heavy, radioactive elements possess chemistry far richer than scientists previously thought.

Prior to these studies, scientists believed that though these elements possessed exotic nuclear properties their chemistry was quite mundane. Instead, many unusual properties were observed as the result of relativity starting to alter the behavior of the electrons in unpredictable ways.

In 2016, Albrecht-Schmitt received a \$10 million grant from the U.S. Department of Energy to create a new Energy Frontier Research Center to extend these basic science discoveries into

applications with the goal of accelerating scientific efforts needed to support nuclear waste cleanup at Cold War-era sites.

Professor recognized for community service in literature

Erin Belieu, a professor of creative writing and poetry in FSU's Department of English, is the recipient of the George Garrett Award for Outstanding Community Service in Literature presented by the Association of Writers and Writing Programs. Included with the award is a \$2,000 honorarium, in addition to travel, accommodations and registration to attend the AWP's annual conference in Portland, Oregon.

Belieu has written four collections of poetry that have all received prestigious awards or nomina-

tions. Her poems have been included in the Best American Poetry anthology series four times, and they have also been published in prominent publications, including *The New Yorker*, *The New York Times* and the *Yale Review*.

Biology professor named distinguished teacher

Professor of Biological Science **Gregory Erickson** received FSU's 2018 Distinguished Teacher Award in May. The award is the university's most prestigious honor for teaching and includes a \$7,500 stipend.

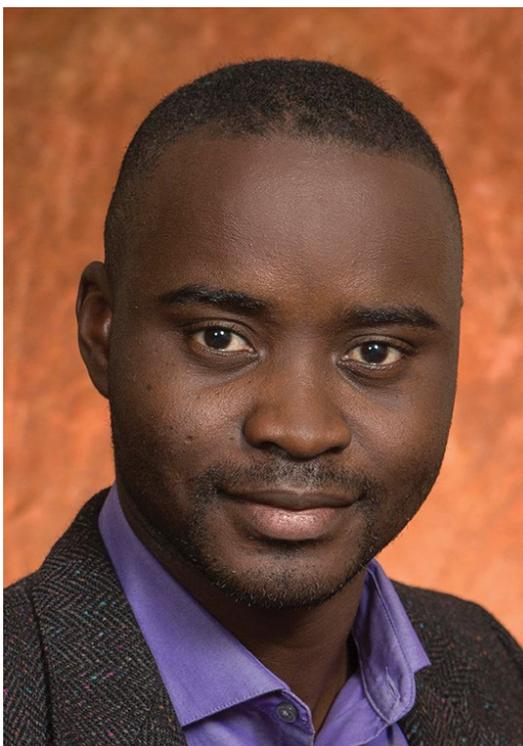
Erickson, a paleontologist, joined the FSU faculty in 2000 as an assistant professor and was promoted to full professor in 2011. He has taught introductory biology classes for non-science majors, herpetology and anatomy.



Professor of Biological Science Gregory Erickson



Nole Notes



Left to right: Chemistry and Biochemistry professor Oliver Steinbock; doctoral candidate Manfa Sanogo; and Physics assistant professor Rachel Yohay.

Professor's experiment conducted at International Space Station

Chemistry and Biochemistry professor **Oliver Steinbock** sent materials for experiments to the International Space Station in June aboard a Falcon 9 rocket from SpaceX to help researchers grow a chemical garden — inorganic structures that can spring up from metal salts and a silicate solution.

Doctoral candidate awarded Chateaubriand Fellowship

Manfa Sanogo, a doctoral candidate from Côte d'Ivoire studying French and Francophone literature, was awarded the Chateaubriand Fellowship in September to perform research at the University of Paris-Nanterre during the next academic year.

The Chateaubriand Fellowship is a prestigious program offered by the Embassy of France

in the U.S. in order to foster academic exchange among scholars from France and the United States.

Geochemist named fellow of American Geophysical Union

Vincent Salters, FSU geology professor and director of the National High Magnetic Field Laboratory's geochemistry program, is now a fellow of the American Geophysical Union, an organization representing some 60,000 professionals in the Earth and space sciences. Salters was among only 62 — about 0.1 percent — of AGU members to receive the honor, which specifically recognizes his work pioneering analytical techniques that look at isotopes of the elements lutetium and hafnium in samples from the Earth's mantle, the 2,700-kilometers-deep layer of our planet lying beneath the crust.

Earth, Ocean and Atmospheric Science professors Jeff Chanton and Allan Clarke join Salters in this exclusive group.

Physicist receives DOE early-career award

Assistant Physics professor and high-energy physicist **Rachel Yohay** received one of 84 Early Career Research Program awards given out this year by the U.S. Department of Energy Office of Science. The five-year award, valued at \$750,000, covers her summer salary and research expenses.

In conducting her research, Yohay uses data from the Compact Muon Solenoid detector at the Large Hadron Collider, located near Geneva, Switzerland, to look for possible lighter siblings of the Higgs boson, an elementary particle in the Standard Model. Such particles might provide clues to both the nature of the Higgs mass mechanism and the dark matter puzzle. <

For the full story on these notes and more, visit artsandsciences.fsu.edu/news.

Fast Facts

As FSU's largest, the College of Arts and Sciences boasts the university's most academically diverse offerings.



90,000+
alumni

The graphic features a red background with several white graduation caps scattered across the top. The number '90,000+' is written in a large, white, sans-serif font, with a white graduation cap icon integrated into the '0'. Below the number, the word 'alumni' is written in a smaller, white, sans-serif font.



18
departments

14
programs, centers,
and institutes

The graphic has a light beige background. It features two large white curly braces on the left side. The number '18' is in a large, teal font, with the word 'departments' in a smaller, brown font below it. The number '14' is in a large, teal font, with the words 'programs, centers, and institutes' in a smaller, brown font below it.



Home to
167
major programs

The graphic has a dark blue background. The text 'Home to' is in a light blue font. The number '167' is in a large, white, outlined font. The words 'major programs' are in a light blue font below the number.



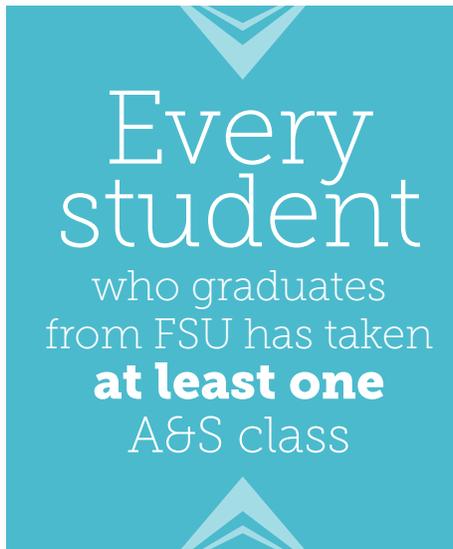
faculty-to-student
22:1
ratio

The graphic has an orange background. The text 'faculty-to-student' is in a dark orange font. The ratio '22:1' is in a large, dark orange font. The word 'ratio' is in a smaller, dark orange font below the ratio. Below the ratio, there is a visual representation of the ratio using 22 small human icons in a row, followed by a colon and one more small human icon.



A&S faculty and TAs teach nearly
50% of all FSU undergrad credit hours annually

The graphic has a green background. At the top is a simple line-art icon of an apple. Below the icon, the text 'A&S faculty and TAs teach nearly' is in a dark green font. The phrase '50% of all FSU undergrad credit hours annually' is in a bold, dark green font.



Every student
who graduates from FSU has taken
at least one
A&S class

The graphic has a teal background. The text 'Every student' is in a large, white font. Below it, 'who graduates from FSU has taken' is in a smaller, white font. The phrase 'at least one' is in a bold, white font. At the bottom, 'A&S class' is in a white font. There are decorative white arrow shapes pointing up and down at the top and bottom of the graphic.



A&S faculty are awarded nearly
\$65 million
annually in research funding

The graphic has a light beige background. The text 'A&S faculty are awarded nearly' is in a dark orange font. The amount '\$65 million' is in a large, dark orange font. The phrase 'annually in research funding' is in a smaller, dark orange font below the amount.

Swinging for the fences

Morgan Klaevemann is a champion on and off the field

By Gabriella Paez

Morgan Klaevemann, an outfielder on FSU's 2018 softball NCAA National Champion team, has long been one to watch in the athletic and academic realms.

She has been recognized multiple times as both an All-Atlantic Coast Conference Academic Team member and as a College Sports Information Directors of America Academic All-America Team member. She chalks up her successes both to being incredibly goal-oriented and to being surrounded by family, on and off the field.

"As the saying goes, home is where your family is, and that couldn't be truer with the people at Florida State University, especially the softball team," she said. "On the academic side, it's so awesome to be surrounded by people who have the same passions as you and the desire to learn. There are so many brilliant people in the College of Arts and Sciences, and I'm grateful to have learned so many great things from them."

The drive to learn comes in part from her determination to be the first in her family to graduate from college. Klaevemann's love for math and science, as well as her interest in becoming a veterinarian, had her working as hard in the classroom as she played on the softball field.



"It may sound a little nerdy, but some of the things I've learned in my classes have popped up in sports, such as ball trajectory from physics, as well as nutrition and how the body works from my human physiology class," Klaevemann said.

The heart of a champion

Though she is thankful for her professors and the family environment surrounding FSU, Klaevemann earned her awards by never ceasing to be ambitious and dedicated. Work ethic is everything, she said, and to realize her vision for future success, on the field and off, she refuses to settle for anything less than success.

Lonni Alameda, head coach of the FSU softball team, describes Klaevemann as among the most determined of student-athletes to have worn the garnet and gold.

In her time as a player for the Seminoles, Klaevemann had an impressive career. She finished in the FSU top 10 in four categories: batting average, stolen bases, runs and walks. She walked, stole two bases and scored a run against the University of Washington Huskies in the NCAA Championship game June 5, 2018.

"She competes every day on the field and in the classroom ... and at times [has burned] the candle at both ends," Alameda said. "I have had the joy to watch Morgan grow up through the sport, and I know many have had the joy of watching her grow up through school. She is a tremendous person and will always be a national champion 'Nole.'"

Cathy Badger, associate director of Student-Athlete Academic-Services, agrees.

"Morgan was a leader on the field, but also in the classroom as she often encouraged others to join her during the many hours of studying," Badger said. "Her efforts in mentoring younger players solidify the importance of academics in future teams."

A new challenge

Forever a champion in the eyes of her Florida State community, Klaevemann, who graduated in May 2018, looks forward to acing a new test: becoming a veterinarian. The challenge of being an "all-in-one" doctor for animals in an evolving field suits her.

"I see my biology degree helping me in veterinary school and the lessons I've learned from softball helping me to be a better person and teammate," Klaevemann said. "More importantly, I see the commitment and drive I needed to achieve academically and athletically help me be successful not only in my career but in life." <

Gabriella Paez is a FSU senior majoring in English with a concentration in editing, writing and media.

... the commitment and drive I needed to achieve academically and athletically help me be successful not only in my career but in life." — Morgan Klaevemann



Views from abroad (from left) Mount Pilatus, Switzerland; a bookshop in Venice, Italy; and sights from the top of the Basilica of St. Mary of the Flower, Piazza del Duomo, Florence, Italy.





Human rights champion

Adam Coogle speaks for the voiceless in the Middle East

— By Barbara Ash —

Florida State University senior Courtney Reed was in Amman, Jordan, for two months last summer interning with a nongovernmental organization when she unexpectedly ran into FSU alumnus Adam Coogle, who was working just a floor above her office.

It was a fortuitous and pleasant encounter for Reed, an international affairs and Middle Eastern studies major, because Coogle is a senior researcher in the Middle East and North Africa Division of Human Rights Watch. Reed has her eye on a similar career.

"It was both inspiring and encouraging to see an FSU grad in an important role like that, and it was fun to be able to pick his brain about the region and the human rights field," said Reed, who in addition to being a full-time student is a state legislative coordinator for Amnesty International

USA. "I was extremely impressed by Adam and the work he does."

Coogle, a 2005 FSU graduate who double-majored in religion and international affairs and earned a master's degree in 2009 in Arab studies from Georgetown University, joined Human Rights Watch in 2010, opening the organization's first office in Amman in 2013.

Since signing on with the human rights organization, Coogle has conducted information-gathering missions to Tunisia, Egypt, Yemen, Qatar and Saudi Arabia,



interviewing a broad range of sources, including victims and witnesses to human rights violations.

Authorities in Jordan consistently and notoriously curtail freedom of expression, detaining and bringing charges against activists, dissidents and journalists. The government discriminates against women by not allowing them to pass Jordanian citizenship to their children, who are denied basic rights. Syrian refugees stranded in remote border areas receive only limited access to humanitarian aid. These are some of the abuses Coogle works to rectify.

“My job gives me an opportunity to address wrongs the government is committing or abuses the government is failing to protect its citizens from,” Coogle said. “If the work has a positive impact, then that is incredibly rewarding.”

Coogle, who has conducted advocacy missions to Washington, D.C., London, Geneva and Brussels, writes extensively on the findings of his investigations into human rights abuses in the region, disseminating his research to international ministerial-level bodies and journalists.

His articles carry headlines such as “Saudi Arabia’s ‘War on Terror’ Is Now Targeting Saudi Shiites”; “Why Aramco Investors Should Scrutinize Saudi Rights Record”; “Saudi Arabia’s Death Sentence”; and “The Truth About Saudi King Abdullah’s Human Rights Record.”

Those and other of his writings appear regularly in such publications as Foreign Policy, The Hill, The Jordan Times, Policy Review and the Huffington Post. He has been interviewed by CNN and MSNBC, among other media outlets and participates in panels alongside other human rights experts.

The Tallahassee native traces the roots of his interest in the Middle East to his time at Florida State. As a Religion major, he says he was encouraged by David Levenson, an associate professor of Religion and Distinguished Teaching Professor, to read ancient scriptures in their original Aramaic language. His desire to study the Koran led him to Zeina Schlenoff, director of FSU’s Middle East Center. Though classes in the ancient language were not offered, Coogle took several modern Arabic language classes with her.

“Over the years, there are a few students who stand out, and Adam is one of them,” said Schlenoff, who also served on Coogle’s honors thesis committee. “He was smart and committed to his classes and to becoming fluent in the language and is an excellent writer. You want someone of his caliber to have enriching opportunities that deepen his understanding of the area and prepare him for whatever path he wanted to pursue — in his case human rights. It takes a special person like Adam to care about justice, and I’m proud of him.”

Coogle says it was Schlenoff who pushed him to apply for a Fulbright Scholarship, which resulted in his spending nine months in Jordan,

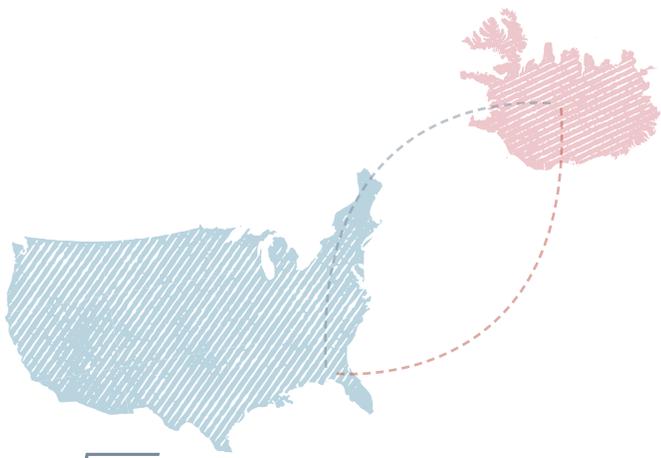
where he conducted research on the relationship between religiosity and government style and further honed his language skills.

That Fulbright experience deepened Coogle’s interest in the area, and upon returning from Jordan he enrolled at Georgetown University and completed a 15-month residency in Damascus, studying Arabic and working for the United Nations High Commissioner for Refugees. While in Damascus, he consulted with Iraqi refugees, assessing their psychological vulnerability and making referrals for treatments, and served as a translator for UNHCR Iraqi outreach group meetings.

Coogle says the amalgam of his experiences in the Middle East has made him feel comfortable in the region: Two years ago he married a Jordanian teacher he met when he was a Fulbright Scholar and is now the father of an infant son. Despite the unrest and instability in the region, Coogle says he would be happy making Jordan his home, with visits to his Tallahassee family — and FSU faculty responsible for putting him on his current path.

“When I look back, I appreciate the amount of individual attention and time our professors put into tailoring classes to students’ specific interests,” Coogle said. “They did everything they could to accommodate each of us and prepare us for post-graduation, and I’m grateful for the experiences and relationships I was able to build at FSU.” <





From Iceland to FSU (and back)

Business, government
service motivate
Benedikt Jóhannesson

By Rosanne Dunkelberger

Icelander Benedikt Jóhannesson always knew he would return to his homeland after his education in the United States and he has had a successful career there as a publisher, businessman and, most recently, a political leader.

But he still carries fond memories of his years earning his master's degree and Ph.D. in statistics at Florida State University. He and his wife came to Tallahassee in January 1978, and by the time they left, the first two of their three children had been born.



Although he chose Florida sunshine to warm up from his undergraduate experience at the University of Wisconsin, his first reason to come to FSU was the stellar reputation of its Department of Statistics.

"It was considered one of the 10 best in the U.S. at the time," he recalled. "Almost all of the world-famous statisticians came to Tallahassee" when he was a student. After spending a postdoctoral year in Montreal, Jóhannesson and his family settled in the island nation of Iceland, which is the size of Kentucky with a population — 348,000 — a bit smaller than Tampa.

The now-63-year-old started out teaching at the college level and moved on to consulting, first in statistics and later actuarial and economics work. In the early 1990s, he founded a company that published periodicals on economics and business, adding titles over the next 25 years.

"In the beginning they were business- and economics-oriented magazines, but then I added a number of publications on travel and nature in Iceland," Jóhannesson said.

Iceland was hit particularly hard during the worldwide recession, beginning in 2008 when all three of its major banks went bankrupt.

"The Icelandic currency, the krona, was devalued by more than 50 percent in one day," Jóhannesson said. "Many listed companies went bankrupt — only about two or three survived in the same form. One of the few companies that survived was a technology company I led as chairman. The crises hit Iceland hard. People lost a lot of money; a lot of people lost their jobs.

"Many people had loans indexed to foreign currency ... I think this the only country where all the loans that people owed went

up almost immediately by 10, 20 or even 50, 60 percent ... and that was a shock to people. There was quite a bit of misery in the country."

Saved by a volcano

Surprisingly, tourism helped the Nordic nation emerge from the recession. In April 2010, Iceland's Eyjafjallajökull glacier volcano erupted. A cloud of ash drifted eastward toward Europe, causing cancellations of 100,000 flights over eight days.

"People were depressed at the time, but it turns out that it was probably the best marketing for Iceland. A lot of journalists came here. Of course, they couldn't just write about the eruption, so they sent pictures from all over the country, and that helped us. Iceland is a beautiful country," he said.

In fact, 92 percent of respondents to a survey from the Icelandic Tourist Board said nature — the Northern Lights, the beautiful, unspoiled and scenic land, geysers, glaciers, black-sand beaches, natural baths and waterfalls — was their reason for visiting. Since 2010, the number of annual foreign visitors has nearly quadrupled, to more than 2.2 million.

"We probably would have recovered anyway, like most of the other countries hit by the recession, but it certainly went faster with the tourism boom. If you go through the center of Reykjavik you're more likely to hear English, German or Chinese spoken than Icelandic," Jóhannesson said.

Like those tourists, Jóhannesson enjoys hiking and mountain climbing in his spare time. He's cosmopolitan — speaking Danish, German and "a little French" in addition to English and Icelandic — and enjoys travel.

"Just this year I've been to Uganda, I've been to Israel, I've been to Russia, and actually many countries in Eastern Europe," he said. "I've been to Switzerland. Mostly for fun. I've had more free time after I stopped being minister, and I decided to use it wisely. Who knows when I will have time to do all that again?"

A foray into government

Jóhannesson was the founder and first leader of the Liberal Reform Party in 2016, was elected to Iceland's parliament and served as the nation's minister of finance and economic affairs between 2016 and 2017.

In American terms, Iceland would be considered "socialist," with health insurance for all, strong pension funds, a fairly equitable distribution of wealth and a minimum wage that equals nearly \$3,000 a month. A respectable sum, but according to the Organization for Economic Cooperation and Development's Price Level Index, it is the third-most expensive country in the world.

"Part of the reason is that we are a relatively closed society for importing agricultural products," he said. "We could be cheaper if we opened up more." A plank of his party's platform is to encourage free trade and liberal — in the U.S. sense of the word — social ideals.

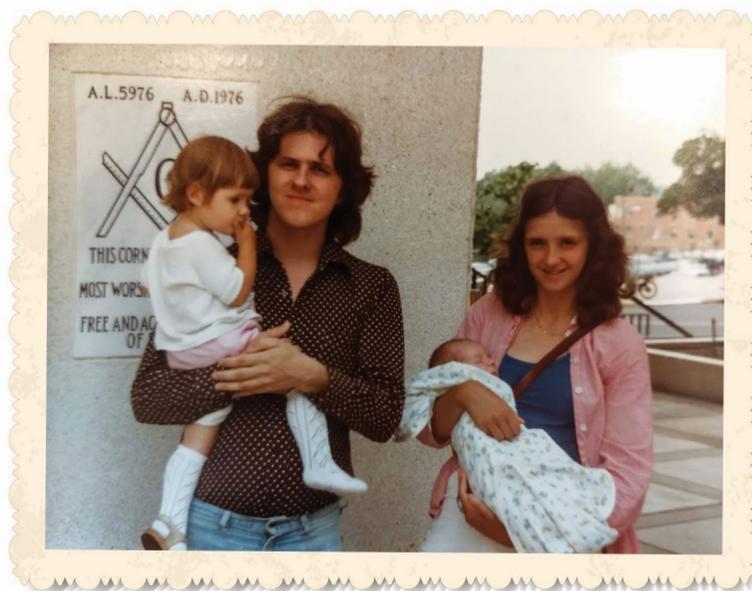
"In that respect, we want to move closer to European countries, and we have advocated joining the EU and the euro," he said of his party. But partly because of Brexit, any thoughts of joining the European Union "unfortunately are not active at the moment."

"As international students, we were always quite welcomed by the university and the local community."

— Benedikt Jóhannesson

While there are stories of Icelanders being Vikings, "actually we have evolved into a peaceful people," he said. "We were never at war. You can safely say that we are pro-peace — I think probably all the political parties subscribe to that idea."

Today, Jóhannesson said, "I write a lot. Articles on politics and economics, and sometimes I write short stories also," including a collection written in Icelandic. <



Benedikt Jóhannesson, wife Vigdís, daughter Steinunn and son Jóhannes are pictured in Tallahassee in 1980.



a
lifelong
commitment

FSCW alumna Mart Pierson Hill ('42)
is still giving back

————— *By Erin Hoover* —————

At 98, Mart Hill is still part of the growth of Tallahassee and of her alma mater, Florida State University. Involvement with FSU over the years has helped her remain connected to her community.

—————

“By becoming involved, you feel like you can improve your mind, as well as form relationships with other people,” she said. “In my case, I feel like I’m communicating with people who are more intellectual than I am, and that I can learn from them,” Hill said.

When she graduated with a bachelor’s degree in English and theater in 1942, both Tallahassee and Florida State were very different places.

At the time, the published population of Tallahassee was about 15,000, about 8 percent of its current population. Florida State College for Women, as the institution was then known, was the third largest women’s college in the country, and Doak Campbell was serving his first year as its president.

The Japanese attack on Pearl Harbor was fresh in the minds of Americans. Mart Hill remembers Pearl Harbor as if it were yesterday. Then Mart Pierson, she was sitting in the library reference room, now the Werkmeister Reading Room in Dodd Hall, in December 1941.

“I was writing a term paper on the poet Robert Browning, and someone burst into the room and said that the Japanese had bombed Pearl Harbor,” she said. “Dr. Campbell was brand new then, and he was charged with the care of 1,800 girls, many of whom were afraid. He had to marshal his forces quickly, engaging counselors to calm students’ fears.”

Inspired to serve

Pierson herself was a leader and honor student, serving as president of the College Government Association and chair of the Student War Defense Committee. She was a member of Phi Beta Kappa and Phi Kappa Phi scholastic societies, Alpha Delta Pi sorority, Esteren, the Mortar Board honor society and the Village Vamps performance troupe, and she was elected May Queen.

Pierson and other college students from across Florida discussed what they could do to help the national war effort. FSCW students planted victory gardens, invited the pilots training at nearby Dale Mabry Field to dances, and sold the first war bonds in Florida.



During her senior year, Pierson had the unusual honor of picking up Robert Frost from the train station for his visit to the college. Her parents lent her the family automobile to transport the poet, arguably the best-known literary figure in America at the time, around campus.

After graduation, Pierson moved north to help Alpha Delta Pi establish a chapter at the University of Maryland. She attended graduate school there for a time, but she was drawn to Washington, D.C., where she got a job to help the war effort, working for American Airlines.

Coming home

Over the next several decades, she would take up leadership and public service with the same passion.

In 1944, Pierson returned to Tallahassee. She married Louis Hill and raised a family. Her children, Dr. Louis Hill Jr. and Almena Hill Pettit, still live in town.

Among many local causes, Mart Hill served two terms as president of the Tallahassee Junior League, and helped start the Tallahassee

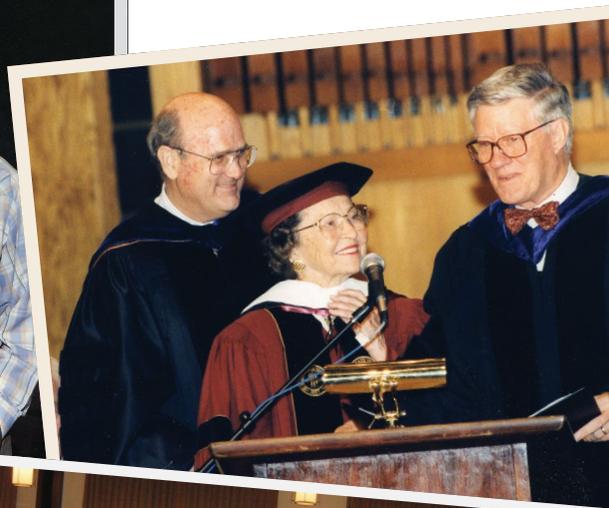
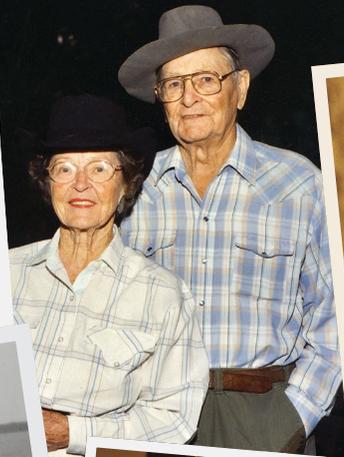
Junior Museum (now the Tallahassee Museum), serving for two years as its president. She was also appointed by Florida Secretary of State Bruce Smathers to a four-year term on the Fine Arts Council of Florida. When John F. Kennedy accepted the Democratic presidential nomination in 1960, Hill was in Los Angeles, serving as a Florida delegate.

Foundation for success

That same year, FSU’s president, Robert Manning Strozier, asked a small group of supporters, including Hill, to begin a foundation at FSU, not only to raise money but, as she put it, “to create good will for the university throughout the world.”

“Dr. Strozier had come from Chicago, and he told us that nationwide, all large universities had foundations,” she said. “He thought that we should have one, too.” The only surviving founder, Hill continues to serve actively on the FSU Foundation board.

The group of five trustees has now grown to more than 50, and the FSU Foundation recently closed its eight-year Raise the Torch



By becoming involved ... you can improve your mind, as well as form relationships with other people ... I feel like I'm communicating with people who are more intellectual than I am, and that I can learn from them."

— Mart Hill

campaign, surpassing its \$1 billion goal by raising \$1.16 billion for the university.

Hill's support has touched students and faculty alike. Early on, she and her late husband became members of the Francis Eppes Society, reserved for friends of FSU who have given between \$1 million and \$4,999,999 to the university over the course of their lives. She has supported programs within the College of Arts and Sciences, the College of Music, and the College of Medicine. Hill also helped create the Theatre Patrons Association, serving for a time on its board.

Cementing a legacy

Today, she is an active member of the College of Arts and Sciences Leadership Council, a board she helped found in 1999 as a charter member.

"Mart Hill is fully engaged in the educational and social aspects of the council," said Janet Stoner,

chair of the Leadership Council. "Mart can and does offer perspective on FSCW/FSU as well as Tallahassee. It's always a treat to see her smiling face and hear her stories about the university and Tallahassee."

FSU has awarded Hill an honorary doctorate of humane letters in recognition of her service. This past October, she accepted the Bernard F. Sliger Award, the single highest honor given by the FSU Alumni Association.

Dean Sam Huckaba calls Mart Hill's support of FSU "generous and unflappable."

"She has taken a special interest in our college, and in particular the Department of English, where she earned her degree as a graduate of FSCW," he said. "I'm honored to count Mart Hill as a friend and confidante and proud to call her an alumna of the college." <

Erin Hoover earned a Ph.D. in English from FSU in 2017.



Turning dreams into reality

FSU Career Center guides grads into the future

By Kati Schardl

College students spend years learning to successfully navigate the halls of academia, but what happens when it's time to take the knowledge and skills they've acquired and apply them to the competitive and sometimes downright intimidating job market?

For students at Florida State University, the FSU Career Center is there to help make that transition seamless.

"The Career Center provides career services to support FSU students on their path to success," said Myrna Hoover, the center's director for more than three decades.

According to Hoover, those services include career fairs, employability skills workshops, individualized career advising, internship/job search tools, mock interviews and a library with more than 3,000 information resources.

"Last year alone, we hosted over 1,000 workshops and 20 career events,"

Hoover said. "Career Center staff are available with no appointment necessary during drop-in advising to help students engage in experiences outside the classroom and with our employer partners, ultimately preparing them for 21st-century careers."

A goal of helping students succeed

According to FSU's 2017 graduating senior survey, the Career Center was the No. 1 way students found post-graduation employment. The center provided career advising services to 19,583 students during the 2016-17 academic year, with close to 90 percent of those students reporting a rise in confidence about future career plans.

“Career Center staff are available with no appointment necessary during drop-in advising to help students engage in experiences outside the classroom and with our employer partners.” — *Myrna Hoover, FSU Career Center director*

Those numbers are the result of the dedicated and inspired work of the center’s staff, career advisers, and career liaisons, who work directly with individuals and groups within the university’s various colleges and departments.

“FSU is student-focused with one goal — helping students succeed,” Hoover said. “The Career Center is no exception ... Taking this model into colleges with our career liaisons has helped us meet students where they are. Career liaisons work to increase student engagement in experiential learning opportunities, deliver employability skills workshops and events, and link students to local, state and regional internship employers. In addition, they collaborate closely with faculty and academic advisers and leverage student affairs partnerships to foster student success.”

“I am impressed by the work of Myrna and her talented, hardworking team,” said Sam Huckaba, dean of the College of Arts and Sciences. “The services that the Career Center provides complement so well our degree programs, and are making a tremendous difference in the lives of our students as they prepare for, and pursue, their career goals.”

The liaisons work to match services to meet the particular needs of individual students, according to Jen Harshner, career liaison to FSU’s departments of Biological Science and Psychology.

“I tailor my services to a student’s specific needs, so I am challenged to learn about trends in their various fields and find the best resources to help them,” Harshner said. “For Psychology students, I will have a panel of graduate students give tips for getting into grad programs, and an event for them to learn about the various advanced degrees they could pursue to become a therapist.”

Eliminating uncertainty

Avenues to employment aren’t always so clear-cut for some students.

“As a liaison for the College of Arts and Sciences’ humanities departments, I have noticed students are mostly uncertain about opportunities

available with their major,” said Cathy Barrios.

“During one-on-one career advising and needs assessments, I learn what tools and information students need to achieve their goals after graduation, which helps in designing and implementing customized programs and workshops that fill those gaps.

“I have invited FSU alumni from the college who are working as professionals in different industries, within and outside humanities, to speak and network with students about their experiences in the annual ‘Humanities Career Panel and Networking Event,’” she said.

Jake Toyota, an undergraduate junior double-majoring in English Literature and Media Communications studies is among the students Barrios is helping.

“I sought assistance in applying for my second major within the College of Communication and Information,” Toyota said. “Cathy helped me curate my personal statement, portfolio materials, résumé and writing examples, as well as coaching me in procuring recommendation letters from faculty.”

The help provided by the Career Center can extend through a protracted journey from school to work and back again.

“My first contact with the FSU Career Center was as a freshman in 2006,” said Gray Platt, who is working toward a Ph.D. in Neuroscience after a three-year break from the classroom. “As part of a Freshman Interest Group, I was required to work with the Career Center to develop a professional portfolio and résumé. I used that résumé for years.

Krystle Graham, a career liaison serving the departments of Anthropology; Chemistry and Biochemistry; Computer Science; Earth, Ocean and Atmospheric Science; Mathematics; Physics; Scientific Computing; and Statistics, echoed her colleagues’ sentiments.

“Witnessing students turn their employer/graduate school dreams into reality is a great feeling,” Graham said. <

The Dream Team



Myrna Hoover



Cathy Barrios



Jen Harshner



First-generation leader

Biology major Stacey Pierre takes reins as student body president

By Rodney Campbell

When senior Stacey Pierre started her term as student body president this fall, she was quick to give credit to her unwavering support system.

Pierre said she owes much of her success to her mother, Nicole, who moved to the United States from Haiti. While it took a little time to acclimate, Nicole Pierre found success in her new home without a college degree. Despite her experience, she made it clear to her two daughters, Stacey and her younger sister, Karybe Jean-Gilles, that higher education was necessary.

Along with being the first member of her family to be born in America, she's also the first to attend college. Pierre's mom questioned her daughter's choice to pursue a Biological Science major. She wanted Stacey to consider how tough the coursework would be, especially if she planned to participate in extracurricular activities.

"One of my mom's first questions was how would I get this done," she said. "She said I have to make sure I'm putting the work in."

Mom's words of encouragement and caution have worked. Pierre has a 3.0 GPA and is on track to graduate in four years.

Institutional support

Much of that success is because Pierre got an early start at Florida State by participating in the Center for Academic Retention and Enhancement's Summer Bridge Program in the months leading to her freshman year. The program helps students become more familiar with campus and develop solid academic habits. It's the largest program of its kind in the country, serving more than 400 people each year.

CARE students are the first in their families to go to college and often come from disadvantaged backgrounds. To qualify for the program, applicants also must maintain at least a 3.0 GPA in high school with qualifying scores on their ACT and/or SAT exams and a series of courses required by the state of Florida.

The Summer Bridge Program is one of several CARE options that give students a better shot at succeeding, including programs that help middle-schoolers prep for college. Once they begin college, CARE students receive tutoring and computer lab assistance, advising, life-coaching, financial aid support and post-graduation prep. When she arrived at FSU, CARE paired Pierre with a student ambassador who helped her get ready for the classroom and beyond. "I wouldn't have come here if CARE wasn't around," Pierre said. "A large part of being in college isn't just being smart enough and

having friends. It's also making sure you have faculty members and fellow students who are clear about things outside of school. I had no one in my family who could relate to what I was going through. CARE has your back."

Being part of CARE has given Pierre the confidence to thrive and accomplish things she never thought possible. A former student-body vice president, she was elected president in February 2018 and is only the second African-American student in school history to earn the position. As president, Pierre oversees the Student Government Association's executive branch and cabinet.

Speaking her mind

Pierre is also the only student who votes on the FSU Board of Trustees. A believer in transparency, she vows to be a strong and consistent voice for her classmates.

"I'm not one to be on the fence about anything," she said. "If I have an opinion, I'm not ashamed to speak on it. If people ask me, I'll tell them my perspective."

CARE Director Tadarrayl Starke said he isn't surprised by Pierre's progress. The Nova High School graduate has served as a CARE ambassador for the past two years, giving younger students the benefit of her experience. "Stacey has been an inspiring example as a

CARE student," Starke said. "She has used her background as a first-generation college student to fuel her success since arriving at FSU.

After graduation, Pierre plans to pursue a master's degree in public health. She also has applied to serve in the Peace Corps and is trying to earn a Fulbright Scholarship. Eventually, she aims to complete medical school and operate a women's health clinic. Thanks to her mom's care and FSU's CARE, plenty of options are out there.

"I have so many opportunities," she said. "Only time will tell what I do." <

SUPPORTING CARE

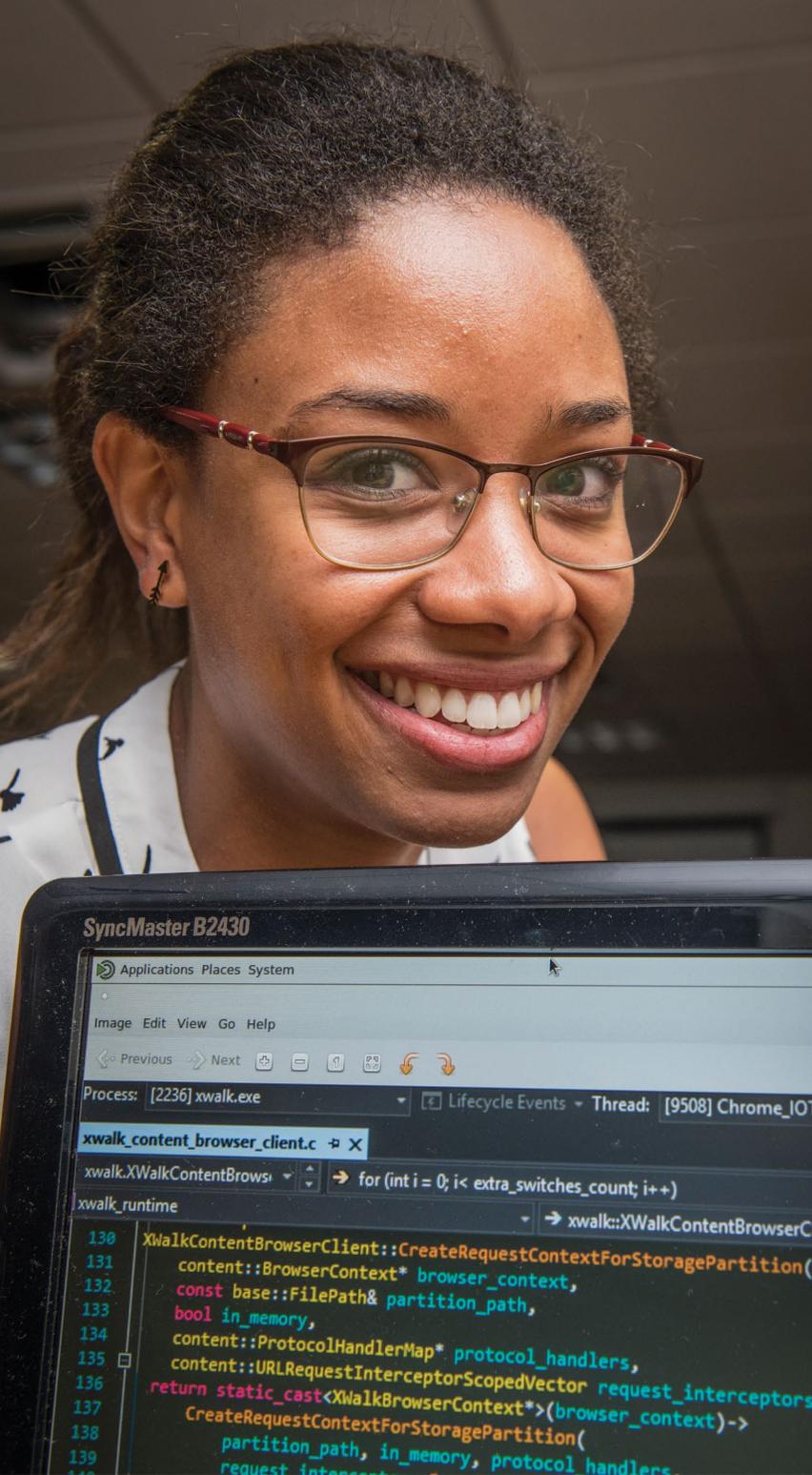
Learn more about the services provided by the Center for Academic Retention and Enhancement, and how to support its mission, at care.fsu.edu.

The college supports CARE students like Stacey Pierre through the CARE Scholarships for College of Arts and Sciences Majors fund. This academic year, eight scholarships of \$2,000 were awarded.



Stacey has been an inspiring example as a CARE student. Through the many roles she's had on campus, she remains steadfast in her passion for helping others reach their fullest potential and achieve their goals."

— Tadarrayl Starke, CARE director



Cyber scholar

*Charisa Powell
excels at academics,
extracurricular activities*

By Barbara Ash

Since arriving at Florida State University as a freshman in fall 2013, Charisa Powell has taken every opportunity to immerse herself in the activities she most enjoys — computer science, music and horseback riding. Along the way, she has maintained a stellar academic record and built an impressive résumé, which already has landed her a job with a national laboratory.

Powell, who earned a bachelor's degree in Computer Science in 2017 and this winter will graduate with a Master of Science in Cybersecurity, has her eye on a career in cybersecurity and digital forensics and, eventually, a position as a chief information security officer.

"The undergraduate program opened my eyes to the increasing global threat of cyberwarfare and sparked my passion for learning more and for protecting our country's interests," Powell said. "Issues like the Russian hacking into our elections are not going away, so this



field is super-relevant. It's especially interesting to me because I like forensics and using critical thinking and detective skills."

Powell has taken advantage of a Cyber Corps: Scholarship for Service program, offered through Florida State's Cybersecurity program, which received funding from the National Science Foundation and the U.S. Department of Homeland Security. FSU has been re-designated several times, most recently by the National Security Agency and DHS, as a Center of Academic Excellence in Cyber Defense Education and a Center of Academic Excellence in Research. The federal government views its

National Laboratory in New Mexico and the Naval Surface Warfare Center in Virginia. Shortly after she graduates, she will start a full-time position as a network and security research engineer at the National Renewable Energy Laboratory in Golden, Colorado.

"It was clear to me that Charisa would get the job she wanted," said Mike Burmester, a professor in the Department of Computer Science and Powell's faculty adviser. "Research teams want people who are smart, work well within the group and who are willing to jump in and do whatever is needed. This is a great job, and Charisa will be an excellent fit."

As part of FSU's Osceola and Renegade team, Powell learned to ride bareback and rode, exercised and fed Renegade. It was a perfect fit for Powell, who started riding English at the age of 10 and competed in jumping competitions throughout middle and high school in her hometown of Sarasota, Florida, where she attended a school for the gifted and was also a track-and-field star.

Even with a heavy academic and computer-related schedule of activities, Powell, a violinist since childhood, finds time to participate in FSU's Campus Orchestra, which offers non-major string players from across campus



scholarship program as a way to build a pool of highly qualified cybersecurity professionals.

Cyberscholars at the graduate level like Powell receive an annual stipend of \$34,000 and participate as a cohort during their studies and activities, including summer internships in a federal agency. They are part of the Federal CyberCorps, whose responsibility is to ensure the protection of the federal government's information infrastructure.

The program has enabled Powell to build on the skills she has acquired in the classroom through summer internships at Los Alamos

Consistently on the Dean's List and a member of FSU's Garnet and Gold Scholar Society, Powell has recognized the importance of being an engaged and well-rounded student with interests beyond the classroom.

Almost immediately after arriving at FSU, she joined Seminole Boosters and became an equine student handler for Osceola and Renegade, part of a beloved and world-renowned tradition for FSU Seminoles. Osceola, who represents the historical Seminole leader Osceola, and his Appaloosa horse, Renegade, introduce home football games by riding to midfield with a burning spear and planting it in the turf.

the opportunity to play in a string ensemble and perform one concert each year. She also occasionally plays shows with a Tallahassee band.

"From participating with the Osceola and Renegade team, where I was responsible for the wellbeing of Renegade and a part of one of the university's most honored traditions, to gaining a solid foundation in cybersecurity with a guarantee of a great position when I graduate, I could not have asked for a better experience at FSU," Powell said. "I'm forever grateful for the opportunities I've been given." <



Scientific legend

Donald Caspar helped put the field of structural biology on the map

By Barry Ray

At 92, Donald Caspar is still working to develop a greater understanding of some of the smallest living things.

"How are virus particles assembled, and how do protein molecules move to build complicated structures, send and receive signals, and catalyze vital processes? These are the broad questions on which my research has been focused," said Caspar, a professor emeritus in Florida State University's Institute of Molecular Biophysics who still maintains a small but tidy office on campus, 15 years after formally "retiring."

"You know, I still have a lot of unfinished work here that I would like to complete," he said.

A lasting legacy

Caspar has a résumé virtually any scientist would envy. Early in his career, he collaborated with famed molecular biologist James D. Watson, best known as the co-discoverer, with Francis Crick and Rosalind Franklin, of the iconic double-helix structure of DNA.

Around 1970, Caspar achieved what may be his most lasting legacy when he coined the term "structural biology," now used by researchers worldwide to describe the scientific field focused on identifying the molecular structures and interactions of biological molecules.

In 1994, Caspar had an especially memorable year — he received a Guggenheim Fellowship and was elected as a member of the Biophysics and Computational Biology section of the prestigious National Academy of Sciences. He also joined the FSU faculty after a long tenure at Brandeis University.

Caspar isn't focused on past successes, however. He is also interested in helping the discipline of structural biology stay relevant for many years to come. To help make that a reality, Caspar has made two major gifts to FSU: a \$285,000 deferred contribution that will provide support in the area of structural biology within the Department of Biological Science, and a \$30,000 outright gift to support research focused on neurodegenerative diseases such as Alzheimer's and Parkinson's within the Institute for Molecular Biophysics.

"I would like to feel assured that what has been started here will continue to grow," he said of the gifts.

A namesake symposium

Another sign of Caspar's unique status within his field was the Donald Caspar Structural Biology Symposium, a gathering of researchers from all over the world that met at FSU two years ago, on the occasion of his 90th birthday. The 2017 event attracted scores of researchers in the fields of molecular and structural biology, including Nobel laureates and a number of his fellow National Academy of Sciences members.

"Donald Caspar is a legend in the structural biology field," said Piotr Fajer, director of the Institute of Molecular Physics. "All of these people coming here was a tribute to him. It's practically unheard of for so many National Academy members to come to a single symposium; the fact that it happened here is a testament to how respected and beloved he truly is."

Although he is now several decades past the age at which many people conclude their careers, Caspar sees no immediate end in sight for his time at FSU.

"I'm 92 years old, I will keep going as long as I am physically able — but I realize that the time is limited and, in the time I have left, I hope I will still be able to open some new frontiers in structural biology," he said. <



Science on stage

Few scientists get the opportunity to see themselves portrayed on the theatrical stage. Donald Caspar is one.

A character modeled on Caspar was featured in a play by Anna Ziegler, *Photograph 51*, which was about British scientist Rosalind Franklin, a key figure in the discovery of the structure of DNA who was never recognized for her contributions while she was alive. Caspar collaborated briefly with Franklin's team while conducting research in the late 1950s at Birkbeck, University of London.

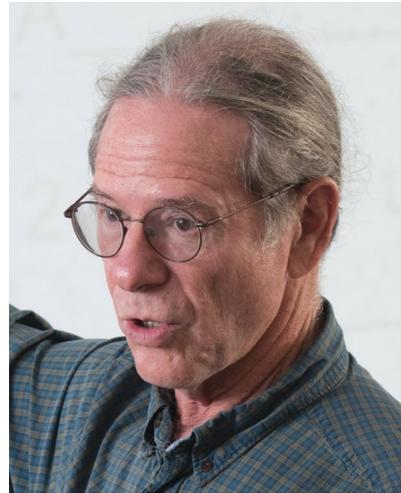
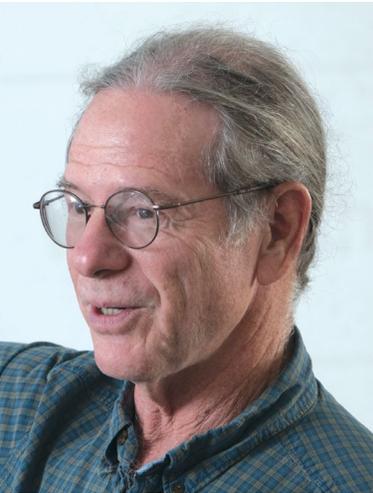
"I think the tragedy was that it was not until many years after her death [of ovarian cancer, in 1958] that it was finally recognized how crucial her work was," Caspar said.

Academy Award-winner Nicole Kidman portrayed Franklin in the production of *Photograph 51* that ran in London's West End in 2015. Caspar was played by English actor Patrick Kennedy, who previously appeared in the television series *Boardwalk Empire* and Steven Spielberg's *War Horse*.

How was Caspar portrayed in the play?

"Let's say a bit anachronistically," he chuckled. "Unlike in the play, I did not meet Rosalind Franklin until almost two years after she had moved from King's College, where she'd been working on DNA, to start her work on the tobacco mosaic virus. The playwright, Anna Ziegler, obviously took some certain liberties with the timeframe — she felt she needed a sympathetic American character in her play."

Anachronisms or not, discussions are underway to turn the play into a motion picture. Kidman has publicly expressed an interest in reprising her role in the film version.



Earth advocate

Lawton Professor Jeff Chanton 'speaks truth to power'

— *By Doug Blackburn* —

Jeff Chanton, an esteemed oceanographer at Florida State University, has a gift for making science understandable for the average person. When Florida Gov. Rick Scott expressed his unfamiliarity with climate change, Chanton was among the small group of experts who held a high-profile session with Scott that garnered national attention.

That moment symbolized decades' worth of instances in which Chanton, the 2017 recipient of Florida State's most revered recognition for faculty — the Robert O. Lawton Distinguished Professor award — has utilized his patient voice to translate science for the rest of us. In a Johnny Appleseed-like fashion, he has over the years addressed Rotary and Civitan clubs, churches, synagogues and, on multiple occasions, elected and appointed officials.

"I like explaining what science has learned about the Earth to earthlings," Chanton quipped, "because there's so much we know that people just don't realize."

His efforts have not gone unnoticed. The Tallahassee Scientific Society honored Chanton earlier this year as its 2018 gold medal recipient.

What's most impressive is that Chanton is blessed with the ability to point out the dangers of rising seas and an ever-warming planet without alienating the powerful people he is talking to.

"Jeff is willing to speak truth to power, and that's very important for a scientist," said Professor Jim Tull, chair of Florida State's Department of Earth, Ocean and Atmospheric Science. "And he does it in a very diplomatic way. That's an important aspect of what we should be doing."

Researcher and mentor

Chanton's efforts to make science accessible are particularly visible on campus. He developed a course, "Sustainable Food and Water," for undergraduate liberal arts students and is director of the environmental science major. He started an FSU chapter of the Florida Association of Environmental Professionals to help students network with experts in their areas of interest.

Chanton is also a decorated researcher. The American Geophysical Union named him a fellow in 2016. In 2005, he received an Aldo Leopold Fellowship Award from the Leopold Leadership Program for his leadership and communication skills.

Science has a pretty good understanding right now of the way the earth system functions. It's fascinating, and it should be conveyed to the public."

— Jeff Chanton

When the Deepwater Horizon oil spill occurred in 2010, Chanton was among the first scientists to form a task force to study the effects of the disaster. It's work he continues to this day. Using radiocarbon and other isotopic tracers, he was at one of the deepest pockets of the Gulf of Mexico in May 2018 in an effort to determine the lasting effects of the oil spill on the seafloor.

He prides himself on being a mentor to graduate students. Chanton said working with engaged young people "is the main thing that keeps me in this job."

It appears to be a two-way street. Kelsey Rogers, who earned a doctorate in chemical oceanography earlier this year, said Chanton is why she chose to do her graduate work at Florida State after earning a bachelor's degree at the University of North Carolina at Chapel Hill. She was a member of Chanton's oil-spill study team and is now doing postgraduate work in Denmark.

"Jeff is amazing. He strikes a balance between being hands-on and letting you figure it out yourself," Rogers said. "I can't begin to tell you how much I learned working with him for six years."

Brittany Verbake, who earned a master's degree in chemical oceanography earlier this year, knew she wanted to work alongside Chanton after taking one of his classes as an undergrad.

"He always made time for everyone; I don't understand how he does it," Verbake said.

"He wants undergraduates to learn to do good scientific research and really cares about scientific integrity."

At home at FSU

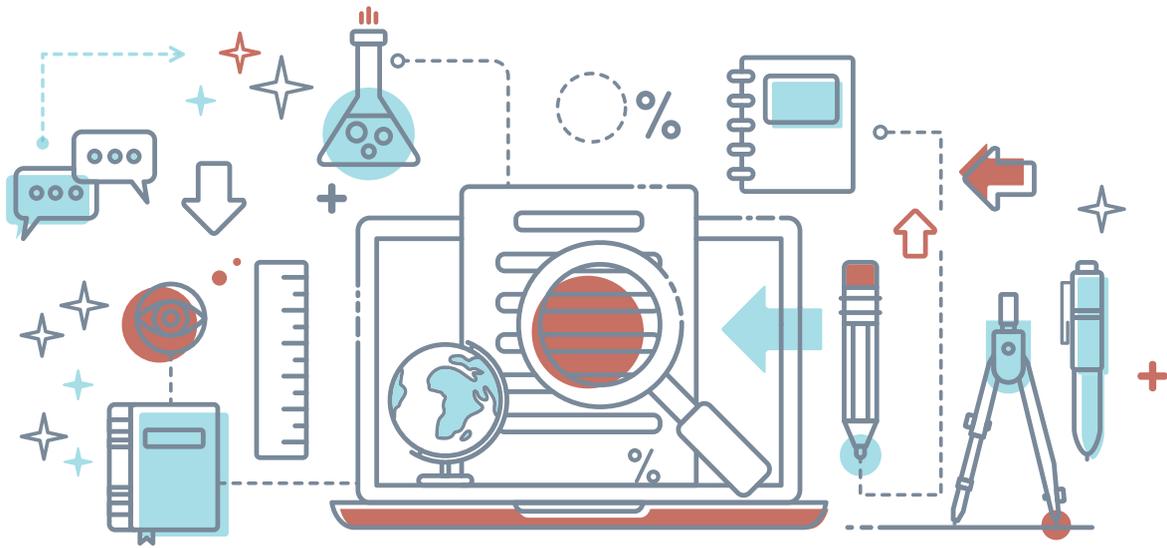
Chanton celebrated his 30th anniversary as a member of the FSU faculty in 2018 and says he feels at home at the university.

His deep ties to the Gulf of Mexico make it easy to understand why. The New Orleans-born Chanton graduated high school in Biloxi, Mississippi before attending New College in Sarasota, where he earned a bachelor's degree in natural sciences in 1975. He completed his master's and doctoral degrees at the University of North Carolina at Chapel Hill, working with a Florida State alumnus, professor Chris Martens, before joining the faculty at FSU in 1988.

Chanton's wife, Susan Cerulean, started the Watchable Wildlife program at the Florida Fish and Wildlife Conservation Commission before becoming a full-time environmental writer. He has joined her on numerous expeditions around the coast for her latest book, *Coming to Pass: Florida's Coastal Islands in a Gulf of Change*.

He admits he is alarmed by what is happening on the national level with regard to environmental issues and the backtracking on plans and protections to address climate change.

"I just try to tell the story of the Earth. I think it's a pretty fascinating story," he said. <



From start to **STEM**

FSU-Teach celebrates 10 years of success

By Doug Blackburn

Nancy Narvaez-Garcia is a relative newcomer to the world of secondary education, but she's already making an impact in Leon County schools. In just her third year as a sixth-grade science teacher at Fairview Middle School, Narvaez-Garcia has been asked to take on leadership roles at her school and on the district level. She was recruited for the team that redesigned the district's curriculum for science, and she was the youngest trainer in the district's professional development program last summer.

Narvaez-Garcia believes there's a simple explanation for her success — FSU-Teach. She graduated from Florida State University's interdisciplinary program in April 2016 with bachelor's degrees in geoscience and education, and was hired immediately.

"I believe it helped me be better prepared in my first year with classroom management," Narvaez-Garcia said.

"I already had strategies under my belt, and I was able to hit the ground running."

FSU-Teach, now celebrating its 10-year anniversary, was one of just 12 institutions in the U.S. to receive funding in 2008 from the nonprofit National Math and Science Initiative. Ellen Granger, director of the Office of Science Teaching Activity in FSU's Department of Biological Science, and professor Sherry Southerland from the College of Education have been overseeing FSU-Teach since its inception.

The program focuses exclusively on grooming future math and science teachers, zeroing in on the STEM fields where there is a critical shortage of teachers nationwide. It started with the freshman class in 2008 and produced its first graduates in 2012. To date, there have been more than 125 FSU-Teach graduates.



Nancy Narvaez-Garcia

Masters of the classroom

A key FSU-Teach component is the addition of master teachers to the FSU faculty. FSU-Teach recruited four experienced secondary-school teachers, two in math and two in science, to mentor and help students in the program learn skills to be successful leading a classroom.

Cindy Dyar, a master teacher in mathematics, taught at Deerlake Middle School in Tallahassee before joining the Florida State faculty. She said FSU-Teach is doing exactly what it is designed to do: improve the quality of STEM education in secondary schools.

"We're producing strong math and science teachers in that they know their content and they also know how to teach it," Dyar said.



Cindy Dyar

"Administrators call me from around the state wanting to know how many graduates we have, and would they be willing to go to their schools," Dyar added. "Our teachers get snapped up right after graduation, sometimes before."

Since the launch of FSU-Teach, nearly 40 institutions have added similar programs, including the University of Florida, Florida International University and Florida Institute of Technology.

Two majors at once

Granger believes one of the attractive features of FSU-Teach is that students are able to earn a double major and still graduate within the required 120 credit hours. And because graduates such as Narvaez-Garcia are well prepared and able to enjoy success the moment they begin their careers, they are more likely to stay in the profession. According to data compiled by the UTeach Institute at the University of Texas at Austin, graduates of such programs have an 83 percent retention rate after five years, far better than the national average of roughly 65 percent.

"It's not an easy profession and it doesn't get the respect it deserves," Granger said. "Teaching tends to be a revolving door; many teachers leave the profession after five years. We're proud of the numbers from our program."

Our students are quite successful when they get into schools. We have principals calling us after they hire an FSU-Teach teacher."

Desmond Cole, who serves as principal of Godby High School in Tallahassee, has five FSU-Teach graduates on staff.

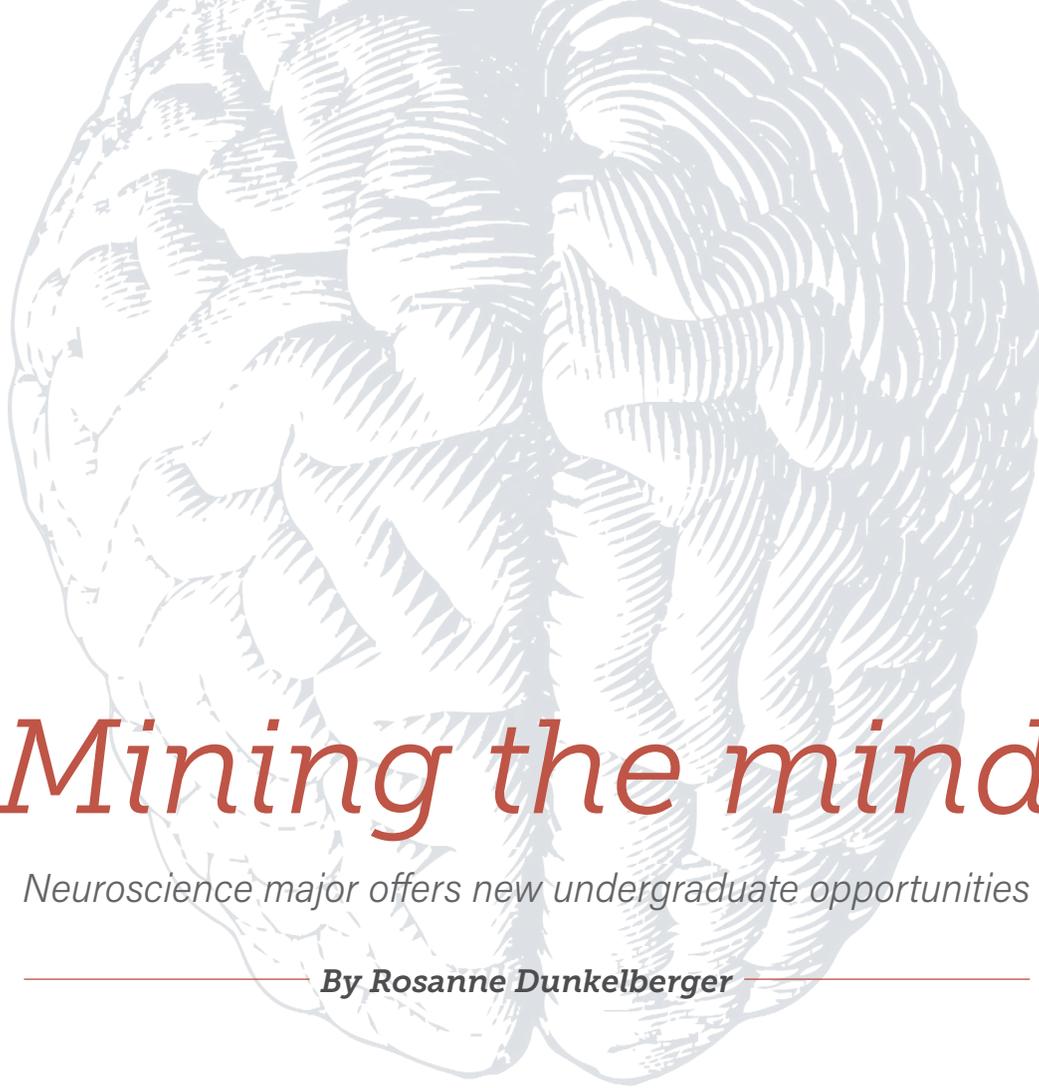
"[FSU-Teach] is phenomenal," Cole said. "[The teachers] come in and they're ready. Their planning is excellent and that's where teachers often fall short. They keep kids busy, and not frivolously busy," Cole added. "When I look at résumés, I try to see if anyone has been in FSU-Teach."

Funding has been critical to FSU-Teach's success. After the initial grant, Florida State received a second endowment of \$1 million from the National Math and Science Initiative to match a \$1 million gift that former longtime FSU Provost Larry Abele secured from the Helios Education Foundation. The interest from those two \$1 million gifts helps cover many of the program's costs, Granger said.

"Preparing teachers requires clinical educational experiences, much like preparing doctors and nurses," she said. "This means that high-quality teacher preparation has to cover expenses that some other educational programs do not." <

Two FSU-Teach students demo a classmate's project during a lab session.





Mining the mind

Neuroscience major offers new undergraduate opportunities

By Rosanne Dunkelberger

In the 20th century, many an academic studied the dynamics of human behavior as “nature versus nurture”: Is it our biology or our environment that causes us to act the way we do?

But advances in technology and brain science in the new century have turned that thinking on its head.

“The ‘versus’ doesn’t belong, it’s ‘and,’” said professor Jeanette Taylor, chair of Florida State University’s Department of Psychology. “Nature and nurture, those are both important.”

Recognizing that an interdisciplinary approach would be the best way to prepare students to delve

into this brave new world, the departments of Biological Science and Psychology at FSU joined forces to develop a new undergraduate degree — neuroscience — that began in the fall 2018 semester.

FSU is the only member of the State University System to offer the degree to undergraduates. It has had a Ph.D. program in place since the early 1990s — again, the only public university in Florida to do so. “One of the things that in the past was an issue for

The departments of Psychology and Biological Science have collaborated since the early '60s on a psychobiology program, but a confluence of different trends made it the right place and right time for the departments to team up and develop the new undergraduate degree.

graduate training in neuroscience was having students come in who either had sort of a pure psychology background or who had a pure biology background," said Thomas Houpt, a professor of biology and neuroscience and chair of the Department of Biological Science. "And that would be a challenge for both of them because you'd cover a topic like addiction and the biologist would understand the biochemistry of dopamine but they wouldn't know..."

"... What it looks like in the actual person," concluded Taylor.

Because of the existence of the graduate program and the emphasis on research in the Psychology Department, faculty who sought to create the undergraduate degree curriculum didn't feel as though they were starting from scratch.

"I think the beauty of this is it's putting together a lot of pieces that were already here, Taylor said. "It's putting it together in a smart way"

Early in the curriculum, students are required to take prerequisite classes in biology, chemistry and biochemistry, physics and math, followed by 19 semester hours of core courses in psychology and biology. The 17 hours of elective courses determine whether a student majors in the more biology-focused Cell and Molecular Neuroscience track or the psychology-based Behavioral Neuroscience track.

In addition to hiring faculty with neurobiology backgrounds, the new program has a dedicated adviser to help students to map their course choices toward their degree. Frank Johnson, a professor of psychology and neuroscience and director of the Interdisciplinary Program in Neuroscience, said advising students is not just academic, but career-focused.

"For the neuroscience degree, students need to be thinking about what they're going to do after graduation as early as possible," he said.

Explosive growth in the field

While the major thrust of a neuroscience degree is obvious for medical school and health-related work as well as graduate studies, there are a number of bachelor's-level career paths available to graduates, such as laboratory technician, regulatory affairs specialist, health educator and science writer. Brain science is also emerging in non-STEM professions including law, business and economics.

"It was an overnight success 50 years in the making," is how Johnson, who for two years shepherded the new degree through the approval process, described the process.

For starters, "there's been explosive growth in neuroscience as a discipline nationally, internationally and scientifically," Houpt said. "It's gone

from being a tiny subspecialty — which would have been the psychobiology program back in the 1960s — to now just a huge enterprise, both scientifically and in popular interest and applications."

Also, Taylor said, the creation of a new STEM degree program fits in well with the university's mission of focusing education in "areas of emphasis" and directives from the governor and state legislature.

Important questions remain

Student interest was another key factor in creating the new degree, including a desire to study experiences affecting their own lives, such as Alzheimer's disease, the effects of concussions and addiction.

"One of the things that got my attention and that of some of the other faculty in neuroscience was when the students formed a student group called the Neuroscience Undergraduate Student Association," Johnson said. Their mission statement included a goal to help promote the development of an undergraduate degree in neuroscience at FSU. "That for me was the sign: If we do this, student interest is there. They were expressing it." <



Biological Science chair Tom Houpt; Director of the Interdisciplinary Program in Neuroscience Frank Johnson; and Psychology chair Jeanette Taylor



FLORIDA STATE UNIVERSITY
COLLEGE OF ARTS & SCIENCES

In memoriam **Maura Binkley**

Fourth-generation Seminole Maura Binkley, a senior double majoring in English and German, was tragically killed in a shooting at the Hot Yoga studio in Tallahassee in November. The college administration, English and Modern Languages and Linguistics departmental faculty and staff, and students were devastated by the loss of this vibrant young leader.

Our sincere condolences go out to Maura's family and the family of FSU College of Medicine faculty member Dr. Nancy Van Vesse, who was also killed. Our thoughts are with senior Psychology student Sabrina O'Dette, who was injured in the shooting.



SPECTRUM

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