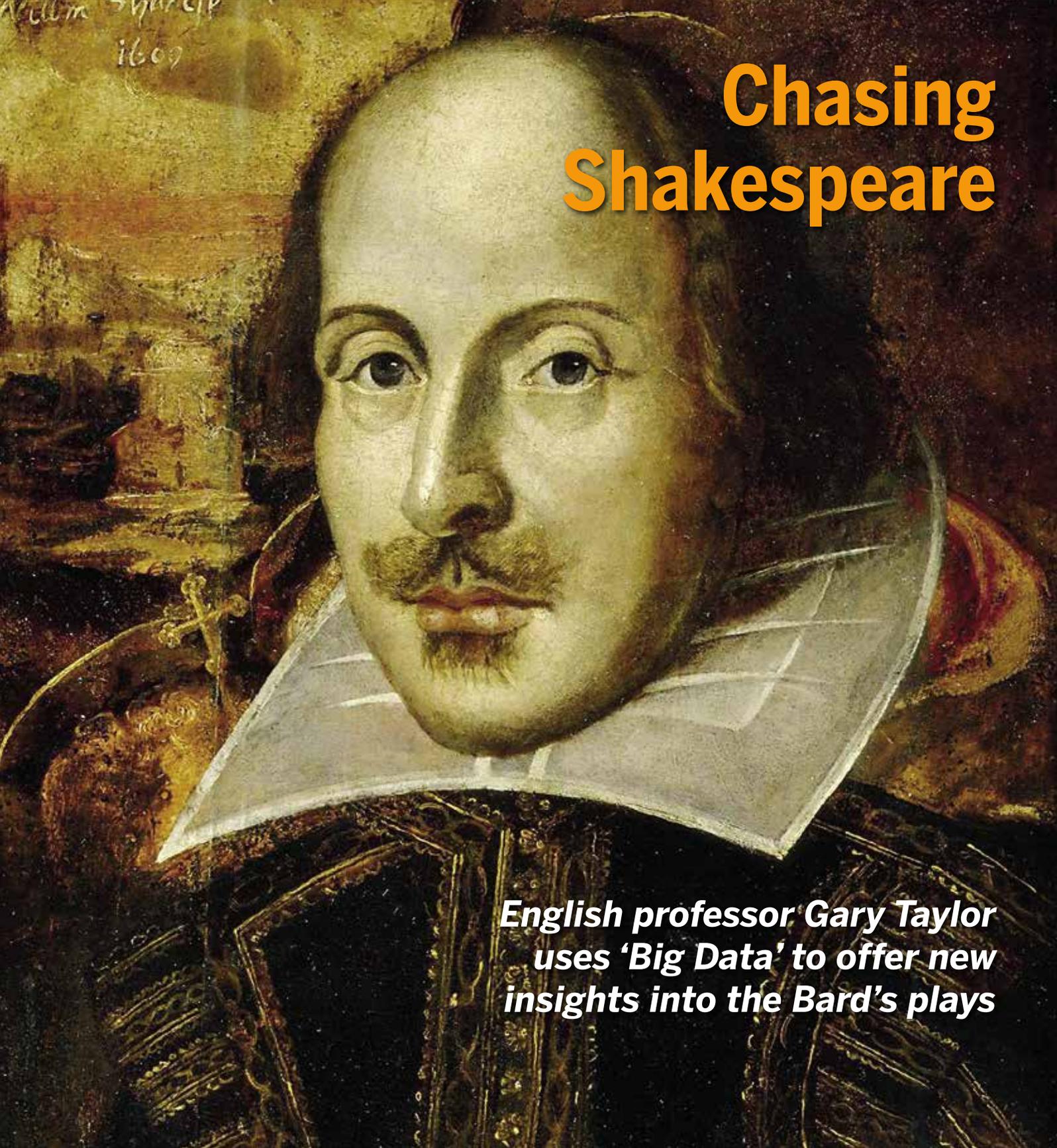




SUMMER
2017

Across the Spectrum

THE FLORIDA STATE UNIVERSITY COLLEGE OF ARTS AND SCIENCES



Chasing Shakespeare

**English professor Gary Taylor
uses 'Big Data' to offer new
insights into the Bard's plays**



Letter from the dean

W

elcome to the summer 2017 edition of *Across the Spectrum*, the primary alumni publication of the College of Arts and Sciences. Florida State University, home to 16 academic colleges, enjoyed another year of great productivity, capped by its largest spring graduating class in history. It also received a record number of student applications, approximately six times the size of next fall's projected incoming class. The college's 38 academic units are central players in the institution's productivity and helped to expand these quantities while reaching continuously for greater quality. I am so proud of our students, faculty and staff and cannot say enough about their commitments to high achievement.

This issue includes stories of faculty accomplishments cutting across the humanities and sciences. Last spring, Gary Taylor, Distinguished Research Professor of English, and his team put the finishing touches on a massive editing project, *The New Oxford Shakespeare*. You will read about why this new edition has generated so much media attention. In another article, you will read about mathematician Richard Bertram and biochemist Michael Roper, and how they are combining disciplines to help understand Type 2 diabetes. Ming Ye is an internationally established hydrologist whose career is on an impressive upward trajectory. With its emphasis on water location and underground behavior, Ming's research underscores the practical value of research taking place within the college.

Two articles highlight programmatic successes of our Department of Computer Science and Department of Mathematics. Students in each are finding their talents and training to be in great demand as they pursue their careers, and are getting the most out of their core training in the mathematical sciences. It is always a pleasure to showcase accomplishments of our alumni, and we visit with several in these articles. In another section, we meet a chemist and a geographer who met while they were students at FSU and now make their home in Kentucky.

Major gifts have enhanced the intellectual climate in two of our humanities-area units, the Department of Classics and the Interdisciplinary Program in Middle Eastern Studies. You will read about the great value added by the hosting of distinguished scholars, made possible by those generous gifts.

For more than 15 years, Florida State University has been home to a spectacularly successful program called the Center for Academic Retention and Enhancement (CARE). Each year, CARE is the on-campus destination for hundreds of students from disadvantaged backgrounds who are seeking a fresh start in higher education. Our article about CARE includes an introduction to its director, Tadarrayl Starke, a former CARE student himself who is taking the program to new levels. It is a pleasure to highlight CARE and help celebrate its successes.

Thank you so much for staying in touch with the College of Arts and Sciences. As we prepare here for the start of another fall semester, it is a pleasure to wish you the very best for the second half of 2017. ❄️

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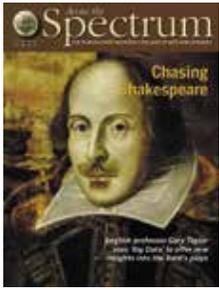
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Across the Spectrum is a news publication for alumni, friends, faculty and staff of the Florida State University College of Arts and Sciences. Visit the college online at <http://artsandsciences.fsu.edu/>; also check out our Facebook page at www.facebook.com/FSUArtsAndSciences and our Twitter page at www.twitter.com/FSUartsscience.

**Schlenoff speaks to graduates at Fall 2016 Commencement**

More than 1,000 graduates received encouragement and a pointed challenge from Florida State's world-renowned chemistry professor Joseph Schlenoff on Dec. 16. Schlenoff, FSU's 2016-2017 Robert O. Lawton Distinguished Professor, aimed to inspire graduates to build their own futures, lead and improve the world. "It's time for you to take charge," he said. "Show by example." The Lawton professorship is the highest honor given by the FSU faculty to one of its own. Read more about Schlenoff's Commencement address at <http://fla.st/2hAojVG>.



On the cover
Described by one colleague as a “disrupter,” English professor Gary Taylor has been roiling the waters of Shakespearean scholarship for nearly four decades. See page 13.

Across the Spectrum

THE FLORIDA STATE UNIVERSITY COLLEGE OF ARTS AND SCIENCES

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Corrections

Two articles in the Winter 2017 issue of *Across the Spectrum* contained errors:

- An article on the “weathercasting” course in the Department of Earth, Ocean and Atmospheric Science incorrectly stated that Associate Professor of Meteorology Jon Ahlquist had been the course’s only instructor. While Ahlquist did create the weathercasting course and has taught it for most of its history, then-Assistant in Meteorology Howard Kilpatrick taught the course from approximately 1987 to 1991. Also, while the meteorology degree programs at FSU, Penn State and Mississippi State run the three largest TV weathercasting training operations, offering experience for both undergraduate and graduate students, they are not the only ones. An ever-growing number of colleges and universities offer weathercasting, and competition is stiff.
- An article on undergraduate researcher Lucia Sicius stated that she conducted research at Woods Hole Oceanographic Institution. The organization was actually the Marine Biological Laboratory at Woods Hole, Massachusetts, which is affiliated with the University of Chicago.



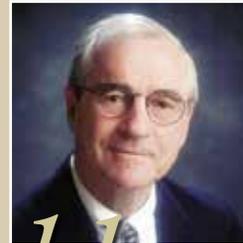
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Pursuing pollutants

Ming Ye develops models to predict how water flows above and below ground

By Kristen Coyne



Ray Stanyard

If you were trying to predict the path of a boy growing up on a farm in northern China and raised by parents whose formal education stopped in high school, you might foresee him following in his parents' footsteps, settling into a life of agriculture.

And you'd be right — about the boy's brother.

But probabilities can be tricky things, as that boy grew up to learn. His name is Ming Ye, and, despite his modest, rural upbringing, he is now a professor of scientific computing at Florida State.

For Ye, an expert in computational hydrology and geology, probabilities are his stock in trade.

Drawing on his breadth of knowledge, Professor of Scientific Computing Ming Ye develops algorithms and software to solve scientific and engineering problems related to water.

His research focuses on developing advanced methods for quantifying and reducing the predictive uncertainty of groundwater flow and contaminant transport models.

"We need to investigate how the unknowns affect our understanding of system behaviors," said Ye, 42, explaining his work with a quiet but intense enthusiasm.

More on that shortly.

Ye knows that what appears probable may not actually come to pass. He didn't end up in agriculture, for one thing. And even though he was on his way to becoming a lawyer as a student at Nanjing University, he averted that fate as well.

It was a bit of a fluke, something anyone who studies risk and uncertainties understands well. Although Ye loved science — he was majoring in geology — he was also an admirer of Abraham Lincoln and, armed with a minor in law, planned to follow in his footsteps to law school.

Then, one day, as Ye was walking by the university library, he bumped into an old professor, Yuqun Xue. And the two got to chatting.

Xue, a member of the prestigious National Academy of Engineering in China, taught a course Ye had aced on hydrogeology, the study of water below and on the Earth's surface. When Xue asked Ye, by then a senior, about his career plans, Ye filled him in about his legal ambitions.

Xue once had an uncle who went into economics and politics, as he told Ye. Unfortunately, it hadn't worked out all that well for him: He ran afoul of Mao Zedong and was persecuted during the Cultural Revolution.

"He told me, 'You better stay away from politics,'" recalled Ye. "He just convinced me that life would be better if you study hydrogeology."

Pausing to talk with his old student, Xue was like a rock in a river that diverts the water's path.

"He just sat on the bicycle, one foot on the ground, another foot on the pedal, and we talked for an hour," Ye said.

That hour-long conversation changed the course of Ye's life.

An Interdisciplinary Approach

As Ye's interest in law suggests, he has a curious, agile mind that finds a lot of subjects interesting. That interdisciplinary bent has shaped his science. He preferred hydrogeology over straight geology because it involves more math. One of his favorite classes in college — methods of mathematical physics — tackled a pair of his research interests. When he came to the United States for graduate school, he landed with Shlomo Newmann of the

University of Arizona — "a mathematician pretending to be an engineer," as Ye describes him. As a postdoctoral researcher at Pacific Northwest National Laboratory, his mentor was an engineer.

That eclectic training comes in handy when solving the kinds of complex problems Ye tackles, helping him identify the right tool for the job, whether that's a geology characterization, an algorithm or a mathematical model.

"You may hear the expression that 'To a hammer, everything is a nail,'" Ye said. "It does not apply to me, because I am interdisciplinary."

When Ye landed at Florida State — he joined the Department of Geological Science in 2007 and the Department of Scientific Computing in 2008 — it was a good fit. Drawing on his breadth of knowledge, he develops algorithms and software to solve scientific and engineering problems related to water. His achievements have been recognized by the Geological Society of America, which named him a fellow in 2012; by the U.S. Department of Energy, which awarded him a prestigious Early Career Award the same year; and by the American Society of Civil Engineers, which awarded him the Walter L. Huber Civil Engineering Research Prize in 2015. He is the only faculty member at Florida State to have received the Early Career Award and the Huber Prize.

Clean, safe drinking water is, of course, critical to life on Earth. But a lot of things humans do that are also important for life — farming, finding energy sources, defending ourselves — can contaminate that resource.

Ye studies the aftermath of those activities by tracking the problems they leave in their wake: nitrogen from fertilizers, radioactive waste from nuclear weapons, gas that has leached into groundwater after fracking.

It's a tricky business, figuring out what may or may not happen to contaminants depending on physical, chemical and biological circumstances and variables. How porous is the ground that the water is filtering through? What other structures are in its path? What, if any, precipitation should get factored in? Are bacteria present that may affect the composition of the pollutants? What are the concentrations of those contaminants, how do they change, and what else in the environment might they react with?

The fact that much of this activity occurs underground and out of sight makes these problems even murkier. Unavoidably, there are unknowns. With the deft use of partial differential equations, Ye's job is to account for them as best as he can.

"We have to study the uncertainty, because there are so many unknowns," he said.

Lake Shore Neighborhood, Jacksonville, FL

Department of Scientific Computing

Concentration (mg/l) 10
100
1000
10000
100000

140 70 0 140 Meters

www.sc.fsu.edu

Develop software that simulates groundwater contamination

A study of pollution related to septic tanks in a Jacksonville neighborhood utilizes software developed by Ye and a former graduate student. The graphic (inset) shows the concentrations of nitrogen escaping from septic tanks through groundwater.

Graphic courtesy Ming Ye

The questions Ye tries to answer are important from both a health and a cost-benefit perspective: Is it safe to extract natural gas from a particular site, or have radionuclides from a decades-old, underground nuclear blast found their way there over the course of the years? Is it safe to drink groundwater downstream from Florida agricultural tracts, or has nitrogen runoff polluted it?

The stakes are high: If your models for answering these tough questions are overly conservative, you lose money and resources. If they're not conservative enough, people could get sick.

Drawing on his hydrogeological, mathematical and computational expertise, Ye develops models to predict what will happen in these challenging systems. For example, Ye and a former graduate student developed software that simulates groundwater contamination that the Florida Department of Environmental Protection uses to better understand and treat nitrogen pollution.

"It makes it possible for our research to go beyond the ivory tower to solve real-world problems," Ye said.

What Lies Beneath

As Ye's life's work demonstrates, you can't tell what's happening underground just from looking at the surface. His very demeanor illustrates the same principle, suggests Gordon Erlebacher, chair of the Department of Scientific Computing. Ye is always helpful, says Erlebacher, and never seems hurried or stressed. But that laid-back demeanor belies an impressive academic productivity.

"How he acts, how he interacts with people, you just would never think he does the amount he does," Erlebacher said. "He's obviously very good at what he does."

Roger Pacheco Castro, a doctoral student in Florida State's geophysical fluid dynamics program, also sees both the caring and hardworking sides of his mentor. While Ye has a way of intuiting when and how his students need help, he also encourages them to work hard and efficiently, and provides the guidance and resources they need to get the job done.

"He pushes sometimes to do the work, but I think that's good," Pacheco Castro said. "I am planning to graduate in the summer, and that's thanks to him."

It is thanks to Ye, also, that Pacheco Castro is studying one of the hottest topics a scientist in his field could tackle in this state: catastrophic sinkhole collapse.

It was probable — if not inevitable — that a hydrogeologist relocating to the Sunshine State would sooner or later get sucked into that most Floridian of hydrogeological problems. So naturally, this happened to Ye, who has dragged along some of his students with him.

Although sinkholes are not unique to the peninsula, Florida has more than any other state in the nation, giving Ye and his students a lot to work with. But even though there are plenty of them, sinkholes remain a challenge to study, because their formation is rarely observed.

"Nobody knows when and where a sinkhole will occur," said Ye, "so there is no way to know exactly how it occurs."

Ye's solution to this conundrum is to build sinkholes of his own, which he does in his lab at the Geophysical Fluid Dynamics Institute at Florida State. Appointed with toy houses and people, they illustrate how sudden and tragic sinkhole formation can be. More importantly, his lab experiments simulate the conditions of sinkhole formation so that scientists can develop mathematical models to better understand and predict when and where they will happen.

The 2013 death of a Tampa area man who was sucked into a sinkhole that formed under the bedroom he was sleeping in thrust Ye's research into the media spotlight. His work was featured on PBS and the History Channel, as well as on Russian television. The exposure showed viewers that only by examining sinkholes broadly — through the lenses of geology, hydrology, soil and rock mechanics, and mathematics — can scientists make sense of these complex enigmas.

"Understanding such systems requires not only multidisciplinary studies," said Ye, "but also interdisciplinary approaches to integrate the understanding in different fields into one that is coherent and comprehensive." ❖❖

Although sinkholes are not unique to the peninsula, Florida has more than any other state in the nation, giving Ye and his students a lot to work with.

Ray Stanyard



Photo courtesy Zeina Schlenoff

Jeanette Chapman, left, has endowed a lecture series that brings to campus world-renowned experts on the Middle East to discuss varying perspectives on current pressing issues. Zeina Schlenoff, right, is director of FSU's Middle East Center.

Shedding light on the Middle East

History alumna Jeanette Chapman funds annual lecture series

By Barbara Ash

Over years, Jeanette Chapman has traveled extensively. One area of the world she has always wanted to visit is the Middle East. Its history, people, culture, politics and antiquities fascinate her. Chapman believes it's important, especially these days, for people to understand the area's dynamics and history.

"If we try to understand the people of the Middle East and what has contributed to the instability and hatred toward Westerners, we might not be so critical," said Chapman, who earned a bachelor's degree in history from Florida State in 1963 and whose family established several banks in Northwest Florida, including People's First. "It's important we keep open minds when we deal with these countries and try to find common ground."

"This is an especially important time for people to learn about the Middle East, U.S. policy toward the region and how that policy affects the region and its relationship to the rest of the world," says Schlenoff.



Chapman feels so strongly about this that she made a \$100,000 gift to the College of Arts and Sciences to create the Jeannette B. Chapman Endowed Lectureship for Middle Eastern Studies. In its second year, the annual event, which is open to the public, brings in world-renowned experts on the Middle East to discuss varying perspectives on current pressing issues.

"This is an especially important time for people to learn about the Middle East, U.S. policy toward the region and how that policy affects the region and its relationship to the rest of the world," said Zeina Schlenoff, a teaching professor in FSU's Department of Modern Languages and Linguistics and director of the university's Middle East Center, which administers the annual lecture series. "We're extremely grateful to Mrs. Chapman for enabling us to bring in these prominent scholars."

This spring, Steven Heydemann, a political scientist who specializes in comparative politics and the political economy of the Middle East, particularly Syria, was on campus. He is an example of the high-caliber scholar the lecture series can attract. Heydemann, who earned his Ph.D. at the University of Chicago, is the Janet Wright Ketcham 1953 Professor in Middle East Studies at Smith College and a senior fellow in the Center for Middle East Policy at the Brookings Institution in Washington, D.C.

As a vice president of applied research on conflict at the U.S. Institute of Peace from 2011 to 2015, Heydemann directed "The Day After" project, in which the institute formulated a transition process for Syria and the Syrian opposition. The resulting document was used by activists, non-governmental organizations and governments during the early phases of the Syrian conflict and is endorsed by numerous Syrian government opposition groups and the European Parliament. His talk at Florida State covered President Barak Obama's legacy and President Donald Trump's policy in the Middle East.

Last year's inaugural lecture featured Paul Salem, whose topic was titled "Between Transition and Disintegration in the Arab World: Risks, Opportunities and Policy Responses." Salem is vice president for policy and research at the Middle East Institute in Washington, D.C. Before joining the institute, he was founding director of the Carnegie Middle East Center in Beirut, as well as the Lebanese Center for Policy Studies, Lebanon's leading public-policy think tank. Salem, who earned his doctorate

Ray Stanyard

at Harvard University, is the author of several highly regarded books and is a frequent television and radio commentator on political change, transition and conflict, as well as on regional and international relations. He is particularly interested in the Levant countries and Egypt.

“The lecture series provides an excellent opportunity for students to hear varying and objective perspectives on current issues from experts, whose knowledge of the Middle East is unparalleled,” Schlenoff said. “The follow-up Q&A sessions and receptions allow our students to interact with prominent scholars like Dr. Heydemann and Dr. Salem, who can be wonderful career contacts and sources for internships because they are so well regarded and connected.”

Schlenoff said the number of Florida State undergraduate students declaring Middle Eastern studies as their major has increased from 12 students in January 2016 to 30 students this past semester. Students enrolled in Arabic and Hebrew language classes currently number around 140. They come from across campus and from several majors. She attributes the growing interest in the Middle East to increased widespread daily news reports on conflicts in the region, most notably those involving Turkey, Israel and Palestine, Iraq, Syria and the emergence of the Islamic State and the worldwide refugee crisis.

Molly Conrad, who is scheduled to graduate in August 2017 from the College of Social Sciences and Public Policy with a degree in international affairs and a second major in Middle Eastern studies, attended both lectures. She said these kinds of opportunities are critical to countering inaccurate news reports and understanding the nuances of the issues.

“It’s important that we learn about what’s happening in the Middle East through the lens of academics instead of only the media,” Conrad said. “These experts know the history of the Middle East and are informed about the issues based on research. This makes a huge difference in truly gaining an understanding of what is happening and finding workable solutions.”

A Tampa native, Conrad’s interest in the Middle East was sparked by her study of comparative religions, especially Christianity and Islam, and a summer as an FSU Global Scholar in Morocco researching child abandonment and adoption. Her post-graduation plans include moving to

Lebanon or Jordan and joining an international human rights organization. For her, FSU’s interdisciplinary Middle East Center has been a great resource for research and connecting students who are interested in the region.

Created in 2002, the center’s primary objective is to provide an academic environment for students from a multitude of disciplines to develop a deeper understanding of the Middle East. The center also supports and works with students who are majors in Middle Eastern Studies, as well as minors in Arabic, Hebrew and Middle Eastern studies. The center draws on the expertise of faculty members in disciplines ranging from modern languages, economics, law, religion and classics to history, theater and urban and regional planning.



Photo courtesy Zeina Schlenoff

Schlenoff, who earned her doctorate at the University of Massachusetts at Amherst, was born and raised in Lebanon. In addition to directing the Middle East Center, she coordinates FSU’s Arabic Language Program. Before coming to FSU, she was the founding director for the Summer Arabic Language Program at The American University of Beirut. She has published on literature and culture in the Arab world.

For more information about Florida State University’s Middle East Center, its Bachelor of Arts degree in Middle Eastern studies and the Jeannette B. Chapman Endowed Lectureship for Middle Eastern Studies, contact Zeina Schlenoff at zschlenoff@fsu.edu. ❄️



Last year’s inaugural Jeanette B. Chapman Endowed Lecture for Middle Eastern Studies featured Paul Salem, who is vice president for policy and research at the Middle East Institute in Washington, D.C.

This year’s Chapman Lecture featured Steven Heydemann, a senior fellow in the Center for Middle East Policy at the Brookings Institution in Washington, D.C.

“It’s important that we learn about what’s happening in the Middle East through the lens of academia instead of only the media,” says Molly Conrad, who is scheduled to graduate in August 2017 with a degree in Middle Eastern studies and international affairs.



A matter of taste

**FSU grad Michael
Bair puts his
chemistry
education to
work for global
beverage company**

By Rosanne Dunkelberger



Bair and his wife, Jackie Monge, met in Tallahassee in 2010, when he was in his fourth year of graduate school and she was about to earn the first of her two bachelor's degrees from FSU in biology and geography.

Alicia Lynn Photography

A 2011 graduate of Florida State with a Ph.D. in chemistry, Michael Bair knew the job he was applying for at Gruppo Campari was going to be different when, in addition to vetting his scientific bona fides, they asked him to take a “smell” test, sniffing little jars containing fragrance-soaked cotton balls.

For while his position — he’s now the international spirits distributing company’s North American technical services scientist — does comprise gas chromatography, mass spectrometry and other lab work, a large part of it involves the less precise but critically important science of “sensory” testing.

Bair is based at the Wild Turkey distillery near Lexington, Kentucky, and it’s his job to maintain the quality and consistency of the bourbon and other distilled spirits by testing more subjectively how they look, smell and taste.

There’s no machine to do that, so Bair trains and leads panels of taste testers — a task that is more difficult than sipping liquor and giving it a thumbs up or thumbs down.

“It’s very involved,” Bair said. “It works very differently than making a physical measurement. It relies very heavily on building communication tools and applying statistics . . .

I can’t observe directly what you are tasting, so the best you can do is taste it and somehow communicate to me what I’m trying to measure.

“Because different people are sensitive to different tastes, two different people may taste very different things for the same liquid,” he continued. “It’s one of those things where practice make perfect. We meet regularly to calibrate ourselves so that we’re kind of adhering to the same scale, and we’re trying to land on the same number to quantify intensities of flavor.”

Gruppo Campari is a major player in the global branded spirits industry, representing more than 30 premium and super-premium brands. In addition to distilling Wild Turkey and a more premium bourbon brand, Russell’s

Reserve, the Kentucky facility also packages and provides product development for Skyy vodka. Bair also provides technical support for facilities that produce Cabo Wabo and Espolon tequila brands in central Mexico, Jamaica’s Appleton rum and a new Campari acquisition, Forty Creek whiskey, based in Canada.

His job often takes him to these distilleries across North America, and also included a two-week trip to the Campari company’s headquarters in Milan, Italy, where he was introduced to the company’s original bright-red, distinctively flavored spirit, which originated in 1860.

“I got my first few tastes of Campari there, and I’m hooked now,” he said. “It’s an acquired taste. Especially with the American palate, we tend to lean toward more sweet things. Campari is an infusion of fruits and herbs and various plant material . . . it’s quite a concoction, and because of its chemistry, it’s quite bitter. It contains a lot of terpenoids and other chemicals that tend to impart a bitter flavor to the product. It does have a sweet aspect, it just happens to have a very bitter one as well.”

Lest you think his job is a frat boy’s dream, there is a downside. For starters, “we don’t drink, there’s a lot of light sipping and spitting

involved,” Bair said. He also said that he’s responsible for taste-testing very old samples of liquor for shelf-life studies, where the freshness and taste of the product depends on the age and how it’s stored.

“It’s not like I get to drink whatever I want whenever I want,” he said. “You have to take the good with the bad. But the perks are pretty good, I gotta say.”

Before joining Campari, Bair had worked in more traditional lab settings for pharmaceutical companies. But it was love that drew him to the Kentucky hills and his new job.

Bair and his wife, Jackie Monge, met at Tallahassee’s Bradfordville Blues Club in 2010, when he was in his fourth year of graduate school and she was about to earn the first of her two bachelor’s degrees from FSU in biology and geography. She would go to the University of Kentucky to earn her master’s in geography and find work at Quantum Spatial, a company that uses lasers and other sophisticated techniques to create maps and collect spatial data. Bair followed her in 2015, and they were married in March of this year.

Bair declares his current position as the best, but up until this one, his “favorite gig ever” was teaching introductory chemistry classes at FSU for a semester after he earned his degree.

“It was great; I loved every day,” he said, even though as low man on the totem pole he taught sections at 8 a.m. While still a student, Bair served as a graduate teaching assistant and was named the General Chemistry TA of the Year three years in a row.

Teaching at FSU enabled him to revisit the basics of his field and, he declared, was a plus when landing his current job, since much of what he does is traveling to the quality control labs of production facilities, distilleries and packaging plants to train employees on the proper ways to conduct chemical and sensory tests.

“It was such a great experience to teach there,” Bair said. “Maybe I can do it again someday.” 🍷



Photo courtesy Michael Bair

Prior to his current job, Bair’s “favorite gig ever” was teaching introductory chemistry classes at FSU for a semester after earning his Ph.D.



A \$1 million endowment from George Langford enabled the Department of Classics to establish the Langford Family Eminent Scholar Chair and host the Langford Conference.

Photo courtesy University Communications

Transformational gift

Langford Endowment enriches scholarly pursuits in the Department of Classics

By Kati Schardl

At this year's spring graduation ceremonies, Florida State's Department of Classics hooded a record number of doctoral students. Six students were recognized by department chair Daniel Pullen, joining three who received their Ph.D. in May 2016. A dozen students received their B.A.s, and eight received M.A.s.

Altogether, it has been a banner year for the department. And faculty and students can, in part, thank the largesse of local entrepreneur and FSU supporter George Langford — as well as a bit of serendipity.

In the early 1990s, a \$1 million endowment from Langford, founder and chairman of Municipal Code Corporation, enabled the classics department to establish the Langford Family Eminent Scholar Chair and host its inaugural Langford Conference. The annual spring conference has since grown to become one of the preeminent university classics colloquia in the United States, attracting illustrious scholars and attendees and putting FSU's classics programs on the map.

The story of how the department acquired the endowment is where serendipity comes in.

"George Langford had gifted another academic unit at FSU with a million-dollar endowment, but they didn't do anything with it right away," said department chair Pullen.

The idea of transferring the endowment to the Department of Classics was eventually proposed to Langford, who was intrigued. His wife, Marian, had studied Latin at FSU under Lynette Thompson, who taught at the Florida State College for Women/Florida State University from 1942 to 1994 and served as the classics department chair from 1961 to 1980.

"(Langford) called up Leon Golden, who was department chair at the time, and asked him to come to breakfast," Pullen said. "Leon came back from breakfast with a million dollars, plus the interest."

Rather than use the money to fund a permanent eminent scholar chair, the department decided

to have rotating scholars in order to spread the wealth among the various disciplines within the department, which encompasses studies in Greek, Latin, archaeology, ancient history, classical civilization, and classics and religion.

"We decided to bring in an eminent scholar each spring semester," Pullen explained. "They would teach an undergraduate course and a graduate course and stage a conference with six or seven visiting presenters."

The inaugural Langford Conference took place in 1994, with the late Michael Jameson, an expert on Greek history, religion and epigraphy and professor emeritus from Stanford University, as first recipient of the Langford Chair.

Since then, the conference has burgeoned, with visiting scholars alternating with FSU classics faculty members to host the proceedings.

Roman archaeology professor Andrea De Giorgi, who joined the classics faculty in 2012 and co-directs the Cosa Excavations in Italy, organized the 2014 Langford Conference.

"When I applied for the job (at FSU), I was honestly drawn to the Langford Conference tab," De Giorgi said in an email. "The possibility to organize a conference and bring any speaker I wanted was a major plus.

"I organized a conference on Roman colonies and invited 13 speakers from major U.S. and international universities. The Langford Endowment enabled me to fly them to Tallahassee, give them accommodations, treat them to local restaurants and, finally, introduce them to the wonders of Wakulla Springs. Not too bad for a Roman archaeology conference!

DEPARTMENT OF CLASSICS

2017 Spring Langford Conference
February 24–25, 2017

Greek Poetry & the West

Organized by Virginia Lewis and John Marincola

FLORIDA STATE UNIVERSITY
Turnbull Conference Center

For further information contact: John Marincola, jmarincola@fsu.edu

Speakers

Gianbattista D'Alessio
Università degli Studi di Napoli Federico II

Hanne Elserfeld
Boston College

Margaret Foster
Indiana University, Bloomington

Leslie Kurka
University of California, Berkeley

Kathryn Morgan
University of California, Los Angeles

Richard Neer
University of Chicago

Nigel Nicholson
Rice College

Richard Rawles
University of Edinburgh

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“The event was particularly successful in intellectual terms, too — vibrant discussions, modern perspectives, engagement of the students.”

In 2001, the endowment allowed the conference to branch out when Latin and Greek scholar Francis Cairns was recruited to join the classics department. While teaching at the University of Liverpool in the UK in 1976, Cairns had started the Liverpool Latin Seminar and had begun publishing an annual tome called the Papers of the Liverpool Latin Seminar. When Cairns moved to the University of Leeds, it became the Leeds Latin Seminar, and when he came to FSU, he didn't even have to change the LLS acronym when he organized the first Langford Latin Seminar. The seminars take place in the fall, complementing the spring Langford Conference.

Cairns has continued to collect and publish the papers from each seminar, which are shared with other universities and scholars.

“These volumes now say that classics at FSU has taken up the torch and we're trying to achieve the highest level of scholarship,” Cairns said. “It's isn't confined to Latin — we also cover Greek and ancient history.

“We are fortunate to have the endowment. We've made extraordinary use of it, and it has increased the cachet of the classics department at FSU.”

Pullen agrees.

“The conferences have put us on the map,” he said. “The list of Langford eminent scholars includes major figures in the field, and we've made great connections in that way.



Daniel Pullen is chair of the Department of Classics.

“People want to be asked to come to our conferences. They know we put on a good show here and that there will be quality people attending. Because it's now an established thing that's been going on since 1994, the academic community looks forward to finding out what the next Langford (conference) will be.”

The high regard for both conferences in the academic world has helped attract students and faculty to FSU's program.

“In part because of the reputation of having an active intellectual life in this department, it has helped recruit students,” Pullen said. “Because of that reputation, the number and quality of applicants has increased.”

And though the endowment is being used for something quite different from what was originally intended, the Langford family is proud of how it has helped the classics department to flourish.

“It means so much that we could help a department that, to the best of my knowledge, had never received a donation like this,” said Rob Langford, George Langford's son.

He and his brother Lawton, now chairman and CEO of Municipal Code Corporation, tend the family legacy at FSU, where Langford Green near Doak Campbell Stadium bears the family name.



Ray Stanyard

Andrea De Giorgi is a professor of Roman archaeology in the Department of Classics.

Marian Langford passed away in 2012; patriarch George is 93 and resides in Tallahassee.

“We're not classics scholars,” Rob Langford said. “But for us to be able to participate in this way and help the classics department is a wonderful thing. And we hope our dad's generosity will inspire others to also support the university.”

“The Langford Endowment is an extraordinary injection of stamina,” said De Giorgi. “It enables the department to invite speakers and short-term scholars who bring their research to Tallahassee and present it to the community.

“The benefits are too numerous to list. Anybody, from the undergraduate novice to the most experienced professor, is going to gain enormously from these events. Looking ahead, as the department faces the challenges of the rapidly evolving landscape of education in America, the Langford Endowment will enable us to offer cutting-edge scholarship and programs to our audiences.” ❁



Guest speakers pose during the 2017 Spring Langford Conference. Pictured, from left to right, are Giambattista D'Alessio (King's College London), Nigel Nicholson (Reed College), Margaret Foster (Indiana University Bloomington), Hanne Eisenfeld (Boston College), Richard Rawles (The University of Edinburgh), Leslie Kurke (University of California Berkeley), Richard Neer (University of Chicago) and Kathryn Morgan (University of California Los Angeles).



Ray Stanyard



In late 2016, Taylor and his team of researchers published *The New Oxford Shakespeare*, a fresh edition of the complete works that attributes co-authorship of the three “Henry VI” plays to the Bard and his contemporary Christopher Marlowe (inset).

The Bard’s collaborators



Ray Stanyard

Gary Taylor uses ‘Big Data’ to offer new insights into Shakespeare’s works

By Kati Schardl

Taylor is not only used to fielding the slings and arrows of outraged Bard-ophiles — he relishes the opportunity they provide to talk about why Shakespeare is eternally relevant and important.

Hamlet’s “To be or not to be?” may be the most well-known — and oft-quoted — question in the Shakespearean canon.

But to Gary Taylor, a Distinguished Research Professor in Florida State’s Department of English, the more intriguing Shakespearean question is, “Who wrote that?”

In late 2016, Taylor and his team of researchers published *The New Oxford Shakespeare*, a fresh edition of the complete works that attributes co-authorship of the three “Henry VI” plays to the Bard and his contemporary Christopher Marlowe. It marks the first time Marlowe has been acknowledged by a scholarly edition as a collaborator on the works.

The announcement triggered an international media frenzy, with Taylor at its nexus. It's a familiar role for Taylor, who has been roiling the waters of Shakespearean scholarship for nearly four decades.

Taylor's colleague Bruce Boehrer served as chair of the committee that hired Taylor in 2005. He acknowledged Taylor's iconoclastic streak.

"The thing to know about Gary first and foremost is that he is at heart a disrupter," said Boehrer, FSU's Bertram H. Davis Professor of English and Frances Cushing Ervin Professor of English. "He exists to interfere with business as usual, and he is never happier than when he is standing the world on its head. It's not just what he does — I would go so far as to say it's who he is.

"He is brilliant, he is ingenious, he has an inexhaustible fund of energy, and he has been gifted with an audacity that has served him well from the beginning of his career to the present day. The combo makes for must-see TV."

Taylor burst on the media scene in the early 1980s when he served as the second editor of the Oxford Shakespeare edition of complete works with his mentor, Stanley Wells. He immediately caused a sensation by advancing into the canon the text of a poem that begins, "Shall I die, shall I fly." Although the poem had been attributed to Shakespeare in a 17th-century manuscript, it had never been printed

before in any edition of Shakespeare's works, or discussed by scholars, and caused an immediate kerfuffle in the academic world.

"Since then, he has done many different things in connection with Shakespearean bibliography and, more broadly, with dramatic bibliography in the Elizabethan and Jacobean periods," Boehrer said.

Taylor is not only used to fielding the slings and arrows of outraged Bard-ophiles — he relishes the opportunity they provide to talk about why Shakespeare is

eternally relevant and important.

"People argue so passionately about Shakespeare for the same reasons they argue about religion or politics," Taylor said. "He's foundational about life and art. And he's not a one-hit wonder.

"You can't really understand why Shakespeare has had such an influence on our culture or attracted these kinds of feelings unless you're looking at all of Shakespeare. (The New Oxford Shakespeare) is a big book, but when you become fascinated with a writer or filmmaker or musician, you want to experience all of their work, and in doing that, you understand each piece of it better."

Taylor and his team used digital text analysis to take both a micro and macro approach.

"It's a difficult job to edit the complete works because most of the time what we talk about when we talk about Shakespeare is a particular play or character," Taylor said. "Once in a generation it's necessary to go back and try to look at the whole thing in the light of what we've learned over decades.

"On the one hand, as an editor you're looking at every single



word and punctuation mark, but at the same time you're trying to connect all of that to the totality of the work."

In the 1986 Oxford edition, collaborators were listed for eight of Shakespeare's plays. In the 2016 New Oxford Shakespeare, thanks to new digital tools Taylor touts as "Big Data," Shakespeare shares authorship on 14 plays. Along with Marlowe, Shakespeare's collaborators/co-authors include such contemporaries as John Fletcher, Thomas Middleton, Ben Jonson, Thomas Nashe, George Peele, George Wilkins and Thomas Heywood.

According to Taylor, acknowledging co-authors for plays once attributed to the unique and solitary genius of Shakespeare doesn't diminish his greatness. Rather, it places the Bard in historical context and in the theatrical milieu of the era. Shakespeare was writing his plays at a time when most playwrights bounced ideas off one another in pubs, collaborated with one another and even borrowed ideas and themes freely from one another. At the time, Taylor said, the process of writing a play resembled that of bringing a movie script to the big screen today. One author might write a general outline, another would contribute certain scenes and yet another might polish the final product.

The digital analysis Taylor and his team used helped parse out the authorial fingerprints — distinctive word usages and groupings — that different playwrights left on the text.

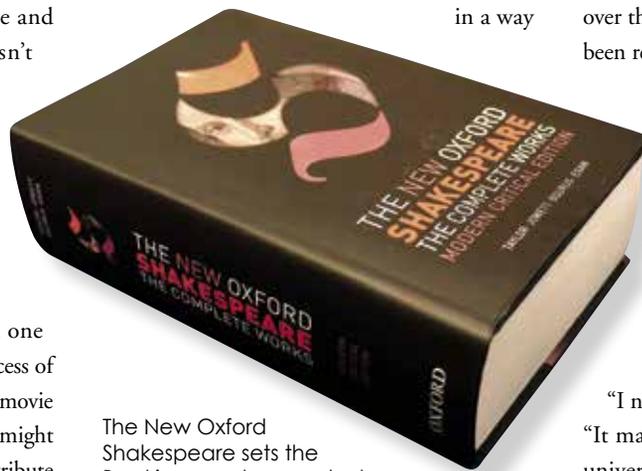
And it makes sense that Shakespeare would collaborate with his fellow writers, even one like Marlowe,

long presumed to be the Bard's chief rival and the pre-eminent playwright of the time before Shakespeare's ascendancy.

"Shakespeare was a star, but never the only one in our galaxy," Taylor wrote in his 1989 book "Reinventing Shakespeare."

The New Oxford edition sets Shakespeare in a more modern context as well.

"Because of the digital revolution and convergence of media, we could conceive of Shakespeare in a practical way — as a multimedia artist — and try to produce an edition that represents that artistry in a way



The New Oxford Shakespeare sets the Bard in a modern context.

not possible for previous editions," Taylor said.

"We wanted to make this a fully illustrated edition, with the illustrations about the art itself — not the art of his lifetime but about the visual images his plays require you to conjure. Theater is a visual medium, and Shakespeare has inspired visual artists from the beginning.

"There's also music in every Shakespeare play, and even people who don't read music will see a textual indication (in the new edition) of what that music is. By putting it right there in the text (of the play), you're forced to recognize that Shakespeare from the beginning was an artist who was interested in music, not just language; in visual images, not just words. This edition now enables you to understand more about the collaborative creative process in a way that makes you feel differently about the cliché of the solitary genius."

The new edition also features fresh introductions to each play.

"The tradition has always been that you have a bit of prose written by a modern scholar that tells you what to think about Shakespeare generally, then scholarly prose before every work that tells you what to think about that work," Taylor said. "One of the things that distinguishes Shakespeare from other writers is that Shakespeare wrote plays with multiple voices. It seemed to us fundamentally mistaken to take Shakespeare's dialogues and reduce them to one voice saying what it all means.

"Instead, we've created these introductions that give you sound bites from lots of brilliant people over the years — over four centuries — who've been responding to this particular work. We let all those people talk to each other (in the introductions) and argue with each other. It creates this great human conversation."

Taylor brings his excitement about the research and his findings into the classroom.

"I never teach the same class twice," he said. "It may have the same course number in the university catalog, but the texts I look at and the way I approach them will be different every time."

Taylor's next challenge will be a bit more conventional — in August, he will assume the chairmanship of FSU's English department.

"It's a department eminently worth serving," he said. "It's an extraordinarily strong, gifted and varied department that embodies the kind of ethic of the ideal teacher-scholar that goes all the way back to Socrates — the best thinkers can be the best teachers.

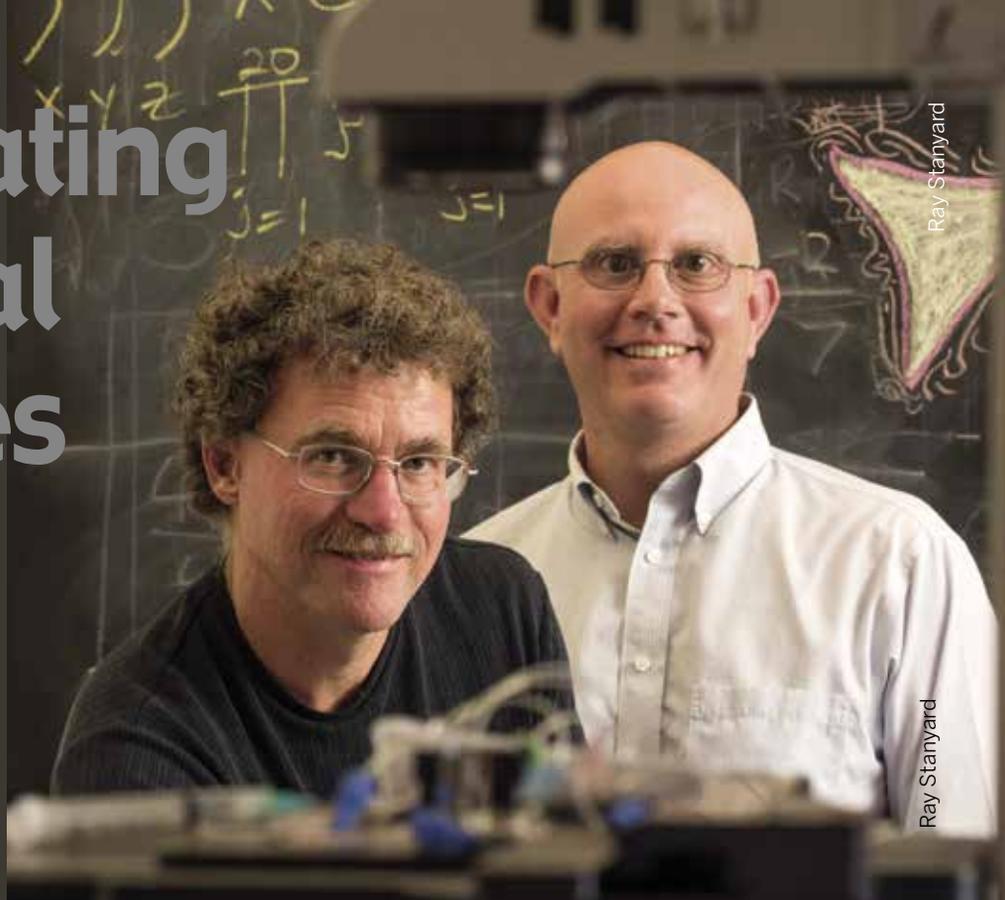
"When Shakespeare was writing all those great works, London was about the size of Tallahassee. So you don't have to be in cities that have millions of people to be doing creative and intelligent work that will make a difference to the future. Since I came here, I have found FSU to be a very stimulating place to teach and think. I hope it will continue to be so during my tenure as chair." ❖❖



Investigating biological mysteries

Researchers collaborate to understand Type 2 diabetes

By Rosanne Dunkelberger



Richard Bertram, left, is the Marion Bradley Brennan Professor in the Department of Mathematics; Michael Roper, right, is the Pfeiffer Associate Professor for Cancer Research in the Department of Chemistry and Biochemistry.

Using a computer “liver” and a mechanical “pancreas,” two Florida State professors from different scientific disciplines have collaborated for 10 years to discover how the two organs function together — and how they might be coaxed to return to normal functioning in people with Type 2 diabetes.

Richard Bertram, the Marion Bradley Brennan Professor in the Department of Mathematics, is the mathematical modeler. He is the director of FSU’s 15-year-old biomathematics graduate program, a relatively new specialization that harnesses the computational power of computer simulations to help describe complex biological systems. Bertram is also affiliated with FSU’s Institute of Molecular Biophysics, which focuses on interdisciplinary biological research.

Michael Roper, the Pfeiffer Associate Professor for Cancer Research in the Department of Chemistry and Biochemistry, is an analytical chemist who creates the precision microfluidic devices that bring Bertram’s mathematical models to life.

“When I got here,” said Roper, “he was one of the first people I emailed, and we went and got a cup of coffee and discussed research and have been working together since then doing various types of projects, most of them related to diabetes.”

A little background: In a person’s pancreas, there are about a million cell clusters called islets (pronounced “eye-lits”). Within the islets are beta cells that produce and release the insulin needed to regulate the blood sugar that energizes the body.

The scientists’ research is not applicable to people who have Type 1 diabetes, which is “fundamentally different,” said Bertram, because in this case, beta cells are attacked and destroyed fairly quickly by an autoimmune disease. Those with Type 2 diabetes have beta cells that create and release insulin, but it is either not enough to deal with the glucose in the bloodstream, or the body is “insulin-resistant” and a blood insulin level that would normally be enough is insufficient. Over time, overworked beta cells can become less effective or die.

In their earlier work, Bertram and Roper were able to show that the liver can act to synchronize individual islets, so that the insulin level in the blood exhibits coherent pulses every five minutes — a schedule, said Bertram, consistent between humans and other animal species.

“Which gives you the suspicion there must be some reason for this; it must be important,” he said. “And it’s been shown over the past few years that that rhythm is better at causing the liver to do what it does. And what does the liver do? It takes up glucose once you’ve had a meal, and it stores and then releases it between meals and keeps your glucose levels constant.

“The liver does that better when you have pulses of insulin and, in fact, in Type 2 diabetics, their pulsatile insulin secretion is disturbed; it doesn’t have that same, nice rhythmicity,” he continued. “Sometimes it’s not there at all. It’s really wiggly.”

Their research is done by sending minute amounts of glucose through microscopic channels to a part of the microfluidic device that includes a chamber holding rodent islets. The resulting activity level of the islets’ beta cells is then fed to the computer, which can send feedback to the

device in an information loop that mimics the interaction of a liver and pancreas.

In their most recent paper, written with graduate students Joseph McKenna and Nikita Mukhitov and postdoctoral fellow Raghuram Dhumpa, and published in the journal *PLOS Computational Biology*, they have shown that beta cells with healthy insulin pulsing can act as a good influence on more sluggish cells, reviving them to a more-normal rhythm. This could provide hope to diabetics that their under-functioning beta cells can be revived and the disease reversed.

But both scientists agree that their research is more foundational about how the liver/pancreas loop operates, rather than suggesting an immediate cure.

“I think we’re trying to make inroads into how it all works,” Roper said. “There’s a lot in medicine that’s based on the results that they see, but they don’t know how it works inside the body.”

Bertram and Roper have an easy camaraderie with each other that comes with a decade of going through the ups and downs of experimentation together.

“Physically, we’re in adjacent buildings, and I think that helps . . . there’s nothing like sitting down with people sharing ideas and talking about things,” Roper said. “There’s great collaborations going on everywhere. Having shared resources . . . I think that’s what will drive more and more collaborations and better and better science.

“You’ve got to get out and talk to people outside of your field,” he continued. “I don’t need to always collaborate with other chemists, I need to collaborate with mathematicians, engineers, biologists, statisticians . . . You need to get out of the department and do that. That’s the way that science is moving, that’s the way funding is going.”

Recently, the National Institutes of Health grant funding their diabetes research was

National Institutes of Health



A Growing Problem

An aging population, sedentary lifestyles and poor eating habits have produced an alarming increase in Type 2 diabetes. Here are the most recent numbers from the American Diabetes Association as of 2012:

- 29.1 million, or 9.3 percent of Americans, have diabetes. Only about 1.25 million of those have Type 1.
- Of the 29.1 million people who have diabetes, 8.1 million are undiagnosed.
- Nearly 26 percent of Americans ages 65 and older have diabetes.
- 86 million Americans ages 20 and older have pre-diabetes. Just two years earlier, the number was 79 million.
- Diabetes was the seventh-leading cause of death in the United States in 2010.

Photo courtesy Michael Roper

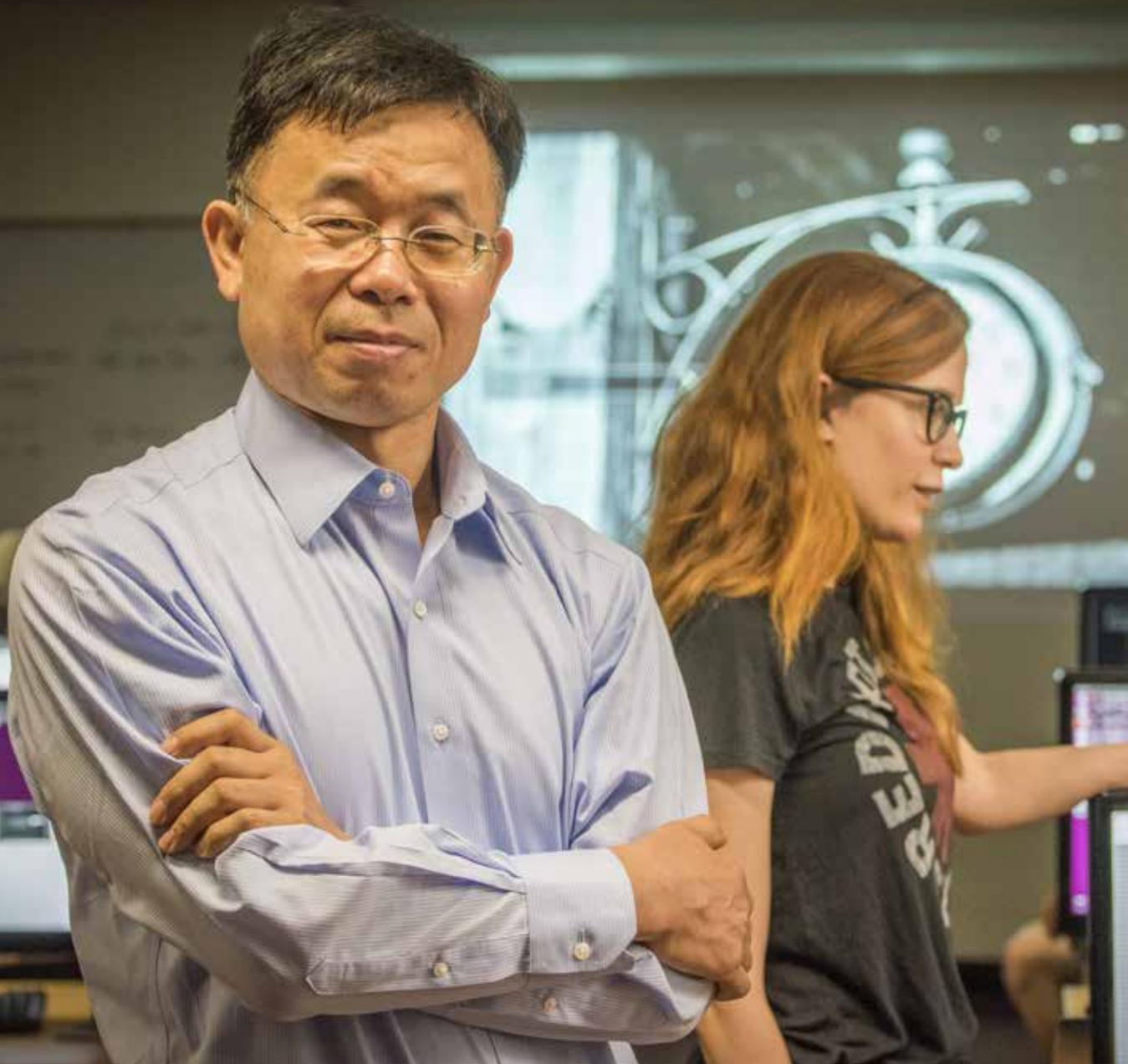


Roper creates precision microfluidic devices like the one shown here to bring Bertram's mathematical models to life.

Bertram elaborated: “Somebody could come up with a miracle cure for diabetes tomorrow, but if they did it would probably be because they tried something and it worked. And they would have no clue why. We’re actually trying to understand the basis of how the system works.”

renewed. And the pair agree that there is plenty more to be discovered about the biological mysteries behind the disease.

“We pretty much have a lifetime of work with diabetes,” Bertram said. 🌱



Computer science professor Xiuwen Liu is acting director of FSU's Center for Security and Assurance in Information Technology (C-SAIT).

FSU's cyberwarriors

Seminoles at the forefront of cybersecurity

By William Lampkin

From compromised email accounts or stolen credit card information to threats to national infrastructure or state-sponsored hacking, cybersecurity is more and more in the news these days. And with computers and connected devices becoming ubiquitous, experts say the risks will only increase.

"Cybersecurity issues are not new," said Xiuwen Liu, a professor in Florida State University's Department of Computer Science and acting head of the

university's Center for Security and Assurance in Information Technology (C-SAIT). "What is new is the magnitude of impact they can have."

The computer science department and C-SAIT (www.sait.fsu.edu) are at the forefront in training tomorrow's cyberwarriors. In April, Military Times ranked FSU's cybersecurity program among the 10 best in the United States.

Among its accomplishments in the field, FSU was the first university in Florida to be named



Xin Yuan is chair of the Department of Computer Science.



Douglas Hennenfent is currently seeking a master's degree focused on cybersecurity.

“Cybersecurity is one of our star programs,” said Xin Yuan, the department’s chair. “It has grown in recent years because people are more aware of cybersecurity issues.”

The program’s prominence also has contributed to its growth, as reflected through larger grants.

Yuan said that a few years ago, only 12 students were grant-supported. Now, grants support 28 students, and five more will be added in the fall.

Last November, the Department of Computer Science received a \$4.6 million grant from the National Science Foundation to support through 2021 eight undergraduate seniors and 64 graduate students studying cybersecurity as part of the CyberCorps: Scholarship for Service (SFS) program. That followed a \$1.9 million grant for 2010-2016.

A \$2.2 million grant has funded the SFS program from 2013 to 2017 for students seeking master’s degrees in computer criminology or computer network and system administration.

The scholarships include an annual stipend (currently \$22,500 for undergraduates and \$34,000 for graduate students) and cover tuition, fees, health insurance and a textbook allowance. Students receiving scholarships will also be placed in a paid summer internship with a federal agency, and must agree to work for a federal, state or local government organization, or a federally funded research and development center, for a period of time after graduation equal to their scholarship participation.

“We currently have 28 students receiving the Scholarship for Service, and five more students will be in the program in fall 2017,” Liu said.

Douglas Hennenfent is one of those graduate students benefiting from CyberCorps.

“The funding from CyberCorps has been beneficial in allowing me to focus entirely on my coursework and personal projects related to cybersecurity,” said Hennenfent, who earned a bachelor’s in computer science and is now seeking a master’s degree focused on cybersecurity. “The program has opened doors for internships and networking.”

“I would not have gone to grad school if it weren’t for CyberCorps,” said FSU alumna Lauren Pearce. “My senior year, I was offered an SFS scholarship. I had a job lined up in government, but with the offer of a \$22,000 stipend plus books, tuition, fees and conference travel, I reconsidered.”



FSU alumna Lauren Pearce now works as a malware analyst on the Computer Security Incident Response Team at Los Alamos National Laboratory in New Mexico.

a Center of Academic Research in Information Assurance by the National Security Agency and the Department of Defense, in 2002. And it is the only Florida university that has been designated a Center for Academic Excellence both in cyberdefense education and in research by the National Security Agency and the Department of Homeland Security.

FSU’s cybersecurity program attracts top-quality students from Florida and beyond — the average grade point average is above 3.6.

Pearce earned a B.S. in computer criminology and a B.A. in international affairs in May 2013, followed by an M.S. in computer criminology in May 2015. Today she is a malware analyst on the Computer Security Incident Response Team at Los Alamos National Laboratory in New Mexico.

“It didn’t take an expert to see that computer security was going to be a growing field, and I had always liked computers,” Pearce said. “Cybersecurity is not and never will be a stagnant field. The ‘bad guys’ are always coming up with new ways to get into networks and hide their footprints, and the ‘good guys’ have to keep up.”

The CyberCorps program is administered at FSU through C-SAIT. The center was established in 1999 by Donald J. Foss, then-dean of the College of Arts and Sciences, in response to a directive by President Bill Clinton calling for a national effort to protect the nation’s infrastructure.

C-SAIT’s purpose is to coordinate the cybersecurity effort at FSU, to sponsor cybersecurity research and education, and to get funding to sponsor cybersecurity activities.



Computer science professor Mike Burmester heads FSU’s Center for Security and Assurance in Information Technology (C-SAIT).

Mike Burmester is a computer science professor and head of the center. (He is on sabbatical for the current academic year but will return in fall 2017.) He said the field is changing as hackers become more sophisticated.

“In 2001, the focus was mainly cryptography and network security, involving the protection of resources by using off-the-shelf crypto tools,” Burmester said. “Recently, the threat model has expanded to include nation-state hackers, and the

resources to be protected are vast. Hacking has become a profitable business, and it is not possible to guarantee security.”

Burmester said there is a shortage of good analysts, a problem that will get worse in the next few years. So what does it take to be a successful analyst?

“The skill set for analysts requires a combination of problem-solving, plus science, technology, engineering and math, plus social engineering,” Burmester said. But problem-solving, he said, is the key to success.



Capture-the-flag competitions are designed to challenge students to solve computer security problems.

Not all cybersecurity training is classroom-based. Students also compete in “capture-the-flag” competitions to hone those problem-solving skills. The competitions are designed to challenge students to solve computer security problems, including capturing and defending computer systems. Students gain experience in securing computer systems, as well as conducting and reacting to the sort of attacks found in the real world.

Liu says the FSU team ranks fifth among U.S. universities.

“CTFs are important for learning practical skills in cybersecurity,” said student Shawn Stone, who is seeking a master’s degree focused on reverse engineering, binary exploitation and forensics. “I have become familiar with different tools used in industry and have become familiar with the community.”



Mitch Schmidt is in his first year working toward a master’s degree in cybersecurity.

Mitch Schmidt is in his first year working toward a master’s degree in cybersecurity, specializing in binary exploitation, reverse engineering and cryptography.

“The competitions vary in difficulty from ‘doable’ with a lot of effort to insanely hard,” he said. “I can learn from many topics that will directly apply to my future career.”

In a world where work virtually stops when the internet goes down and important information is no longer filed away in metal cabinets, the need for cybersecurity experts and analysts will continue to grow. Expect FSU’s cybersecurity program, with strong grant support and high-caliber students, to grow right along with it. 🌟

Assessing the Threat

The website CSO Online, which reports on a broad range of cybersecurity topics, offers some sobering statistics:

- Global damages from cyber crime will reach \$6 trillion annually by 2021.
- Global spending on cybersecurity efforts are expected to exceed \$1 trillion over the next five years.
- Cyber crime will more than triple the number of unfilled cybersecurity jobs worldwide by 2021. There will be an estimated 3.5 million unfilled jobs over that time.
- Microsoft estimates that by 2020, 4 billion people will be online — twice the number that are online now.
- Global ransomware damage costs are expected to exceed \$5 billion globally in 2017 — a 1,500 percent increase in just two years.

Read more at <https://goo.gl/KVoX8Y>.



Tadarrayl Starke is director of FSU's Center for Academic Retention and Enhancement.

Taking CARE of students in need

FSU's Center for Academic Retention and Enhancement helps traditionally underrepresented students succeed

By Barbara Ash

Growing up in a low-income Miami neighborhood, the daughter of a single mother coping with multiple sclerosis and supporting two daughters on her disability benefits, Donae Adjei-Grundy never dreamed a college education was in the picture for her.

But fueled with a determination to escape the same dismal future for which many of her peers appeared destined, Adjei-Grundy studied hard and, with her mother's encouragement, excelled in the rigorous high-school International Baccalaureate (IB) program, graduating with honors. She also took her school counselor's advice and explored options that might allow her to attend college.

One of those options — and a first step toward making college a reality — was a component of Florida State University's Center for Academic Retention and Enhancement (CARE) — the Summer Bridge Program. The program was created to identify, recruit, motivate and help high-performing, economically disadvantaged high school students pursue higher education and develop the academic habits to succeed. Adjei-Grundy followed up on this college transition program and is grateful for the experience.

"I knew I had to get out of my situation, and that motivated me to do well," she said. "My mom forced me to learn on a higher level by going into the IB program so I'd have exposure

to other motivated students. Then CARE put me on a solid footing and helped me do things like filling out applications and accessing financial aid — and other things you don't know about as a first-generation student.”

Today, Adjei-Grundy is an FSU alumna. She graduated cum laude last spring with a Bachelor of Arts degree in English and a concentration in editing, writing and media, as well as a Bachelor of Arts degree in communication and digital media studies and a concentration in media/communication studies. She's on track to finish a master's degree in education at the University of South Florida next spring and begin work on a Ph.D. Her ultimate goal is to become a university dean for student affairs.

Adjei-Grundy is one of thousands of first-generation college students who in high school demonstrated a strong desire to succeed and took advantage of Florida State's multifaceted CARE, going on to achieve postgraduate degrees or landing in the kind of careers they never thought were within their reach.

CARE got its start almost 50 years ago as Horizons Unlimited, which was created to support the transition of minority students into Florida State. In 2000, that program evolved into today's CARE, whose mission is to provide equity and access to traditionally underrepresented students disadvantaged because of their educational and socioeconomic situations. The center is a department under both the Division of Student Affairs and Division of Undergraduate Studies.

This past spring, six students in the CARE program received an extra boost when the College of Arts and Sciences created a new scholarship — funded by private donor money and Dean Sam Huckaba's discretionary fund. Each of the students received \$1,000 for the semester. Moving forward, the scholarships will be awarded each fall and spring semester, increasing the amount to \$2,000 for the academic year. Recipients are selected based on academic merit and financial need and are nominated by CARE staff.

“We are very proud of the CARE program's great success and particularly pleased to see its students thrive,” Huckaba said. “I am hopeful that these scholarships will help high achieving CARE students make ends meet and



“I knew I had to get out of my situation, and that motivated me to do well,” says FSU alumna Donae Adjei-Grundy, who recently graduated with a degree in English.

enhance even further their FSU experience.”

In addition to connecting students to on-campus support services, like help filling out financial aid forms, finding housing, connecting to tutors or accessing technology, CARE staff also works with students on personal development to ensure that they are engaged in the college experience — a major factor in retention.

Tadarrayl Starke, the CARE director, knows young people want more than seems possible in their circumstances, and that for self-motivated students, CARE is a lifeline, a path to academic and personal success.

Starke is keenly aware of the challenges first-generation college students face, because as the youngest of seven children, growing up in a low-income neighborhood in Jacksonville, he was one of them. He had mentors from the university who saw his potential and encouraged him, and he possessed a strong work ethic.

He graduated in 2003 with a bachelor's in psychology, went on to earn a master's in higher education and is completing his doctorate. He has directed CARE for the past five years.

“Coming into college straight from the situations some of these young people grew up in is especially challenging, and though we look at that as an asset to success, some of these students don't really know what it takes to succeed in college,” Starke said.

“But these are kids who have come from tough environments and displayed resiliency and perseverance, the things you need to succeed at FSU. We know that given the opportunity, they will adapt and do well. Keeping them engaged is important to retention, as is helping them meet basic needs like food and living expenses. They deserve a chance, and championing them makes a difference.”

Miami native Candida Pouchie describes herself as hardworking, optimistic and a problem

solver. She has always strived to make her supportive single mother proud. In high school she maintained a 4.5 GPA, took college prep courses and got involved in TV production and business organizations. Though financial obstacles stood in her way, Pouchie was determined to attend college and applied to eight universities. She was accepted by six. It was CARE that sealed her decision to attend Florida State. She is one of the College of Arts and Sciences' scholarship recipients.

CARE staff facilitated the application process and helped her access several scholarships that eased her financial worries. Today, she calls CARE her home away from home. She says the program has solidified her tendency toward resiliency and is helping her attain her goals. Scheduled to graduate in December with a bachelor's degree in editing, writing and media, Pouchie has her heart set on a career in broadcast journalism.

In addition to the Summer Bridge Program, which has grown to become the largest program

of its kind in the country, other components of CARE are also designed to support students once they are on campus. Examples include a tutoring and computer lab that provides computer access, supplemental instruction and private study rooms. Student Support Services-STEM helps STEM majors connect to academic resources to ensure retention and graduation. The Unconquered Scholars Program offers wrap-around services for students previously classified as in foster care or homeless or in the care of relatives. Advising and College Life Coaching helps students see their academic path and develop into well-rounded students by promoting on-campus engagement.

Just as important are services such as the CARE Leadership Council, which gives students the opportunity to develop into leaders by allowing them a voice in programming and direction of CARE. In addition, the Transition, Engagement and Academic Mentoring (TEAM) Program and TEAM Leaders provide an opportunity for CARE students to mentor incoming students to ensure that they learn the nuances of college

life and ensure that no student is left isolated on the campus. Finally, the CARE Guides and Delegates help recruit and develop the next generation of students to the CARE family.

Grateful for her experience, Adjei-Grundy has stayed connected, serving as a mentor and a CARE ambassador, giving speeches about the program and helping raise funds in its support.

Pouchie is a work-study student in the CARE office and is thankful she found the center, which is helping her reach her academic goals and move on to a fulfilling career.

"Some of the challenges we go through can be so bad that they deter us from following our dreams," she said. "But through the people at CARE, I've developed an awareness that trials and tribulations are part of life and I've learned to treat them as a learning process, an opportunity to achieve."

Learn more about the services provided by the Center for Academic Retention and Enhancement at www.care.fsu.edu. 🌟

It was CARE that sealed English major Candida Pouchie's decision to attend Florida State.



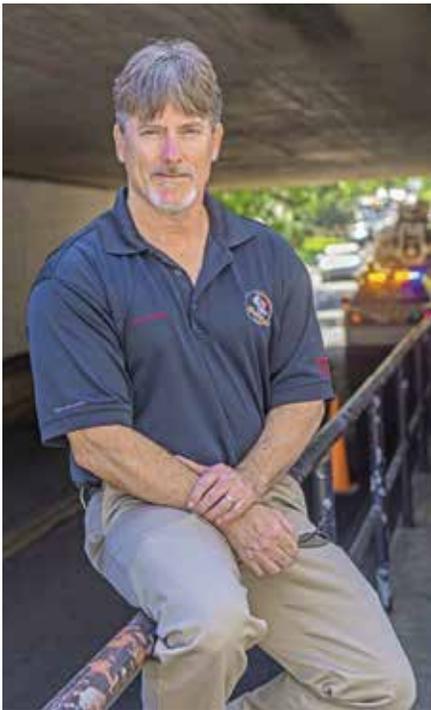
A risk worth taking

The Department of Mathematics is helping prepare students for successful actuarial careers

By William Lampkin

Say “actuary” to the average person and you likely will be met with a bit of head-scratching about what an actuary is.

But Steve Paris, a teaching faculty member in Florida State University’s Department of Mathematics and coordinator of the department’s actuarial science program, has a concise explanation: An actuary is someone who manages financial risk.



Ray Stanyard

Steve Paris coordinates the Department of Mathematics’ actuarial science program.

“You don’t want to eliminate all risk financially,” Paris said. “If you eliminate all risk, then you’re probably not going to experience very high returns on investments, for instance. But you do want to manage risk, and that’s what actuaries do.”

While actuaries work with risk, being an actuary doesn’t seem to be a risky career choice. In fact, actuaries are often listed among the best (Forbes), the highest-paying (Money) and the lowest-stress (Business Insider) jobs. The Bureau of Labor and Statistics’ Occupational Outlook Handbook says the employment prospects for actuaries will grow much faster than the average rate through 2024.

Those positives are reflected in participation in FSU’s actuarial science program, which is thriving with 250 enrolled students.

“We account for over 50 percent of the undergraduate students in the math department,” Paris said. That’s up from 90 actuarial science majors, or about 33 percent of all math majors, in 2009.

While there are a few graduate students focusing on actuarial science at FSU, it is predominantly an undergraduate program. The math department does offer a Financial Mathematics Master’s Program in which students can choose to concentrate in actuarial science. However, this concentration is intended for students already holding a bachelor’s degree in a major other than actuarial science.

“Actuarial employers want you to get experience,” Paris said. “It’s not a career that values education beyond a bachelor’s degree, other than passing the actuarial exams.”

Actuarial exams are an integral part of the career. There are two exam paths: the Society of Actuaries, which is the largest actuarial society and focuses on life insurance, retirement systems, health-benefit systems, and financial and investment management; and the Casualty Actuarial Society, which focuses on property and casualty insurance, reinsurance, finance and risk management. According to BeAnActuary.org, it takes between three and five years to pass enough exams to become credentialed as an



Bettye Anne Case, the Olga Larson Professor of Mathematics, helped start the actuarial science program in the 1990s.

Associate in either of the societies, and several more years of work experience and exams to become a Fellow, the highest credentialed level. Many Fellows also hold the Chartered Enterprise Risk Analyst credential.

FSU’s actuarial science program began in the 1990s under the auspices of Bettye Anne Case, the Olga Larson Professor of Mathematics, and Sam Huckaba, dean of the College of Arts and Sciences, who was then a professor in the math department. The first group of students in the program graduated around 1996.

“One reason we’ve grown so much is the emphasis we place on students passing actuarial exams, which makes them very competitive for jobs,” Paris said. “Our courses are designed to help students prepare for the actuarial exams.”

In 2016, 65 students in the program passed a total of 78 actuarial exams, he said. Those students were recognized with certificates at the department’s annual Math Honors Day this past April 7.

The exams aren’t cheap: The first couple cost \$225 each. But with support from alumni and supporters, the program has developed an exam reimbursement program. Students who pass the exams are reimbursed the full cost.

“A lot of alumni financially give back to this program,” Paris said, “and other friends and companies have done a great job of supporting it.”

That support is demonstrated by the program’s rate of growth. When it started 10 years ago, the program reimbursed about 25 percent of the exam fee. Now, it’s 100 percent.



Actuarial science major Maddie DeLoach graduated in May and already has a job lined up.

Maddie DeLoach is one of the students taking exams.

“I just passed my third exam in February, so it’s still a long road ahead,” the senior said. “I’m working on becoming a Fellow of the Casualty Actuarial Society, but it’ll be a few years at least before I can put those letters after my name.”

She graduated in May 2017 and starts work with Ernst & Young in Boston in August as an actuarial analyst on the property and casualty side.

DeLoach said she knew she wanted a career in math. When she was in high school, she read an article about what an actuary does and realized it was the job for her.

“Being able to apply both critical thinking and statistical-type skills along with interactive, client-facing work is part of the daily routine for a consulting actuary,” she said. “I always wanted to go to FSU, and when I saw that Florida State was one of the top schools in the nation for actuarial science, my decision was made for me.”

Alan Percal also came to FSU as a freshman intent on becoming an actuary. He graduated



Alumnus Courtney R. White is a principal and consulting actuary in the Atlanta office of Milliman.



Photo courtesy Steve Paris

In 2016, 65 students in the program passed a total of 78 actuarial exams. They were recognized with certificates at the department’s annual Math Honors Day this past April 7.

in spring 2015 and is now an Associate of the Society of Actuaries.

“Steve Paris taught my first actuarial class ever and structured the class in a way that every student would have a shot at passing their first exam if they put in the work,” Percal said. “He also made sure we had a lot of good companies coming on campus to present to and interview actuarial students, which made it a lot easier to get an internship and full-time job.”

Over the past year, around 20 businesses, including Aflac, Mercer, Milliman, New York Life, Travelers and WellCare Health Plans, have recruited on campus or hired FSU students for either full-time jobs or summer internships.

Percal knows the value of these opportunities firsthand. An internship at health insurance company Humana led to a full-time position, and he’s now a senior actuarial analyst at the company in Louisville, Kentucky.

Like DeLoach and Percal, Courtney R. White’s interest in actuarial science also began in high school and led him to FSU. But that was before the math department had an actuarial science program.

“I was one of the first students to connect with Professor Case (regarding becoming an actuary),” said White, who is a Fellow of the Society of Actuaries and a principal and consulting actuary in the Atlanta office of Milliman.

“I was a junior when they rolled out the program,” said White, “so it was too late for me to switch from applied math to actuarial science.”

While he wasn’t able to take advantage of FSU’s actuarial science program as a student, he turns to it for hiring. White said FSU students present themselves well, speak well during interviews, and are solid workers once on the job.

“The faculty and Steve Paris do a great job of preparing the students and providing them with future opportunities,” White said. “The FSU experience was great for me. College is about getting your education, but also finding the right fit. FSU has lots of opportunities and paths, you just need to try them.”

Contact Steve Paris at paris@math.fsu.edu if you’re interested in learning more about the actuarial science program or helping to offset the cost of students’ actuarial exams. 🌱

Actuaries, Actually

The U.S. Department of Labor’s Bureau of Labor Statistics offers insights into what actuaries can expect in the job market:

- 2016 Median Salary: \$100,610 per year. (The median salary for all professions was \$37,040 per year.)
- Top-Paying Industry for This Profession: Insurance agencies, brokerages and other insurance-related activities, with a 2016 median salary of \$126,310.
- Job Outlook, 2014-2024: An 18 percent increase is forecast. (The average growth rate for all occupations is 7 percent.)
- Work Environment: The largest employers of actuaries as of 2014 were as follows: finance and insurance, 71 percent; professional, scientific and technical services, 15 percent; management of companies and enterprises, 9 percent; and government, 4 percent.
- Work Schedules: Most actuaries work full time, and about 1 in 4 worked more than 40 hours per week in 2014.

Duly Noted

News and notes from around the College of Arts and Sciences

Faculty Accomplishments

Oceanographer Chanton named Lawton Professor



Jeffrey Chanton, an acclaimed climate scientist who has also done extensive work investigating the effects of the BP oil spill, has been named the 2017-2018 Robert O. Lawton Distinguished Professor, the highest honor given

by the Florida State faculty to one of its own.

"Jeff is a tremendous researcher and an asset to the Florida State University faculty," said FSU President John Thrasher on April 5. "In addition to an impressive research record, Jeff is an outstanding colleague to his fellow faculty members and mentor to his students. The faculty has made an excellent choice in naming Jeff this year's Lawton Distinguished Professor."

Chanton is the John Widmer Winchester Professor of Oceanography in the Department of Earth, Ocean and Atmospheric Science. He is a 29-year veteran of the university and a fellow of the American Geophysical Union.

"I just feel really great about this," Chanton said. "It's an amazing group of distinguished faculty who I'm joining that have received this honor. I owe a lot of the kudos to the people who I work with. They are really supportive, work independently, and I can count on them. And that's a really important thing."

Chanton's research has focused largely on climate change, examining the causes of increased methane gas in the atmosphere and changes in our environment that continue that trend. He has also done extensive work on the effects of the 2010 BP oil spill, including research on how methane-derived carbon from the spill entered the food web and how much of the oil sank to the ocean floor and mixed with the sediment.

Read more at <http://fla.st/2p6cuqY>.

MagLab director named fellow of AAAS



Until recently, Greg Boebinger counted on three fingers the high points of his career: earning three bachelor's degrees (simultaneously); snagging a job at storied Bell Laboratories as a young physicist; and becoming director of

the National High Magnetic Field Laboratory, headquartered at Florida State University.

But this past April brought news that now requires an extra digit: Boebinger has been named a fellow of the American Academy of Arts and Sciences (AAAS),

one of the country's highest professional honors.

As one of 228 new fellows, Boebinger is now part of an elite group, founded in 1780, that has included renowned statesmen (Thomas Jefferson, John F. Kennedy), scientists (Alexander Graham Bell, Jonas Salk) and artists (Martha Graham, Georgia O'Keeffe). Boebinger joins seven fellow Florida State faculty members on the Academy, including two MagLab colleagues, physicist Laura Greene and chemist Alan Marshall.

"I am deeply honored to be included among some of the leading minds and talents of our nation's history," Boebinger said of the award. "I had no idea I had been nominated."

The AAAS is one of the country's oldest learned societies and independent policy research centers, convening leaders from the academic, business, and government sectors to respond to the challenges facing the nation and the world. Boebinger will be formally inducted at the House of the Academy in Cambridge, Massachusetts, in October.

Read more at <http://fla.st/2pKjXML>.

Greene named president of American Physical Society



Laura Greene, the Francis Eppes Professor of Physics at Florida State and chief scientist at the FSU-affiliated National High Magnetic Field Laboratory (MagLab), took office Jan. 1 as the 103rd president of the American Physical Society

(APS), the nation's largest organization of physicists.

Greene, an internationally renowned condensed matter physicist, came to FSU and the MagLab in 2015. Her research involves investigating strongly correlated electron systems with a focus on high-temperature and other unconventional superconductors.

As APS president this year, Greene has decided to focus on human rights. United by their love of discovery, physicists have an important role to play, she said in the *Across the Spectrum* article. She recalled a recent meeting in Oman that drew a diverse group of scientists — Indians, Pakistanis, Palestinians, Omanis, Yemenis, Sunnis, Shiites, Jews.

"We get together from very disparate backgrounds that on paper should not be getting along at all," she said. "But we typically don't give a hoot about that. We just care about interacting over science."

Among her other accomplishments, Greene is a member of the National Academy of Sciences, an honor widely recognized as one of the highest a scientist can receive. She is also a fellow of the American Academy of Arts and Sciences and APS and is a former Guggenheim fellow. Greene has

co-authored more than 200 publications and given over 450 invited talks.

With more than 51,000 members, the APS is the nation's largest and most prestigious professional society dedicated to the advancement of physics research and knowledge.

Greene was featured in the Spring/Summer 2016 issue of Across the Spectrum. A .pdf version of the magazine is available at <http://fla.st/2pLYwis>.

Dalal named fellow of Royal Society of Chemistry



Chemistry professor Naresh Dalal has been named a fellow of the prestigious Royal Society of Chemistry in the United Kingdom.

Dalal, a 22-year veteran of the FSU Department of Chemistry and

Biochemistry and former department chair, was named a fellow of the society in recognition of his accomplishments in the field of information storage and materials science.

"It's such an honor, and I'm humbled by this," Dalal said. "This honor recognizes our contributions on an international level. And it obviously has a lot to do with my students over the last 35 years who have helped execute much of this work."

Dalal came to Florida State in 1995 from West Virginia University, drawn partly to the university because of the National High Magnetic Field Laboratory. Dalal used the MagLab to develop new magnetic materials that can be used for electronic information storage. Notably, he led a team that synthesized a material called Fe8 — a molecule made of eight iron ions that form a high magnetic field. That substance led to new kinds of medical imaging.

In 2012, he was named a Robert O. Lawton Professor, the highest honor given by Florida State University faculty members to one of their own. He is also a fellow of the American Association for the Advancement of Science, the American Chemical Society and the American Physical Society.

Read more at <http://fla.st/2kzb9pZ>.

English department's Kennedy selected for NEH grant



Associate Professor of English Meegan Kennedy has been selected as a recipient of a highly coveted grant from the National Endowment for the Humanities.

The \$50,400 grant will allow Kennedy, who teaches 19th-century British literature and the history of science and medicine, to focus on her research about how evolving technology for the microscope influenced scientific, cultural and even religious trends at the time.

Her research provides the foundation for a book she plans to complete during her yearlong fellowship titled “Beautiful Mechanism: The Bounds of Wonder in the Victorian Microscope.”

“I’m so excited,” Kennedy said of the book that she’s been researching for several years. “I really can’t wait.”

The microscope in the early 1800s was much more than a piece of scientific equipment sitting in a laboratory, Kennedy explained. People regarded it as a mystical contradiction of sorts. They described it as an extraordinary and transcendent tool, but almost in the same breath they would express fear and caution.

Read more at <http://fla.st/2pXsfVw>.

English department’s Kimbrell receives NEA fellowship



English professor James “Jimmy” Kimbrell has been chosen as one of 37 writers to receive a highly selective fellowship from the National Endowment for the Arts for 2017.

Kimbrell, who specializes in poetry, was selected from more than 1,800 eligible applicants for his second NEA individual creative writing fellowship. His first was in 2004.

“It is a tremendous honor to be among this year’s NEA Fellows,” said Kimbrell, who joined the FSU faculty in 2000. “There’s no better affirmation and encouragement than to be selected by a panel of one’s peers.”

The National Endowment for the Arts gives writers the time and space to create, revise, conduct research and connect with readers through the creative writing fellowships program. Applications are reviewed through an anonymous process on their artistic excellence. Fellowships of \$25,000 alternate between poetry and prose each year. There is a limit of two per lifetime.

“The NEA has an excellent record of supporting writers who have gone on to have impressive literary careers,” said NEA Director of Literature Amy Stolls. “With their talent and diverse backgrounds, this year’s Creative Writing Fellows, including James Kimbrell, will add to our country’s rich literary history.”

The NEA fellowship will enable Kimbrell to continue working on his new collection of poetry, currently titled “Flea Trap.”

It’s been a banner year for Kimbrell. In April, he received a highly competitive Guggenheim Fellowship for 2016 from the John Simon Guggenheim Memorial Foundation.

Read more at <http://fla.st/2pTQfsU>.

Alumni News

Chemistry alumnus Mark Thiemens honored by Meteoritical Society



Florida State chemistry alumnus Mark H. Thiemens (Ph.D., 1977), a former dean and professor of chemistry and biochemistry at the University of California, San Diego, has won the most prestigious prize awarded in the field of

meteoritics — the scientific discipline concerned with the study of solar system origin, evolution and history.

Thiemens, who served for 16 years as the founding dean of UC San Diego’s Division of Physical Sciences, was announced as the winner of the Leonard Medal for 2017 at the annual meeting in Berlin of the Meteoritical Society, the International Society for Meteoritics and Planetary Science. The prize was established in 1962 to honor the first president of the society, Frederick Leonard.

Thiemens, who stepped down as dean in July 2016 to spend more time on his research activities, received his undergraduate degree in chemistry from the University of Miami before earning his doctorate at FSU. He is a member of the National Academy of Sciences, the American Academy of Arts and Sciences, a two-time winner of the Alexander von Humboldt Award, and was awarded the prestigious E.O. Lawrence Award from the U.S. Department of Energy in 1998.

Read more at <https://goo.gl/Ou8Md0>.

In Memoriam

Kathleen Erndl, scholar of South Asian religions



Kathleen Erndl, a faculty member in the Department of Religion for 24 years, passed away suddenly on Feb. 19. She was 63.

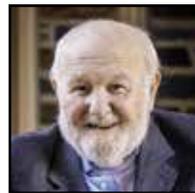
During her career at FSU, Erndl taught a wide range of courses at all levels of the curriculum on South Asian religion and culture, including courses on Hindu goddesses, the epic Ramayana, Hindu-Muslim conflict in India, Hindu

ethics, and Bollywood film, in addition to language classes in Sanskrit, Hindi and Urdu. She was widely recognized, by students and colleagues, as an excellent teacher, and received University Teaching Awards from FSU in 1997 and 2006.

After earning her undergraduate degree in comparative religions and anthropology from New College of Florida, Erndl received a Ph.D. in South Asian Language and Literature (Religions of South Asia) from the University of Wisconsin-Madison in 1987. Before arriving at Florida State, she taught at DePauw University, Lewis & Clark College, and the University of Wisconsin-Madison. In addition to serving on the faculty at FSU for almost a quarter-century, she was a courtesy professor in the Department of Religion at the University of Florida, and was affiliated with its Center for the Study of Hindu Traditions.

Read the Tallahassee Democrat’s obituary for Erndl at <https://goo.gl/StjVKi>.

Religion professor and administrator John Carey



John Carey, a progressive ordained minister who was the moral compass of university administration during a tumultuous time at Florida State, died March 2. He was 85.

Carey spent 26 years at FSU, from 1960 to 1986.

He arrived as university chaplain, helped found the Department of Religion in 1965 and served in several administrative roles. He became FSU’s first vice president for student affairs in 1967.

In Tallahassee, Carey was renowned as a liberal political activist, both on campus and in the community. He was involved in the civil rights movement, spoke out on women’s issues, led vigils against the death penalty and started a peace studies program at FSU.

Carey wrote or edited 12 books and published more than 60 scholarly articles. He was one of the nation’s leading authorities on influential theologian Paul Tillich. He won major FSU awards for undergraduate teaching and service to the university.

“John was just a born leader,” said FSU professor emeritus Robert Spivey, Carey’s college classmate at Duke who joined Carey at FSU to found the religion department. “He had good courage and excellent judgment. He made a career that reflected his faith and personal priorities. If something needed done, John was there to lead it.”

Read the Tallahassee Democrat’s obituary for Carey at <https://goo.gl/DtjV7>. ❖

Giving made easy

Jump-start your legacy via an IRA charitable rollover

By Barry Ray

Florida State University is nearly seven years into its eight-year “Raise the Torch: The Campaign for Florida State,” the most ambitious capital campaign in university history.

With a goal of \$1 billion, “Raise the Torch” is already helping the university improve the educational experience for students, hire and retain talented faculty, and serve as an economic engine for the state through research and job creation.

The campaign officially ends on June 30, 2018, so there is still time to contribute and thereby help the College of Arts and Sciences create “an atmosphere of excellence and the expectation of superior performance,” in the words of Dean Sam Huckaba. Fortunately, a mechanism exists that makes it easy for many individuals to support the college while simultaneously lowering their annual tax burden — the IRA Charitable Rollover.

The Protecting Americans from Tax Hikes (PATH) Act of 2015 permanently extended the IRA Charitable Rollover provision. This means that from now on, taxpayers ages 70½ or older can make an IRA transfer of up to \$100,000 directly to charity and claim it as a tax-free IRA Charitable Rollover gift.

Here are the relevant details for making an IRA Charitable Rollover gift to benefit the college:

- You must be 70½ or older when you make a gift, and the gift must be made from a traditional or Roth IRA. No other retirement plans (such as 401(k), 403(b), SIMPLE or SEP accounts) qualify.
- As a result of this new legislation, you may contribute up to \$100,000 in each year. This limit is per taxpayer. Thus, a husband and wife can each give up to \$100,000 from separate IRA accounts.
- Distributions must be made directly to the FSU Foundation and must be completed by Dec. 31, 2017.
- The IRA charitable distribution is not included in your taxable income; consequently, there is no charitable deduction available.
- Transfers also count toward your required minimum distribution.
- The IRA charitable distribution may be used to fulfill a pledge.

“The IRA Charitable Rollover provision gives many alumni and other friends of Florida State a way to take advantage of an incentive in the tax code and make an immediate difference for our students and faculty,” said Nancy Smilowitz, the College of Arts and Sciences’ assistant dean for development.

An IRA Charitable Rollover may be the right gift for you to make if:

- You wish to make a charitable gift and your IRA constitutes the largest share of your available assets.
- You are required to take a minimum

distribution from your IRA, but you do not need additional income.

- You do not itemize your deductions. In that case, a personal IRA distribution increases your taxable income without the benefit of an offsetting deduction. An IRA charitable rollover will not be included in your taxable income even if you do not itemize other deductions.
- You live in a state where retirement plan distributions are taxable on your state income tax return, but your state does not allow itemized charitable deductions.
- You would like to make an additional charitable gift, but it would not be deductible because of the annual limitation of 50 percent of adjusted gross income for charitable contributions. The IRA charitable rollover is equivalent to a deduction because it is not included in taxable income.
- You have an outstanding pledge to a charity. The IRA charitable rollover can satisfy a pledge without violating rules against self-dealing.

Your generosity is essential in helping the College of Arts and Sciences meet the needs of its students. So jump-start your legacy today by making a gift that will have an immediate impact on young people for years to come.

If you would like more information, or if you are preparing to make a direct-transfer charitable gift from your IRA, contact Smilowitz at (850) 294-1034 or nsmilowitz@fsu.edu. Learn more about Arts and Sciences programs at www.artsandsciences.fsu.edu and “Raise the Torch: The Campaign for Florida State” at <http://raisethetorch.fsu.edu/>. ❖



RAISE THE TORCH

for the COLLEGE of ARTS & SCIENCES

Your Development Team:

Nancy Smilowitz



Assistant Dean

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Assistant Dean for Development Nancy Smilowitz loves working with people who have a thirst for knowledge and a desire to enhance higher education. May 2017 marked 19 years that Nancy has been in the Office of Development at Florida State University's College of Arts and Sciences. She began at FSU as an associate director of development, became senior director in 2002 and assistant dean in 2008.

Nancy earned her bachelor's degree in sociology from Penn State University, where she also worked part time raising funds in the phone center. Between her time at Penn State and her arrival at FSU, Nancy served as the assistant director of annual giving at Ball State University in Muncie, Indiana.

Jeff Ereckson



Director of Development

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Jeff Ereckson was born and raised in the Florida Panhandle, growing up in Panama City, and graduated from high school in Pensacola in 1980. He earned his bachelor's degree in finance from FSU in 1985 and enjoyed a 17-year career as a financial consultant in Atlanta before returning to Tallahassee in 2005 to become Director of Planned Giving at the FSU Foundation. He also helped raise funds and gifts-in-kind to build the new President's House, which was completed in 2007. In 2009, Jeff joined the College of Arts and Sciences as Director of Development, became the PA announcer for the FSU baseball team in 2015, and continues to serve FSU in both roles today.

While in college, Jeff was a student senator and member of the Renegade Team, and was Chief Osceola in 1983 and 1984. As an alumnus, he was an active member of the Atlanta Seminole Club and served on the FSU Alumni Board and the College of Arts and Sciences Leadership Council for eight years. He and his wife, Renee, live in Tallahassee and have two grown sons.

Brett Lee



Development Officer

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Email: bwlee@foundation.fsu.edu

Brett Lee is a native of Crestview, Florida. In 2011, he earned a Bachelor of Science degree in marketing from Florida State. After graduation, he immediately accepted a position in Data Management with the FSU Foundation and worked most recently in the Foundation's Department of Gift Processing before moving over to the College of Arts and Sciences.

For fun, Brett plays on the FSU Foundation flag football team and enjoys hiking and kayaking. In his role as a development officer, he advances the many initiatives of the college and works with faculty staff and students throughout the university to raise interest and awareness among current and prospective donors.

Johanna Withers



Development Coordinator

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Johanna Withers, a Tallahassee native, graduated from FSU in 2010 with a bachelor's degree in humanities. From 2010 to 2013, she worked in the billing office of a local medical practice as a financial counselor. From 2013 to 2014, she worked as the administrative assistant of a Florida engineering firm, where she became familiar with proposal production and marketing strategies. From 2014 to 2016, she worked as an executive assistant at The National WWII Museum in New Orleans. She worked closely with the vice president of the expansion department, which managed all museum projects from concept to construction.

Johanna joined the College of Arts and Sciences development team in November 2016, where she is thrilled to be working for her alma mater.

Barry Ray



Media & Communications Officer

Office: (850) 644-6510
Email: beray@fsu.edu

Born and raised in Jacksonville, Florida, Barry Ray graduated from FSU in 1988 with a bachelor's degree in English literature. He has held communications positions in state government and with a daily newspaper, and has worked extensively as a freelance writer and editor. In 2005, Barry returned to FSU, working with University Communications to focus national and international media attention on the groundbreaking research and accomplishments of Florida State faculty.

Barry moved to the College of Arts and Sciences in 2013 and is excited about this opportunity to promote the college. He and his wife, Susan (a 1987 FSU grad), have two children.

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History alumna Jeanette Chapman (B.A., 1963), left, recently endowed an annual lecture series that brings world-renowned experts on the Middle East to Florida State University to discuss varying perspectives on current pressing issues. "This is an especially important time for people to learn about the Middle East, U.S. policy toward the region and how that policy affects the region and its relationship to the rest of the world," says Zeina Schlenoff, right, a teaching professor in FSU's Department of Modern Languages and Linguistics and director of the university's Middle East Center. Read more about the lecture series and the Middle East Center on page 5.