

COLLEGE OF PHARMACY / UNIVERSITY OF SOUTH CAROLINA / SPRING 2018

# Gamecock Pharmacist



OPPORTUNITY  
AT EVERY TURN

*plus*

'THE VERY BEST OF THE PROFESSION'

COUNTER CULTURE

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The USC College of Pharmacy compounding team, Kristen Arnall Spoon, Caroline Roberts and Rebecca Caughman took second place overall on March 17 in the National MEDISCA Student Pharmacist Compounding Competition in Hollywood, Fla.

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**On the Cover** — Patti Fabel, executive director of the Kennedy Pharmacy Innovation Center, with College of Pharmacy benefactors Bill and Lou Kennedy

## **SPRING 2018**

**College of Pharmacy**  
Dean / Stephen J. Cutler

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**STEPHEN J. CUTLER**  
DEAN OF PHARMACY

## *Dear Friends,*

One of the pleasures of Spring is anticipating the new growth and changes that lie ahead. I am eager for what will unfold this year at the University of South Carolina College of Pharmacy.

Last year we returned to our legacy program and reclaimed our identity as Gamecock pharmacists. We celebrated many successes, including a near 80 percent post-graduate residency match rate and a 42.8 percent increase in research funding. We also marked the 150th anniversary of pharmacy education at USC.

Recruitment of the most promising students continues to be a high priority. I am pleased to announce an early assurance admissions initiative that will offer early acceptance with no PCAT requirement to a highly select group of students.

I am extremely proud of our new strategic plan, which was created by stakeholders including faculty, staff, students, alumni and preceptors. It is designed as a roadmap to advance our mission: "to prepare the next generation of innovative and collaborative pharmacists and health scientists while pioneering clinical, entrepreneurial and research endeavors to improve health outcomes for residents of South Carolina and beyond."

New communication efforts will rebrand the college to stay current and supportive of our goals and strategic plan. This will also mean a more robust communications effort with you, our alumni.

Your support is critical to our success, and I hope you will join with us in leading your college into its next 150-year chapter. As you reflect on how the college has benefited you, please consider creating a named legacy for the college such as a scholarship endowment or other new initiative. We are also grateful for your gifts of time and expertise by serving as a preceptor, mentor or guest lecturer. Let us know how you want to be involved.

I wish you the best throughout the coming year.

*For Carolina,*



**"HE MIRRORS THE  
VERY BEST OF  
THE PROFESSION  
IN TERMS OF HOW  
HE PRACTICES  
COMMUNITY  
PHARMACY."  
- GENE REEDER**



Lynn Connelly and his wife, Frances, have served patients at the Medicine Mart in West Columbia since 1982.

# ‘The very best of the profession’

ALUMNUS NAMED NCPA NATIONAL PHARMACIST OF THE YEAR

**A** trusted practitioner. A pharmacy advocate. A community servant. Throughout his career, **Lynn Connelly**, ’78, has learned to master each of these roles.

Now Connelly, long-time owner of the West Columbia Medicine Mart, has earned national recognition, named in October as the National Community Pharmacists Association 2017 Willard B. Simmons Independent Pharmacist of the Year. The award comes on the heels of Connelly’s selection as the USC College of Pharmacy’s 2017 alumnus of the year.

“He mirrors the very best of the profession in terms of how he practices community pharmacy,” says Gene Reeder, director of outcomes research and distinguished professor emeritus at the College of Pharmacy.

Reeder, who nominated Connelly for the award, said Connelly’s leadership abilities stood out even in his college days when he was the treasurer and regent of Kappa Psi Pharmaceutical Fraternity. The sincerity of Connelly, a former Boy Scout leader who is active with his church, shines through whether he is counseling a patient or speaking to a politician. Connelly does not boast the loudest voice in the room, but he is a very effective advocate, Reeder said.

“I think it is his quiet passion,” he said. “He truly cares about his profession and the people he serves, and he wants the best for both.”

Connelly became a pharmacy advocate at the Statehouse when he began serving on the S.C. Pharmacy Association’s board about 15 years ago. After learning about the catastrophic effects of closed networks on independent community pharmacists in other states, Connelly’s persuasive voice led a chorus of pharmacists who propelled passage of the state’s Any Willing Provider bill. With other SCPHA leaders, he also successfully pushed for legislation that enables pharmacists to provide flu shots to their patients.

Moreover, he played an instrumental part in a three-year legislative effort that successfully enacted the state’s prescription monitoring program, now a critical tool for opioid abuse tracking. Connelly credits his lobbying success to thoroughly reviewing the issues at hand and relating issues in the pharmacy profession to the people involved. “You do your homework,” he explained.

Although it is time consuming, advocacy has an impact, Connelly says, and he wants to ensure that future pharmacists — like the students he and his wife, Frances, ’80, work with in their store — are positioned for success.

“I keep abreast of all the legislation that’s going on,” he said. “If I need to help make a change or get some people together to do it, I know who to call, and that’s passed onto the students. It’s paving the pathway for them to be able to practice like we have.”

The Connellys have been longtime friends and supporters of the College of Pharmacy. In addition to mentoring students on experiential learning rotations, they sponsor a community residency program at their store and provide support for student organization events. The Connellys established the Frances O. and Lynn Connelly Endowed Scholarship Fund in 2012.

“I learn from the students, they learn from me,” he said. “There’s a generational gap between us, but I don’t even see it or feel it. I know they’re my employees, but I also know I’m their mentor. They tell me new things about drugs that they’re learning in school, they tell me about new opportunities that are going on. It’s a synergistic thing where we help each other.”

Each year, Connelly speaks to pharmacy students about community pharmacy, and he serves on the college’s experiential education oversight committee as well as the Kennedy Pharmacy Innovation Center board.

Still, he was surprised by his selection as alumnus of the year. Connelly was driving when Dean Stephen Cutler called him to share the good news.

“I couldn’t believe it. I almost had to pull over,” he said. “I’m not an emotional kind of guy, but that really, really was cool.”



Frances and Lynn Connelly



# Rx for the future

FACULTY, STAFF DRIVE COLLEGE'S NEW STRATEGIC PLAN

Buoyed by its national accreditation as an independent pharmacy school, the University of South Carolina College of Pharmacy is launching a new era of pharmacy education.

Faculty and staff members in October approved the cornerstone of the college's renaissance, a five-year strategic plan.

In light of the college's separation from a joint pharmacy education program with the Medical University of South Carolina, the first priority is re-establishing and advancing the college's brand.

"With our transition to the USC College of Pharmacy well underway, we're now

focusing on increasing our program's visibility to prospective students, partners and alumni," Dean Stephen Cutler said. "Our strategic plan will bolster our branding and help us advance our mission of preparing the next generation of innovative and collaborative pharmacists and health scientists and improving health outcomes in South Carolina and beyond."

In addition, the college is focused on establishing partnerships, collaborations and strategic alliances to advance the college's teaching, service and research mission; driving the acquisition of self-generated revenue; ensuring the college has current and future research laboratory space and infrastructure to support the college's long-term research agenda, mission and accreditation; renewing and investing-to-build the college's focus on pharmacy administration (e.g. outcome science, business administration, health policy and pharmacoeconomics); and maximizing professional development opportunities and operational efficiencies for faculty and staff.

The college began charting its new course in spring 2017 with the development of mission and vision statements. That work identified six key areas of interest that were further explored by an executive steering committee appointed by Dean Stephen Cutler.

Chaired by **Scott Sutton**, chairman of the Department of Clinical Pharmacy and Outcomes Sciences, the committee included associate dean for assessment **Brie Dunn**, associate professor **Bryan Love**, director of outcomes research and distinguished professor emeritus **Gene Reeder**, associate professor **Mike Wyatt**, assistant

professor **Jill Turner** and assistant dean of finance **Keith Warren**.

Faculty and staff members from across the college volunteered to serve in six working groups, each tied to a key area. To support the groups, Bernard Consulting collected data and interviewed students, alumni, donors, preceptors, industry partners and other key stakeholders.

Informed by the 360-degree perspective of the college's position and future possibilities gleaned from Bernard's research, the working groups drafted specific initiatives for the plan.

"The direction that the college is moving was driven by the components of the college," Sutton said. "The goal is for there to be [faculty and staff] buy-in and engagement because they developed the plan versus executing a directive [from someone else]."

Led by Bernard's team, the working groups and executive steering committee met throughout summer and fall 2017, culminating in a half-day session where faculty and staff unanimously approved the plan. During the session, Bernard president John Deadwyler commended participants for their high level of commitment, reflection and productive dialogue.

"This thinking that you're putting in this plan and the discussions that you're having are very, very rich," he said. "You're seeing delta here, you're seeing a different approach. It's refreshing to see the kind of thinking you're putting in this, from my standpoint."

Following the plan's approval, the college's leadership team will assign deadlines and leaders to oversee specific objectives tied to each initiative. To view the plan online, log on to [sc.edu/pharmacy](http://sc.edu/pharmacy).





## COUNTER CULTURE

Renovated museum celebrates community pharmacy history

**M**useum curator **Kathy Quarles-Moore** leans her elbows on the glass top of a large wooden display case and turns her gaze around to light blue walls, rows of meticulously placed antique prescription bottles and a stamped copper tile soffit ceiling.

“Can you believe it?” she says. “It’s finally done.”

After three years of dreaming, planning, cataloguing and refurbishing under Quarles-Moore’s watchful eye, the College of Pharmacy’s museum has reopened as a showpiece. Located on the first floor of the Coker Life Sciences building, the remade museum resembles a late 1800s pharmacy. The space is anchored by an antique pharmacy counter donated by Olin B. Davis, turned to display the pharmacist’s side of the counter so that visitors can better understand how pharmacists practiced back then.

A show globe — the traditional display window symbol of an apothecary — hangs in the back, filled with green water, a nod to the college’s health and vitality. The show globe was presented as a gift to the college by **Beverly Quarles**, wife of alumnus **Wallace Quarles**.

“The museum’s new layout allows for easier navigation of the collection, and the college plans to capitalize on the space to promote the Pharm.D. program and teach students about pharmacy history,” Dean **Stephen Cutler** said.

The museum originally opened in 1992, the brainchild of dean emeritus **Julian Fincher**, an avid pharmacy historian who donated many items to the museum from his personal collection. Fincher canvassed the state for artifacts, and many retiring pharmacists entrusted their treasured objects to his care.

As more gifts-in-kind flowed to the museum, display space ran short, and pieces of the collection remained in boxes. Driven by

her love of pharmacy history, Quarles-Moore, a clinical instructor in the college, recruited a team of students to better organize the space. Together they created a digital catalog of the museum’s collection, logging more than 2,000 pieces. They researched and visited several pharmacy museums and created an inspiration board where they dreamed about what the museum could be.

Believing in their vision, dean emeritus **Randy Rowen** set aside necessary funds to renovate the museum prior to his retirement in 2016, and in light of support from Rowen and Fincher, the museum was rededicated in their honor on Nov. 16.

“I’m just very proud of it,” Rowen said. “I hope it means as much to our students here as it does to me.”

Because Rowen’s former office was located across the hallway from the museum, he often found himself acting as an impromptu docent, and as he spent more time there, his appreciation grew.

“The museum really initiates a lot of questions about pharmacy,” he said. “It gives you an opportunity to discuss what the profession is about — where it’s been and where it’s going.”

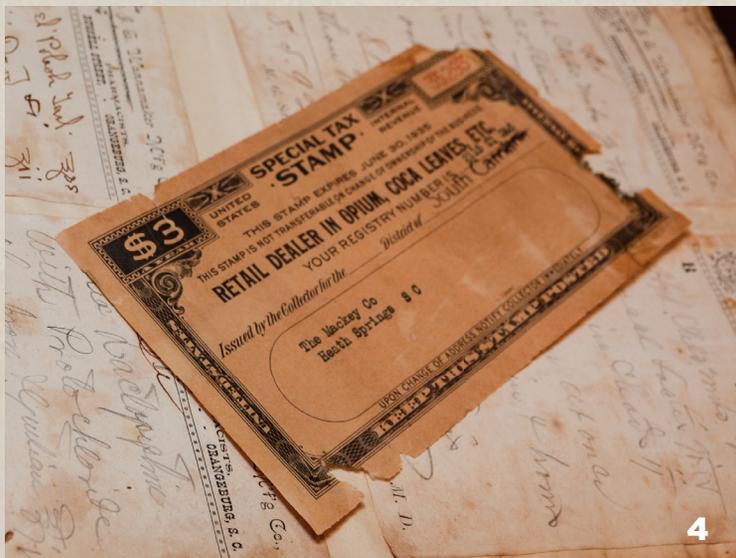
**Amy Yanicak**, ’16, who assisted Quarles-Moore and wrote a thesis about the restoration process, said cataloging the items brought them to life as the team talked about their history and their future in the museum.

“These items are also so important because they are tied to people who practiced the profession we all love,” she said. “These were the items they used as they were learning about pharmaceuticals at the university or working in their pharmacies in South Carolina. That is why I love this museum because it is full of the stories of the past and will bring those to future generations.”

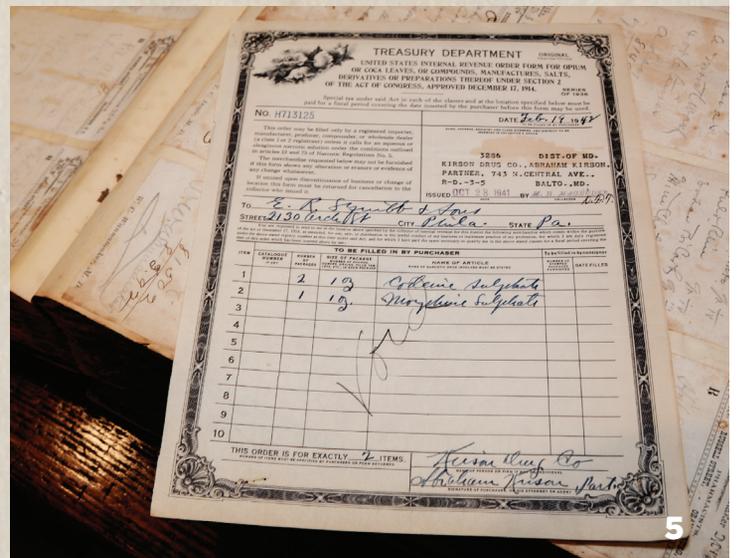


Beverly Quarles and Kathy Quarles-Moore

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4



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## Archives

### 1 | SHOW GLOBE

The 19th century show globe donated by Beverly Quarles, wife of alumnus Wallace Quarles, was one of a pair of globes that hung from 1933 to 1965 at Liberty Drug in New York (near where the World Trade Center now stands) before moving to the store's Chatham, N.J., location where it was displayed until 1986. The globe features hand-blown glass and is adorned by fancy plated brass.

### 2 | PHARMACY TEXTBOOK

This pharmacotherapy textbook, a favorite of Caroline Arnette, '16, and Amy Yanicak, '16, includes humorous doodles from previous owner Herman W. Watson and his notations about diseases such as tetanus, diphtheria and smallpox that are rarely encountered today.

### 3 | PRESCRIPTION LOGS

As the practice of written prescriptions became standard in the 19th century, pharmacists began to track the orders they had filled for easier retrieval, pasting prescriptions into large books or stringing them on copper wires or coat hangers.

### 4 & 5 | ORDER FOR COCA LEAVES

Beginning in the early 20th century, pharmacies interested in compounding or preparing opium or coca leaves had to obtain an order from the U.S. Treasury Department and a special tax stamp verifying their authority to be retail dealers in opium and coca leaves.

### 6 | PILL BOTTLES

The museum boasts an extensive collection of antique pill bottles, including strychnine arsenic eye drops, the favorite artifact of Joshua Agbunag, '17.



### SCHEDULE A TOUR

For an appointment to tour the museum, contact Terry Dixon, senior director of development and alumni relations, at [dixont@cop.sc.edu](mailto:dixont@cop.sc.edu) or 803-777-5426.

Q&A

# Opportunity *at every turn*

Kennedy Pharmacy Innovation Center helps students and alumni plot individual career paths.

**Patti Fabel was named executive director of the Kennedy Pharmacy Innovation Center last August after serving as interim director for seven months. She also serves as director of the College of Pharmacy's community residency program.**

**Fabel, a clinical associate professor in the College of Pharmacy, earned her Pharm.D. from the University of Rhode Island and completed a community pharmacy practice residency at the University of Georgia College of Pharmacy and Kroger Pharmacy. She shared her vision for leading KPIC in a recent interview.**

## ***What attracted you to the opportunity to lead KPIC?***

I have always been interested in moving the dial on pharmacy practice. Leading the Kennedy Center allows me to help pharmacies across the country and impact the profession on a larger scale. The more KPIC can get students and pharmacists to think differently and push the envelope with their practice, the faster change will happen.

## ***What is your vision for the Kennedy Center?***

First and foremost, we are building upon a strong foundation thanks to the talented professionals who have led and worked with KPIC in the past. We will continue to enhance the knowledge and educational experiences of our students while serving as a bridge to connect students with our talented alumni. We want to do everything possible to ensure that our students are ready for the incredible opportunities that await them after graduation. We will still hold our signature events — our ownership boot camp, our compounding boot camps and our business plan competition — and we will be growing our sterile compounding program.

We are here to not only educate our students but to inspire them as well. We want to broaden career opportunities for students and alumni. Competition for employment can be fierce, and we want our students to remain highly competitive. The Kennedy Center will show students how to differentiate themselves and sharpen their skills so they can create their own jobs beyond traditional career opportunities.

We want students to know about all possibilities including non-traditional career paths. Examples include consulting and embedding pharmacies within medical practices. We will connect them with pharmacists already working within these non-traditional spaces for learning purposes. A Pharm.D presents many unique career opportunities.



### ***What inspired your vision?***

I am often approached by community pharmacists interested in exploring different career paths once they are five to 10 years into their careers. The same thing holds true for students. Some are unsure about what to do after graduating. I knew the Kennedy Center could step in and provide connection opportunities to areas such as regulatory affairs, sterile compounding manufacturing or help them develop necessary skills to blaze a new career path. There are so many options you can choose with a pharmacy degree.

### ***KPIC is on the leading edge of practice innovation. What are the latest developments in this area?***

We are working to create new billing opportunities for community pharmacies. Rather than billing only from the pharmacy insurance side for the product, we are exploring billing options from the medical insurance side for enhanced services that keep patients healthier and out of the hospital. As an example, I have been working with Gene Reeder, our director of outcomes research, and an alumnus who owns a community pharmacy to develop data sets to explore that model with a payer group. This is important as the profession moves toward a quality-based business model.

We also started a residency program with Premise Health, which runs the employee health care for BMW in Greer. Our resident is embedded into the primary care medical team. She and the pharmacy team are developing collaborative practice agreements so they can see patients and manage their conditions.

### ***What are the next frontiers KPIC is pursuing?***

There is so much movement in technology and health care, and we want to equip pharmacists to play an active role in this field whether it's through app development, software development or other areas. We are sending our students to technology conferences, and they have impressed presenters with their ideas and passion.

Based on our past success and the growing demand for business-savvy pharmacists, we are growing our consulting services. Alan Spies recently joined our team and is an expert in leadership and management training. He is already helping our students and alumni be more productive and more effective in their daily work.

As we think about the future of patient care and the shift toward personalized medicine, there are so many possibilities in pharmacogenomics. We are bringing together clinical and research faculty to explore some of those opportunities.

### ***How can alumni get involved with KPIC?***

The short answer is call us! We want to hear from alumni who are interested in exploring unique career paths. We also want to help alumni who have ideas for practice innovations because we can help you bring those concepts to life. Our team can conduct research to build a strong methodology and help you design a sustainable business model. We can also educate your team and pull everyone on board with the change.



Dean Stephen Cutler (center) standing with past competitors of the KPIC business plan competition. More than 175 students have participated in the competition since its inception.

## MAKING OUR WAY

Pharmacy students describe how KPIC is helping them map their professional career paths.

### Eyes on residency

**Conor Myers**, 22, a third-year professional student from South Shore, Mass., came to USC without a career path in mind. A University 101 class taught by assistant dean of finance Keith Warren convinced him to give pharmacy a try, and he has never looked back. Myers, the Student Government Association president, parlayed work experience in the Walmart pharmacy near his hometown into a job involving sterile and non-sterile compounding at Palmetto Health Children's Hospital. That experience, in turn, put him on the radar of Nancy

Roberts, who runs the Kennedy Center's sterile compounding programs, which are held in the center's Aseptic Compounding Experience (ACE) lab.

"My performance at my job at the hospital has gotten much better because I learned what is best practice here from people who are so well-known in this field, and then I can take that back to where I work," he said. "I will talk to the pharmacists I work for and say, 'Hey, this is what I'm learning here. You should check it out.'"

As an ACE lab intern, Myers is part of a student team that performs weekly cleaning to maintain the lab's sterility. In addition, the interns help to prepare the lab for training sessions for pharmacists and technicians as well as observe participants and question them to ensure they are grasping the content.

"It has been a really eye-opening experience to see everything in the clean room and how precise everything has to be and how you have to do x, y and z at this time, this time, this time," he said. "It's a lot of specifics [to keep the clean room sterile], but it has really shown me how important the pharmacist is in this world."

Myers said working in the ACE lab is preparing him to take on a management role because the interns are invited into the big-picture conversations about the lab, sparking thinking about how to best manage workflow, adapt to regulatory changes and develop workforce talent.

In addition to his pharmacy jobs, Myers is treasurer of Phi Lambda Sigma and a member of the Rho Chi Society and the Student Society of Health-Systems Pharmacists.

"I didn't know I could learn this much!" he said of his experience at the College of Pharmacy.

### Compounding opportunities

Community pharmacy was always the end goal for **Kristen Spoon**. In her first semester, Spoon, 25, a fourth-year student from Kernersville, N.C., discovered her niche in the field: compounding.

"The main thing I like about it is the math," she said. "You can be creative. There are so many different dosage forms. I really enjoy getting to do something different all the time."

After gaining exposure in the introductory compounding lab, Spoon pursued scholarship opportunities through the Kennedy Center to attend Professional Compounding Centers of America training sessions. She gained hands-on experience in veterinary compounding, including one-on-one time with the animals, as well as advanced her overall compounding knowledge at conferences in Washington, D.C., and California.

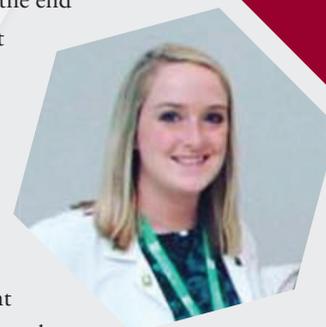
Spoon, who worked as an intern in the ACE lab, has also competed in Medisca's national student pharmacist compounding competition two years in a row with plans to repeat in 2018. In 2017, Carolina's team placed second in the nation and first for sportsmanship.

Although she describes herself as shy, Spoon said she felt confident and comfortable talking about the compounding poster her team created at the competition. "I really came out of my shell," she said.

In addition to compounding opportunities, Spoon also took part in KPIC's community pharmacy ownership boot camp, co-sponsored by the National Community Pharmacists Association.

When she meets students from other colleges, she said they are always surprised by the opportunities available to Carolina pharmacy students.

"People's first question is, 'How do you afford that?'" she said. "The first thing I say is, 'Our school is so supportive. We have got



amazing alumni that started KPIC, and I get reimbursed for a lot of these opportunities.' I talk about how much USC focuses on the students and how much they want us to go out there and do these things."

Even in Spoons's fourth year, KPIC scholarships have opened doors for her to take advantage of unique out-of-state rotations with a compounding bent. During her advanced practice experiences, she has been encouraged by her preceptors' affirmative feedback, and because of her strong compounding background, she has been able to skip some of the introductory work and enjoy more time honing her craft in the lab.

After graduation, Spoon will work in an independent pharmacy and manage its compounding business. "I could not have done any of this without the funds from the Kennedy Center," she said.

### **There's an app for that**

**Chuck Hennes** senses opportunity. With the health care technology market exploding, Chuck Hennes, 23, of Seneca, S.C., eyes openings for creative technology solutions to solve health care challenges, and he is eager to forge his own role in health innovation. With help from the Kennedy Center, he is building his IT and business acumen alongside his pharmacy education.

Hennes, a Walker Pharmacy Leadership Scholar, is enrolled in the business track and plans to apply this spring for the dual-degree master's of health information technology program.

The second-year professional student, who also works as a lab assistant for assistant professor Eugenia Broude, has already attended several conferences, including the Digital Health South East conference and KPIC's community pharmacy ownership boot camp, thanks to assistance from KPIC. He will also attend a medical entrepreneurship summit in the spring with KPIC financial support.



## **KENNEDY CENTER AT A GLANCE**

*The Kennedy Pharmacy Innovation Center opened in 2010 with a \$30 million gift from Bill, '66 pharmacy, and Lou Kennedy, '84 journalism. The center's mission is to create and fuel an influential cadre of pharmacists and educators equipped with a vibrant, innovative and entrepreneurial spirit to conquer the challenges of the changing health care landscape and transform the practice of pharmacy. Focus areas include:*

### **BUSINESS AND ENTREPRENEURSHIP EDUCATION**

- The Pharmacy Ownership Boot Camp has been held annually for four years, with 251 students participating (more than 150 from other colleges).
- KPIC launched the business and entrepreneurship track three years ago. Twenty students have successfully completed the requirements, which mirror a minor in business, and 52 students are currently enrolled.
- KPIC's business plan competition has been held for five years, with 175 students participating.

### **COMPOUNDING EDUCATION**

- The compounding boot camp, held in conjunction with the Professional Compounding Centers of America, has been held annually for five years, with 138 students participating.
- In the past three years, nearly 350 students have taken compounding elective courses sponsored by KPIC.

### **SCHOLARSHIPS**

- Over the past six years, KPIC has provided more than \$450,000 in scholarships to 279 students.

### **RESIDENCY TRAINING**

- KPIC has supported two post-graduate year one community pharmacy residency programs at Barney's Pharmacy in Augusta, Ga. and Medicine Mart Pharmacy in West Columbia. Nine pharmacists have successfully completed the program requirements.

### **PRACTICE INNOVATION**

- The Kennedy Pharmacy Innovation Center is actively engaged in the development of a sustainable business model where pharmacists, as a provider, are an integral part of care teams in Patient Centered Medical Homes (PCMH). The PCMH model is an approach to providing comprehensive primary care in a setting that facilitates partnerships and communication between patients, their personal physicians and other healthcare providers in a team approach to healthcare.
- KPIC created three pharmacist jobs that did not exist prior to the center's patient-centered medical home project.

Participating in professional conferences is helping Hennes to understand the innovation process from start to finish, including how potential clients evaluate technology purchases. At the digital health conference, other participants were intrigued to see a pharmacy student in attendance but welcomed his perspective, Hennes said.

“You get to have a lot of one-on-one talks with these experts and really learn about them and ask them questions like ‘How did you even get to this position? What kind of things should I be doing as a student right now?’” he said. “The one-on-one time was phenomenal.”

Hennes sees opportunities to develop apps or other IT solutions that advance data interpretation for researchers as well as products that link providers and pharmacists to real-time insurance data to reduce patient treatment delays because their prescribed medication does not comply with their plan’s formulary.

He credits KPIC for helping him to chart his own course by exposing him to various career paths where he can leverage his pharmacy education and for encouraging his diverse interests.

“It helped me realize that, more and more, I love the idea of innovation and that I love the idea of entrepreneurship,” he said. “Going to all these different programs, it gets my brain turning about what kind of new ideas I can come up with and what else I can do here right now. What can I start planning for after I graduate from pharmacy school and start my career? It just makes me really excited.

“At this school, I feel my options are unlimited.”

### **Getting down to business**

**Michelle Simons**, 24, of Lexington, S.C., never thought she could own her own business.

But after taking classes for the College of Pharmacy’s business track, the fourth-year professional student sees more possibilities for herself than she imagined. “I always thought [owning my own business] was something crazy, but not after the classes I have taken,” she said.

To complete the business track, which KPIC developed and oversees, students participate in certain electives, advanced experiential rotations, extracurricular activities and mentoring

programs designed to enhance their core business knowledge and pharmacy-focused business training.

There is no additional cost for students to earn the track certificate, and KPIC offers scholarship support for students to participate in related opportunities.

For instance, Simons is taking a class at Midlands Tech to finish her coursework, and KPIC offered assistance so she could participate in the community pharmacy ownership boot camp.

As part of the business track, Simons worked with three other students to write a business plan for a class assignment. Building on that draft, the team enhanced its plan and entered it in KPIC’s annual business plan competition. Based on the written plans, four teams were selected as finalists to pitch their plans to a panel of judges.

Simons’s team, Elevate Pharmacy and Wellness Center, proposed a holistic approach to health featuring a pharmacy; yoga, cooking and art classes; other stress relieving programs and a smoothie bar. The team placed first, earning a trip to the national business plan competition, held as part of Cardinal Health’s annual convention, as well as \$1,500 scholarships each.

The first-hand learning experience from the competition helped Simons understand the detailed financial planning necessary to develop a business, and she realized that she would rather buy an existing pharmacy than build one from scratch.

Participating in the business track has enhanced her finance knowledge and management skills, a strong selling point during interviews with prospective employers, Simons said.

Simons, who served last year as president of the college’s chapter of the National Community Pharmacists Association, is planning to pursue a community pharmacist role because she enjoys the patient interaction and ease of access to patients. Taking part in KPIC-sponsored activities has opened her eyes to other pharmacy career options, as well, she said.

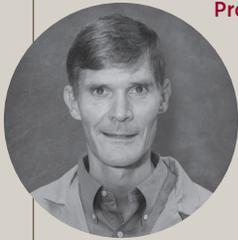




## GRANTS and AWARDS



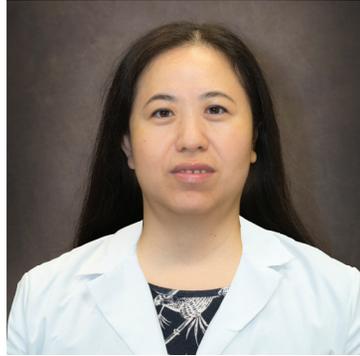
**Associate professor Hippokratris Kiaris** was awarded a \$3.9 million research infrastructure improvement grant from the National Science Foundation's Established Program to Stimulate Competitive Research. Along with collaborators from Claflin and Auburn universities, Kiaris, director of USC's Peromyscus Genetic Stock Center, will investigate how genetic differences in individual mice determine their fitness under stress. "With this grant, the PGSC will be positioned as the focal point for Peromyscus-associated research," he said.



**Professor Campbell McInnes** was awarded a two-year, \$143,000 grant from the National Cancer Institute to examine inhibitors of polo-like kinase 1, an oncogene correlated with a poor prognosis, particularly in colon and lung cancers. The McInnes lab is focused on developing targeted anti-cancer drugs that hamper cancer growth by disrupting the cell cycle.



**Professor and SmartState Endowed Chair in Translational Cancer Therapeutics Igor Roninson** was awarded a \$50,000 infrastructure grant from the St. Baldrick's Foundation for research equipment to advance pediatric cancer research. Roninson directs the Center for Targeted Therapeutics.



Assistant professor **Jing Fang** was awarded a five-year, \$1.68 million grant from the National Cancer Institute for her cancer research exploring the p62 protein, which is overexpressed in leukemia cells and associated with cancer growth. Building on her previous in vitro research, Fang will be examining the effects of knocking out the p62 protein in an in vivo study using genetic models to gain a better understanding of the protein's function and mechanisms. Such research, in turn, could be used to identify opportunities for the development of targeted therapies.



**Tyler Wagner**, a third-year pharmacy student from Seneca, S.C., earned the distinguished trainee award from the American College of Clinical Pharmacy. Wagner has been working with associate professor Brandon Bookstaver, '04, to build a database of patients at Palmetto Health Richland and Baptist with *Clostridium difficile*, and he is studying *C.diff* severity assessment and scoring systems to accurately predict clinical outcomes. Wagner presented his research at the 2017 ACCP annual meeting in Phoenix.



## Congratulations!

Congratulations to the USC College of Pharmacy compounding team of Kristen Arnall Spoon, Caroline Roberts and Rebecca Caughman that took second place overall in the National MEDISCA Student Pharmacist Compounding Competition in Hollywood, Fla., on March 17. A separate competition was the compounding challenge where one student from each team had one hour to create a non-sterile dosage form based on a physician's scenario. Rebecca Caughman won this competition by the judges' unanimous decision, earning a trip to the World Compounding Congress in Las Vegas in October 2018 for our team, including the advisor/coach.



Jeanette Walker, center, and scholarship recipients  
Anna Todd, Chuck Hennes, Meaghan Freiter and Laura Jane Straw



Nancy Ross, the Honorable J. Michael Ross, '76





Leon Finklin, '72, Linda Finklin, Wanda Nelson and Stan Nelson, '85



Martha and Julian Reynolds, '67, Lynn and Frances Connelly, '78, '80, Dean Stephen Cutler



Jonathan McFall, '12, Dr. Sara McFall, '12, Leanne Norris, '04, Michael Norris

## CELEBRATION OF SUPPORT

USC College of Pharmacy scholarship donors and student scholarship recipients connected over dinner at the Palmetto Club on Sept. 6. The annual event puts names and faces on the donors' generous scholarship investments in the college. Interested in establishing a named scholarship endowment? Contact Terry Dixon at **803-777-5426**.

The college also welcomed donors to its first Lowcountry Boil on Nov. 10 in Columbia. The inaugural event showed appreciation for philanthropic support of the college's endowments, annual giving drive and the White Coat campaign.



## OUR GIVING STORY

When **Dianne Rauch Karig**, '68, entered pharmacy school in 1963, less than 10 percent of the students were women.

Karig and other female students were trailblazers in the pharmacy profession, a field now heavily populated by women, overcoming significantly lower salaries and discriminatory treatment in the workplace. Although the professional environment has vastly improved for today's students, many still must overcome a significant obstacle to their success: crippling education loan debt, often into six figures and continuing to rise.

In honor of Dianne and to encourage bright students to pursue careers in pharmacy and lessen their financial burden, Karig's husband, **Arnold Karig**, Ph.D., dean emeritus of the Medical University of South Carolina's College of Pharmacy, recently established the Dianne Rauch Karig Scholarship Endowment. It will provide a scholarship for qualified pharmacy students at USC's College of Pharmacy.

Dianne Karig, a second-generation Gamecock, was a decorated student at Carolina and a member of the American Pharmacists Association, the Rho Chi Honors Society, Kappa Epsilon and Alpha Order. She worked part-time as a student pharmacist at the State Hospital under the supervision of Myrtle Mackey. Following graduation, she completed a hospital pharmacy residency at MUSC and worked as a pharmacist at Grady Hospital in Atlanta.

She returned to MUSC to work as a unit dose decentralized pharmacist on the pediatric floor, a novel practice concept at that time. After taking time off to raise her children, she later worked at Sea Island Comprehensive Health on John's Island and as a pharmacy consultant for Charleston County Home Health Service. The Karigs reside on Isle of Palms.

"The purpose of the scholarship is to recognize Dianne's many years of service to the pharmacy profession and as a way for her to leave a lasting legacy by helping future pharmacy students achieve their goals," Arnold Karig said. "A large increase in available scholarships can help students to reduce this debt burden and help colleges to attract the best and brightest students. We hope that establishing this scholarship will encourage many others to follow suit."

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*Above: Arnold Karig signs the gift agreement establishing the Dianne Rauch Karig Scholarship Endowment Fund.*

*Middle: Arnold Karig and Dean Stephen Cutler*

*Bottom: Thomas and Mary Jo Fuller, Dianne and Arnold Karig with their daughter Kristen Day take a tour of the renovated pharmacy museum.*



# Read & Repeat

251

Number of pharmacy students from USC and across the country who have participated in the college's Pharmacy Ownership Boot Camp, sponsored by the Kennedy Pharmacy Innovation Center.



May 14

19th Annual USC Pharmacy Alumni and Friends Golf Classic, located at Cobblestone Park in Blythewood, S.C.

For more information, contact Kathy Keenan, **803-777-1767**, or **keenankf@cop.sc.edu**

567

Number of pharmacy alumni who made gifts of financial support to the college last year. The College of Pharmacy had the largest number of alumni donors among the university's five health science schools and colleges.

25%

25 percent of the college's class of 2021 is comprised of minority students.



**WORLD CLASS**

The new Peromyscus Genetic Stock Center directed by Hippokratis Kiaris, associate professor in the College of Pharmacy, is the only one of its kind in the world.

► FOR INFORMATION, CONTACT TERRY DIXON AT 803.777.5426 OR TEDIXON@MAILBOX.SC.EDU



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College of Pharmacy

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### We make South Carolina healthier.

For nearly 20 years, preceptor Janet Thames has shown USC pharmacy students the healthy difference they can make by compassionately listening and caring for a community. It's a lesson that's paying dividends for the Palmetto State as USC graduates a highly trained corps of pharmacists every year.

## CAROLINA CHANGES EVERYTHING



▶ [SOUTHCAROLINA.EDU/HEALTHY](http://SOUTHCAROLINA.EDU/HEALTHY)



**JANET THAMES**  
OWNER, BLYTHEWOOD PHARMACY  
'00 PHARMACY, USC COLUMBIA

Janet Thames Pharm  
Blythewood