Gamecock Pharmacist

ELEVATING LEADERS

Alumni lend a helping hand to develop student leadership.





INTERIM DEAN JULIE M. SEASE

DEAR ALUMNI AND FRIENDS,

It is hard to believe that I have been serving as interim dean of our college for six months! Here we are, though, already at the beginning of the spring semester and I continue to be in awe of the amazing work being done by our students, faculty

While fulfilling our mission to prepare the next generation of innovative and collaborative pharmacists and health scientists, our faculty members are hard at work pioneering clinical, entrepreneurial and research endeavors that are certain to improve health outcomes for all residents of South Carolina and beyond.

Michael Shtutman, Scott Sutton and Michael Wyatt received a \$2.1 million Ro1 grant from the National Institutes of Health to develop and apply an integrative artificial intelligence-based approach to analyze biomedical datasets and electronic health records related to HIV and drugs of abuse interactions. This grant represents a firsttime collaboration between the college's Clinical Pharmacy and Outcomes Sciences and Drug Discovery and Biomedical Sciences departments.

Ozgur Sahin was selected as a 2021 Cancer Research Grant recipient on behalf of the Mary Kay Ash Foundation. This award will support his breast cancer research

In August, we welcomed 109 new Pharm.D. students with an average GPA of 3.63. Ethnic minorities make up 36.7 percent of this class, a significant increase over recent years. The class of 2021 boasted a 70 percent residency match rate, compared with a national rate of 65 percent, as well as a 90.9 percent four-year on-time graduation rate. Third year students Jordan Jones and Emily Brackett took first place in the state-level American Society of Health-System Pharmacists Clinical Skills Challenge, representing South Carolina at the Midyear conference. I am so grateful for the chance to get to know and work with such excellent student pharmacists each day.

I am even more excited for what is to come. The Diagnostic Genomics Lab, established to provide COVID-19 saliva testing for the university, offers immense potential for our students and researchers. From conducting genomic sequencing to cancer testing, such as liquid biopsy, the future is bright for this initiative, and we are moving toward a model that will place the lab in a position to become self-sustaining.

It has been some time since we have come together as a college family, and I am looking forward to the day when we will again enjoy in-person fellowship with our alumni, donors and supporters. It is, indeed, an exciting time to be a Gamecock pharmacist!

Forever to Thee,

Interim Dean of the College of Pharmacy



WINTER 2022

Dean / Interim Dean Julie M. Sease

Managing Editor / Margaret Gregory

Writer / Margaret Gregory

Copy Editor / Kathy Keenan

Photography / Jason Ayers, Malory Spicer, Kim Truett

Stay Connected

University homepage: sc.edu **COP homepage:** sc.edu/pharmacy

College of Pharmacy

University of South Carolina 715 Sumter Street Columbia, SC 29208

Phone: 803-777-4151







Social: UofSCPharm

ON THE COVER

The growth and experience of students, working professionals and pharmacists are shaping the profession for the next generation of pharmacists.

Communications and Public Affairs

The University of South Carolina is an equal opportunity institution, 21-11916 2/22

CONTENTS



IN THIS ISSUE

5 / WORKING TO END THE PANDEMIC

Spurred by the COVID-19 pandemic, the College of Pharmacy's Diagnostic Genomics Lab will provide tremendous value for students and researchers long after the pandemic ends.

6 / THE IMPACT OF SOCIAL MEDIA IN PHARMACY

In the world of pharmacy, social media is a useful tool. From large retailers to community pharmacies and in academic and clinical settings, social media is changing the way pharmacists communicate.

8 / PHARMACY DEGREE LEADS TO DIFFERENT PATHS

Diane and Andy McColl met as students in biochemistry class and both earned pharmacy degrees. With open minds, they each followed their own path to a successful career.

14 / INNOVATIVE TREATMENTS OVERCOME ANTIBIOTIC RESISTANCE

Two pharmacy alumni teamed up with a School of Medicine alumna to treat patients with antibiotic resistant diseases at Prisma Children's Hospital.

GAMECOCK PHARMACIST • COLLEGE OF PHARMACY UNIVERSITY OF SOUTH CAROLINA GUEST COLUMN COVID IN REVIEW



Let's take a moment to step back in time.

The department of Drug Discovery and Biomedical Sciences (formerly Basic Pharmaceutical Sciences) decreased by seven faculty members, totaling nearly 50 percent, between 2006 and 2009. There were a multitude of reasons, including the retirements of long-term stalwarts Walter Sowell, Joe Kosh and Joe Roberts.

Over the next decade, under the leadership of Kim Creek, faculty numbers strengthened, and research funding grew substantially. During this time, I witnessed and contributed to the growth, but more importantly, I learned a great deal from Kim. After serving as interim chair during the depths of the pandemic, I am excited about accepting the role as chair for a five-year term.

I felt compelled to serve as interim chair because the department is filled with hard-working colleagues who are a joy to work with. This past year proved how exceptional the department is with its response to the COVID-19 pandemic. Our Drug Discovery and Biomedical Sciences faculty members stepped up in the very earliest days of the pandemic to apply their

knowledge in the aid of our community, not just for the university but for the local community, including hospitals.

It is hard to overstate the accomplishment of establishing the Diagnostic Genomics Lab in our college, and there are too many people to thank in this space. The Diagnostic Genomics Lab has the capacity to test more than 2,000 saliva samples per day for the novel coronavirus and has tested more than 150,000 samples in its one year of existence. And this occurred on top of many other exciting accomplishments, including multiple R01 grants from the National Institutes of Health and other competitive grants. I am especially excited about the recent five-year NIH R01 award totaling \$2.1 million as the result of a first-ever collaboration between DDBS and the Clinical Pharmacy Outcomes Sciences department.

This is an exciting time for our College of Pharmacy with the accomplishments in research, teaching and service that DDBS is achieving, and I cannot wait to share more about these developments in future correspondence.



Working to end the pandemic

When the COVID-19 pandemic began in February 2020, no one imagined that nearly two years later, we would still be struggling to bring it under control. More people have been impacted by the disease across every population than any other prior public health threat.

The College of Pharmacy has continued its efforts to reduce the impact of COVID-19 on our campus and in our communities across the state. Carolyn Banister's team in the Diagnostic Genomics Lab has worked around the clock, processing as many as 2,000 saliva samples in a day for students, faculty and staff members and university employees' family members.

"We are also conducting sequencing of the entire viral genome to determine if any variants might appear that haven't yet been described," Banister says.

The College of Pharmacy went further, providing testing for other institutes of higher learning and for organizations across the state including the South Carolina General Assembly and the South Carolina Philharmonic.

Initial funding came from the CARES Act and from the state legislature through the Joint Bond Review Committee and has been continued through financial support from the university.

Banister is especially grateful for the ongoing support that students provide to the initiative.

"Students have been supporting the collection sites and working in the lab to help process samples," Banister says. "Some College of Pharmacy students have been with us from the first day. It is good to have the consistency, and they realize they are contributing to an important public health service."

Banister says the lab will provide tremendous value for students and researchers within the college long after the pandemic ends.

"The opportunity to work in a lab such as this opens their eyes to new career opportunities," she says.

Students and researchers will benefit from having this lab available for future learning opportunities. Researchers may even use the lab for advanced testing abilities for cancer, such as liquid biopsy, a cutting-edge test that can find new cancer growth containing as few as one million cells.

"This lab, developed out of the need to address the pandemic, will be of immense importance to our community down the road," Banister says. "It will further enhance the skills of pharmacists who graduate from our program by having the opportunity to interact with the lab during their time



From community pharmacies to clinical education, social media is changing how pharmacists communicate

It is an undeniable fact that social media has infiltrated nearly every aspect of our daily lives. Whether it is Facebook, Instagram, Twitter or LinkedIn, most of us log in to social media for personal or professional use.

In the world of pharmacy, social media has become a useful promotional tool in retail businesses as well as academic and clinical settings. Professional organizations such as the American College of Clinical Pharmacy, the American Association of Colleges of Pharmacy and the American Society of Health-System Pharmacists have developed guidelines on best practices in using social media.

For community pharmacies, social media has become a touchpoint for their patients and customers, informing them of important events such as vaccination clinics, educational seminars and sale specials, and helping customers learn more about the staff.

Addison Livingston, '97, owner of Hawthorne Pharmacy and Medical Equipment in Columbia, South Carolina, recognized that promoting his stores through social media was a business necessity.

"I knew it would be imperative that we have a social media presence in today's world to promote ourselves as innovative and knowledgeable," he says. "All of that brings value to our patients."

Livingston recognized that if his company was going to be active on social media, he needed to have someone on his team who was trained in its use. So he hired **Andrea Fuhrman**, who earned her bachelor's degree from the University of South Carolina School of Journalism and Mass Communications and a Master of Business Administration from the Darla Moore School of Business.

"One of my biggest challenges is to ensure we are putting out communications that are

tailored specifically for each of our stores," she says. "Understanding the demographics of each store and the clientele they serve is a key part of producing appropriate messaging."

At Medicine Mart in West Columbia, South Carolina, owner **Lynn Connelly**, '78, admits that while he does not post on social media himself, he understands the need for a social media presence.

"We can tell when we post health tips or an event coming up that we get a response from our customers," Connelly says. "It helps enhance the trust our patients have in us."

Jennifer Wicker, a pharmacy technician at Medicine Mart, coordinates the social media efforts for the store by creating posts and using content provided by third-party companies.



and Instagram.

better clinician.



"We use RxLocal and SOCi," she says,

"and with one click, I can post to all our

Since **Jarrod Tippins**, '09, opened THE

We used targeted advertising and saw an

immediate impact, starting from day one,

filling around 33 prescriptions a day, to

several hundred daily," he says. "I've tried

all methods and I feel I get more bang for

my advertising dollar by boosting posts through social media advertising."

Clinical pharmacists are finding social

media to be helpful in sharing information

and networking among colleagues. Julie

Ann Justo, clinical associate professor in

the department of Clinical Pharmacy and

Outcomes Sciences, uses Twitter to share

information and says it helps make her a

"Key thought leaders in my field are already

prominent on Twitter," she says. "Using

social media gives me the ability to reach

worlds, gather information about new

clinical trials, and ask real-world clinical

and historical evidence. It's also a great

Brandon Bookstaver, '04, who helped

research health practitioners' views on

social media as an educational resource,

limits his social media use to Twitter and

uses the platform to keep up with medical

literature. He actively promotes tweets from

colleagues and shares news about students

them about infectious diseases."

in the College of Pharmacy.

questions. I can stay up-to-date on current

way to quiz my trainee followers and teach

out to the pharmacy and infectious diseases

platforms — Facebook, Twitter, Instagram and LinkedIn — and even our website."













"This is a way for us to highlight what our alums, colleagues and trainees are doing while giving them recognition," Bookstaver says. "I have been able to connect with people for a multi-center research study, and I have helped people who are trying

Pharmacy in Florence, South Carolina, in 2016, he has used social media to promote his pharmacy, primarily through Facebook their site."

Social media even provides an opportunity for students to grow their networks and search for positions after graduation.

Madeline Belk, '19, is an infectious diseases pharmacy specialist at Huntsville Hospital in Alabama. Twitter is also her social media platform of choice.

"I got my feet wet using Twitter when I went to the Midyear conference as a P4 because speakers were tweeting information about their presentations," she says.

Belk also used Twitter to help her stay accountable while studying for the NAPLEX exam.

"I posted 'pearls' every day as I studied, and that led to meeting other students," she says. "Other pharmacists were sharing their experiences. As a PGY-1, I shared my continuing education presentations, which was a great source of content."

Belk continues to use social media as a pharmacy professional, recently appearing on a podcast to discuss tips and tricks in using social media.

No matter your role, whether as a business owner, practitioner, educator or student, social media has proven to be a valuable resource and can be another tool used to impact the future of the profession and improve and advance the future of health care.







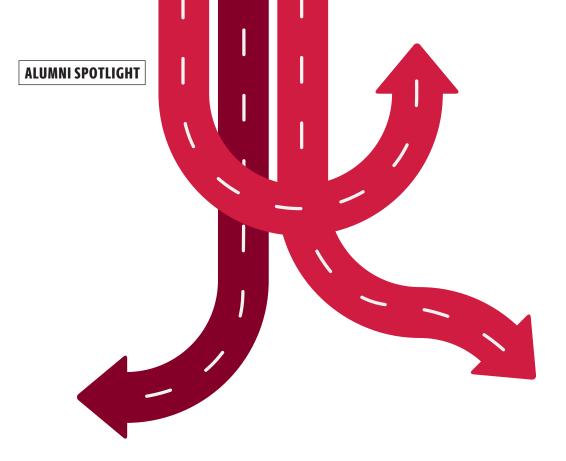






6 GAMECOCK PHARMACIST • COLLEGE OF PHARMACY

UNIVERSITY OF SOUTH CAROLINA 7



PHARMACY DEGREES LEAD TO DIFFERENT PATHS

Diane and Andy McColl met as students in biochemistry class at UofSC College of Pharmacy



"Andy and I sat next to each other in Dr. Beamer's class" Diane McColl says. "I think he wanted to be friends so he could borrow my student I.D. to take Columbia College girls to the football games, but we hit it off."

Andy McColl pursued a pharmacy degree after working in his hometown drugstore in McColl, South Carolina. And yes, he is distantly related to the town's founder and namesake.

"I worked for T.D. Williams (B.A. Pharmacy, 1943), and he was probably the most respected man in the town," he says. "I thought pharmacy was the way to go. I got to deal with people every day, which I enjoy."

Diane's path to pharmacy school was more about job security.

"I didn't have any personal experiences with pharmacy, but I thought we will always need pharmacists," she says.

Andy graduated with his Bachelor of Science in Pharmacy in 1975. Diane earned her pharmacy degree in August 1976, and they were married in September. The newlyweds moved to Chattanooga, Tennessee, where they worked in retail pharmacies. At the time, Andy thought about opening his own pharmacy.

"One of the reasons I went to Chattanooga was to see how the competition and the chains worked. If I was going to be an independent pharmacist, I needed to know that," he says.

But fate had another plan in store. Andy decided to earn a law degree from UofSC School of Law, so they moved to Greenville, South Carolina, to qualify for in-state tuition. He and Diane continued working in retail pharmacies.

"I always had an interest in law, and it was just something I wanted to do," he says.

Andy completed his law degree in 1981, then began searching for an opportunity to put both degrees to use. He applied to join the Federal Bureau of Investigation.

"The FBI was able to combine their law enforcement efforts with drug enforcement and that was a no-brainer for me." he says.

In the meantime, he encouraged Diane to seek a law degree as well, as she had become discouraged in the retail setting.

"There really was no opportunity
to advance unless you became
a supervisor over several
stores," she says. "That
means you are on the road,
and I didn't want to do that.
When Andy suggested law
school, that opened so many
more doors."

Diane earned a scholarship and began her law studies. The FBI had a temporary hiring freeze, so Andy continued working as a pharmacist until April 1982, when he was sent to Quantico, Virginia, for 15 weeks of training.

Then, when Diane was expecting their first child during her second year of law school, life threw them another curve — Andy was transferred to Houston, Texas.

"We moved to Houston with a six-week-old baby and two dogs in July 1983," Diane says. "And Hurricane Alicia hit just two weeks later!"

In the field office in Houston, Andy became one of the first members of the Gulf Coast Organized Crime Drug Enforcement Task Force, where he investigated a variety of cases, ranging from outlaw motorcycle gangs to Colombian drug lords.

Fortunately, Diane was able to complete her final year of law school in Houston, meeting all the requirements for the

South Carolina School of Law, graduating in 1984.

That same year, the McColls relocated to Washington, D.C. Andy spent the next 21 years working on drug enforcement and public corruption cases and supervising the Strategic Information and Operations Command Center at FBI headquarters.

Andy was involved in several high-profile cases during his career, including the investigation into the drug-related death of former University of Maryland basketball star Len Bias and the corruption investigation of Michael Deaver, former White House deputy chief

of staff who was accused of conflict-ofinterest violations.

After graduation, Diane focused on public product liability defense work. With Andy's transfer to the nation's capital, she was approached by law firms intrigued by her background in pharmacy, encouraging her to consider food and drug law. She eventually joined the firm of Hyman, Phelps & McNamara, PC, the nation's largest boutique food and drug law firm, becoming the firm's ninth director and its first female director.

She was a member of the U.S.

Pharmacopoeia Food Ingredients Expert
Committee and served as president of the
Council of the International Society of
Regulatory Toxicology and Pharmacology,
among other distinguished professional
memberships.

Both Diane and Andy credit their backgrounds in pharmacy for their success in their careers.

"I never could have become the type of food and drug lawyer that I am without my pharmacy education and experience," Diane says.

"Our pharmacy degrees have been integral to everything we have done," Andy says. "I had a unique niche in the work that I did. I helped bring a different perspective to the cases I worked.

"It's a life lesson. You have to keep your mind open to other paths where you can use your pharmacy degree as a jumping point. You never know where your opportunities will come from."

8 GAMECOCK PHARMACIST • COLLEGE OF PHARMACY

UNIVERSITY OF SOUTH CAROLINA 9

STUDENT LEADERSHIP STUDENT LEADERSHIP

Mentoring our next leaders

College of Pharmacy alumni help students build leadership skills











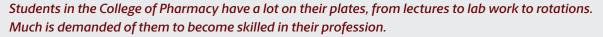
Johnson



Leighton



Brackett



Just as important are their leadership abilities, "Different people have different leadership which can take on many distinct roles. While some students have a natural tendency to lead, others step into leadership gradually by participating in extracurricular programs, getting involved in professional organizations or joining study groups. No matter how a student gains leadership skills, those abilities will serve them throughout their career.

Jennifer Bair, '99, executive director of Pharmacy for Prisma Health – Midlands, did not recognize how much she would gain from her leadership roles in college until she began her career. Active in several organizations as a student, Bair advocates that networking is the key to getting things done.

"Creating relationships is important to leadership," she says, "and getting involved is a way to create those relationships throughout your entire career."

Bair, who helped launch the college's chapter of the Student Society of Health-System Pharmacists and was a member of Kappa Psi, Kappa Epsilon and the Student National Pharmaceutical Association, says that observing how others led influenced her style of leadership.

skillsets, and watching others helped me determine how I wanted to be as a leader," she says. "What other ways will students learn except by having mentors who came before them? Being a mentor reinvigorates me."

Sam McCallum, '18, is associate safety director for Genentech, a biotechnology company researching groundbreaking science to discover and develop medicines for people with serious and life-threatening diseases.

McCallum participated in Phi Lambda Sigma and Phi Delta Chi and served as president of the college's American Pharmacists Association-Academy of Student Pharmacists chapter.

"Getting involved always seems to position people for success," he says. "There is an adage — 'opportunity looks like hard work' — and that cannot be more true for student organizations."

As an alumnus, McCallum feels an obligation to support students in finding their futures.

"My path has been paved by those who stepped out of the mold of the traditional

pharmacist," he says. "It takes involved alumni to serve as role models and reveal those connections to new opportunities."

Meg Freiter, '19, is a senior manager of pharmacy practice with the American Pharmacists Association. She completed a legislative internship with the American Society of Consultant Pharmacists and rotations in health care advocacy with APhA and the National Community Pharmacists Association.

Freiter served as class president, vice president of Rho Chi and graduated with leadership distinction as a Walker Leadership Scholar.

"My career has been entirely impacted by the Walker Leadership Scholars program," Freiter says. "I had the chance to collaborate with faculty, doing needs assessments, and put what we developed into practice. It gave me hands-on experience in program development.

"Remaining connected to the College of Pharmacy is a wonderful way to remain inspired. It serves as a reminder of how you can be a spark for someone else."



Asia Johnson, '21, served as president of the Student Government Association, along with a host of other student organizations, including KE, PLS, APhA, ASHP and ACCP.

"Taking part in all these organizations taught me so much about myself," she says. "Interacting with others helped me learn how to communicate with various personalities and gather context on the best way to work with others."

Jordan Jones, class of 2023, who is a member of the Pediatric Pharmacy Association, PLS, president of Rho Chi and a Walker Leadership Scholar, spent her first year as a pharmacy student trying to determine in what field of pharmacy she might want to concentrate.

"I decided to apply for the Walker Leadership Scholars program to grow more confident as a leader. I chose to run for president of Rho Chi to further build on my leadership experience and was able to become more organized," she says.

Shannon Leighton, class of 2023, is president of SNPhA and a member of PLS, APhA, KE and a Walker Leadership Scholar. She also volunteers for the Gamecock Pharmacy Assurance program, providing insight to prepharmacy students as they transition to the professional program.

She also feels supported by alumni of the Walker Leadership Scholars program.

"Prior scholars who have graduated have reached out to us and shared their experiences," she says. "To have their insight helps me discern what I want to do, and I hope to be able to do the same for others after I graduate."

Emily Brackett, class of 2023, is the current Student Government Association president and is active with SNPhA as chair for Carolina Cares 4 Kids, among other leadership roles.

"When I get to rotations, preceptors will be looking for problem solvers, and serving in these roles has taught me how to work under pressure," Brackett says. "I want to encourage alumni to stay active with the college. We love to hear from them in how they chose their goals, and it's important to remember that someone did it for them."

To learn more about supporting students at the College of Pharmacy as a mentor, friend of the college or through financial support, contact Terry Dixon, senior director of development at tedixon@cop.sc.edu or 803-777-5426.

11 GAMECOCK PHARMACIST • COLLEGE OF PHARMACY UNIVERSITY OF SOUTH CAROLINA 11

Certificate program trains pharmacists to share knowledge

In recognizing the need for pharmacists to impart their expertise and knowledge to others, the Clinical Teaching Certificate program helps pharmacy residents hone their skills as mentors, preceptors and academicians. The year-long program produces life-long educators through professional development workshops, hands-on learning activities and opportunities to create educational experiences in academic and clinical practice settings.

The program is led by codirectors **Brandon Bookstaver**, '04, associate professor and director of Residency and Fellowship Training and **Brie Dunn**, associate dean for Outcomes Assessment and Accreditation for the College

Bookstaver says the program offers tracks in academia and precepting and teaches robust skills.

"We cover the gamut of meaningful skills for both tracks," he says, "including developing a syllabus for a didactic course, transitioning from a resident to a new practitioner and getting them engaged in the classroom."

Reagan Barfield, '19, is a clinical assistant professor and program coordinator for the Tandem Health-UofSC Postgraduate Year 1 Residency program. She believed her passion for medicine and teaching would translate into direct patient care, but that changed when she precepted her first student.

"I enjoyed that first experience of teaching in a clinical setting and the interaction I had with the students," Barfield says. "That led me to ultimately pursue the academician track, which helped prepare me for effective precepting and grew my confidence in the classroom."

Kayla Antosz, '19, joined the College of Pharmacy in October as a clinical instructor and lead antimicrobial stewardship pharmacist for the Antimicrobial Stewardship Collaborative of South Carolina. She also found her way to academia through the CTC program.

"As a resident, I was originally interested in the precepting track. Taking part in this program was the perfect time to dive in and explore all the opportunities," she says.

Dunn, who handles logistics and assessments for the program, says it is helpful for participants to have someone who can share their experiences.

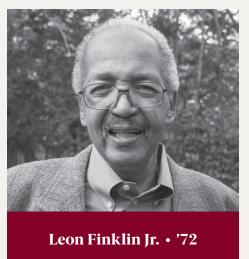
"There is an opportunity for alumni who are already serving as preceptors to step in as mentors," she says.

The program serves residents from across the state, including the Columbia VA Health Care System, Hawthorne Pharmacy, Lexington Medical Center, McLeod Regional Medical Center, Medicine Mart, Premise Health, Prisma Health Richland, Prisma Health Upstate, Spartanburg Regional Medical Center and Tandem Health.

REMEMBERING OUR PIONEERS







Dianne Rauch Karig graduated from the College of Pharmacy with a Bachelor of Science in Pharmacy in 1968, when fewer than ten percent of the college's students were women.

She was a decorated student — a member of the American Pharmacists Association, the Rho Chi Honor Society, Kappa Epsilon and Alpha Order.

After completing her residency at the Medical University of South Carolina, Karig worked at Emory Hospital in Atlanta, Georgia. She returned to MUSC as a unit dose decentralized pharmacist on the pediatric floor, a novel practice concept at the time.

In honor of her achievements, the Dianne Rauch Karig Scholarship Endowment was established in 2017 by her husband, Arnold, to encourage students to pursue careers in pharmacy and to lessen their financial burden.

"Dianne was among the women trailblazers in the pharmacy profession," Karig says. "She will be remembered for her intelligence, elegance and grace. We are grateful to know that she touched so many lives."

Dianne Karig died July 19, at age 76.

Marvin Hyatt earned his Bachelor of Science in Pharmacy in 1959 from the College of Pharmacy. In 1963, Hyatt opened Good was known for his warm smile.

Hyatt took an active role in promoting the profession of pharmacy, serving on the South Carolina Board of Pharmacy for 12 years and one term as chair. He was honored with a commendation from the South Carolina Legislature.

His wife, Lois, recalls that he was dedicated to supporting young pharmacists. "He mentored many students and pharmacists in their careers," she says, "and he loved the university."

Together, they established a scholarship fund within the College of Pharmacy. Hyatt received the Outstanding Alumni Award in 2010.

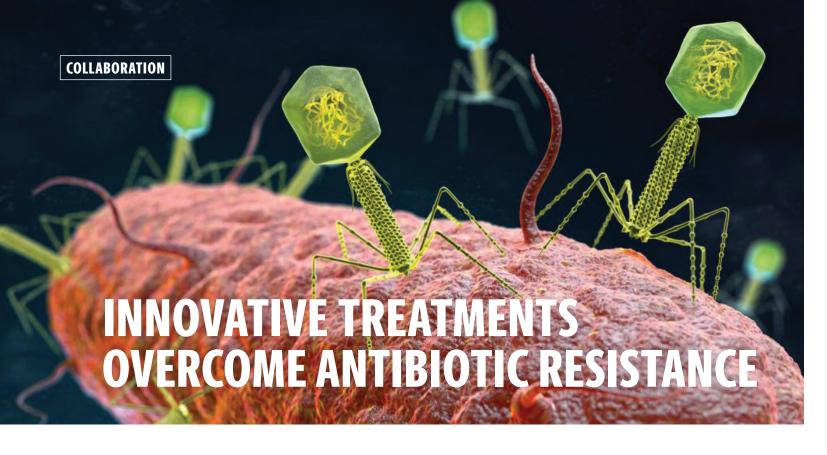
Marvin Hyatt died May 7, at age 87.

Leon Finklin Jr. graduated from the College of Pharmacy with a bachelor's degree in Pharmacy in 1972. He began his career at the Medical Pharmacy in Rock Hill, South Carolina, where he College of Georgia, then with K-Mart Pharmacy and Roche Pharmaceuticals. In 1986, Finklin became franchise owner of The Medicine Shoppe, and in 2006, he fulfilled his dream of opening his namesake pharmacy, Finklin Pharmacy in Columbia, South Carolina.

> Finklin served his profession and his community as a leader with the Palmetto Medical, Dental and Pharmacy Association, the South Carolina Board of Pharmacy, the Benedict College Health Center and the Eau Claire Community Development Council, among others. In 2013, Finklin received the UofSC Outstanding Black Alumni Award.

"My husband loved what he did. He dedicated his life to serving his customers," says his wife, Linda. "He even made a point to move our family from Dentsville to the Eau Claire area so that he could be in the same community as his customers. I miss him so."

Leon Finklin died April 29, 2020, at age 70.



Pharmacy alumni work with pediatric infectious disease physician to battle bacterial diseases

ne of the hallmarks of finding answers to unique problems in the world of science is interprofessional collaboration. Two alumni from the UofSC College of Pharmacy joined with an alumna from the School of Medicine to tackle an everincreasing health care dilemma helping patients who are resistant to antibiotics that would traditionally be used in their treatment.

Bacteriophage, viruses that infect bacteria, might sound like a novel approach. But the use of bacteriophages has been around for more than 100 years. While more research is needed, bacteriophage is beginning to gain ground in the fight against antibiotic

Robert Daniels, '05, and Andrew Gainey, '11, have teamed with Anna-Kathryn Burch, M.D., '02, to treat patients using bacteriophages at Prisma Health Children's Hospital. To date, they have

resistant diseases.

Kathryn successfully treated two patients and are

Daniels

treating a third patient, with hopes of finding a bacteriophage to treat a fourth

Daniels, who is codirector of the Antimicrobial Stewardship program at Prisma Health, says phages are viruses that invade bacterial cells, disrupting the bacterial metabolism, thus causing the bacterium to collapse.

"These phages can only multiply and grow inside a specific bacterium, meaning they are not dangerous to humans," he says. "Once the bacteria collapse, they stop multiplying."

Gainey, a pediatric infectious diseases pharmacist and director of the Pediatric Specialty PGY-2 Pharmacy Residency for Prisma Health Children's Hospital, says bacteriophages seem to work where traditional methods of treatment fail against antibiotic-resistant bacterial infections in certain patient populations.

"We have treated one patient who was immuno-suppressed," he says. "The others have been patients with cystic fibrosis, which tends to present the most complex and resistant bacteria. Because of their

disease, these patients are constantly placed on antibiotics and that drives the resistance."

Phages are unique in that, while there are many types of phages, only one specific phage will attack a specific bacterium, and it may take months to grow a particular phage to match that bacterium.

"That means a phage can be used to directly target disease-causing bacteria," Daniels says. "For example, a bacteriophage specific to group A streptococcus will only kill bacteria that cause strep throat infections."

"We are one of the few pediatric institutions in the U.S. that has this much experience with phage therapy according to published literature," Burch says. "To our knowledge, no one else in South Carolina nor in the Southeast is doing this type of treatment in the pediatric population. We want to let other practitioners know we have this capability so their patients can be referred for phage therapy if no other treatments of the resistant bacteria are available.'

OVERCOMING T **OBSTACLES**

Erin Anderson began her journey to earn her doctoral degree in 2017. This past December, she fulfilled that ambition as she graduated with a doctorate in pharmaceutical sciences.

> After completing her undergraduate work at North Carolina State University with a double major in chemistry and biochemistry, Anderson spent several years working in the drug discovery industry.

She came to the University of South Carolina when her husband accepted a position as a rhetoric and composition professor in the Department of English Language and Literature. Anderson joined the Integrated Biomedical Sciences Graduate program at the university's School of Medicine and the lab of Jill Turner in the College of Pharmacy researching neuroscience pharmacogenomics.

There was a point in Anderson's life when she heard that achieving such academic success would not be possible. As an undergraduate, she was diagnosed with dyslexia, a learning disability that can make it difficult to learn in a traditional classroom setting.

"I struggled my first year as an undergraduate and finally got tested," she says. "It definitely makes it interesting when 99 percent of the world thinks one way and you are part of the one percent that thinks another."

Through perseverance and accommodations provided through the Americans with Disabilities Act. Anderson learned to advocate for herself and push through barriers.

"I had to provide data on why my accommodations only leveled the field and did not give me an unfair advantage," she says. "I had to learn how to be my own advocate and stand my ground."

Her focus resulted in tremendous success. While conducting her research, which focused on sex differences in the molecular effects on the immune system during withdrawal from nicotine, Anderson earned a \$50,000 R36 National Institutes of Health Grant.

She also found time to serve as treasurer for the South Carolina chapter of Delta Alpha Pi, an international honors society for high achieving students with disabilities.

"The group works with students that have other disabilities, and it is an opportunity to share techniques and other ways to study," she says.

Anderson says it is important to not compare yourself to other students and to not let negativity from others sway your goals.

"Everyone's journey is different," she says. "You must be less fearful of what others think and follow your own path."



STUDENT EXPERIENCE STUDENT EXPERIENCE

















'22

In addition to learning essential knowledge of pharmacy principles, the UofSC College of Pharmacy has given me invaluable mentors, wonderful memories, lifelong friends, pharmacy connections and, most importantly, a firm passion for serving others throughout my career. The past four years have equipped me with the tools necessary to pursue, with confidence, my future as a pharmacist.

'24

It has been an honor to be a part of the inaugural Gamecock Pharmacy Assurance program and to hold many leadership positions within the College of Pharmacy. Attending pharmacy school during a global pandemic has been an eye-opener into the role and the impact that pharmacists can have within the health care profession.

'23

My time with the UofSC College of Pharmacy has been the best years of my life. Between the phenomenal professors and diverse organizations that this college has, I have been able to expand my knowledge and love for pharmacy more than I ever expected. I am so excited to see what the next year has to offer me.

'23

UofSC's College of Pharmacy has set me on various pathways within the pharmacy field. Under the mentorship of Kathy Quarles Moore and other incredible faculty members, I have developed greatly as a leader and discovered a passion for academia and clinical pharmacy. I have made invaluable connections during my time here and look forward to incorporating everything I learned into practice.

'23

With each year of advancement in the program, I take a moment to reflect on my personal and professional development. There have been many ups and downs in navigating the uncertainty of the world, but the perseverance of my professors and colleagues is a daily reminder that anything we set to accomplish is possible.

'24

As a P2 this year, coming back on campus has shown me innumerable resources and opportunities our college has to give. I love being involved on campus from SSHP president to Phi Delta Chi worthy correspondent. Thanks to the professors at the college, I work at Nephron Pharmaceuticals in regulatory affairs as I hope to pursue a job in industry in the future. '23

The UofSC College of Pharmacy has taught me the importance of being a lifelong learner. We are exposed to a variety of pharmacists at the college. While their practices differ, their underlying passion to learn is the bond that unites them all. Because of this, I am encouraged to become a better version of myself every day, personally and clinically.

'24

As a student at the University of South Carolina College of Pharmacy, I have been provided with numerous leadership, professional and research opportunities that have helped me grow as a future pharmacist. Because of these opportunities, I feel prepared to take on the role of a pharmacist once I graduate from the College of Pharmacy.



Kayla Boyd | '14

Completing my Doctor of Pharmacy degree at the University of South Carolina provided me with experiences and relationships that propelled me into the world of clinical practice. Without the professional mentors I was fortunate enough to learn from at UofSC, I would not have ended up pursuing residency and, subsequently, a career in oncology pharmacy.



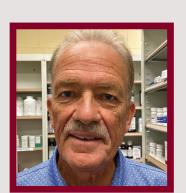
Jamie Mathis | '04

The University of South Carolina College of Pharmacy changed my life. I am the first person in my family to graduate from college, and this university opened so many opportunities for me that others in my family were not afforded. I now own two pharmacies and am blessed to be able to give back to the university. I love this university and hope to have started a tradition of Gamecock graduates with my own children.



Susan Mosier | '95

I support the UofSC College of Pharmacy because of the impact pharmacy has allowed me to make in my patients' lives. From patient counseling to making OTC recommendations or just lending an ear, every day is unique and gratifying. At this year's white coat ceremony, I had the opportunity to sponsor a coat for an aspiring pharmacist. I hope that student will find their journey and career as satisfying as mine has been.



Dennis Burdette | '79

I was very fortunate to attend the University of South Carolina College of Pharmacy. Great professors prepared me for my career in pharmacy. I was able to meet other students and have some that have now become lifelong friends. Pharmacy has rewarded me in many ways, and it is a pleasure to give back to our future pharmacists.

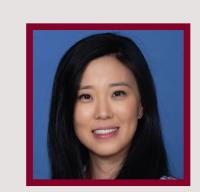


We chose to support the College of Pharmacy because of our passion for our profession. Graduating from pharmacy school allowed us to help others and give back every day. We love South Carolina and the opportunities that the College of Pharmacy allowed us to pursue!



Sarah Waller | '16

I continue to donate and support our students at the University of South Carolina College of Pharmacy because I am grateful for the opportunities that the college opened for me. I wouldn't be where I am today without the support of the staff and alumni and want to do my part by investing in the future generations of our profession.



April Thompkins | '18

I support the College of Pharmacy because I want to support future generations of Gamecock pharmacists. UofSC played a huge role in my career, particularly through mentorship by my professors, opportunities for involvement in professional organizations, and the development of friendships that have lasted beyond my college years.



Morgan Mace | '08

I remember how excited I was for my white coat ceremony, and it's just one small way to give back to the future generations of pharmacists. It is a special feeling, putting your white coat on for the first time and how it symbolizes the start of your journey to become a pharmacist.



NEWS ACCOMPLISHMENTS

ALUMNI



Tyler Wagner, '19, received the 2021 Predoctoral Fellowship in Health Outcomes Disparities from the American Foundation for Pharmaceutical Education.



J. Lynn Bass, '96, received the 2021 America's Inspire Award from the Drug Information Association.



Taylor Meyers, '15, was chosen as speakerelect for the 2021-2022 South Carolina Pharmacy Association Board of Directors.



Ranarda Jones, '03, received the Excellence in Innovation Award from SCPhA.



J. Tommy Johnson, '99, received the Bowl of Hygiea Award from SCPhA.



Donna Avant, '85, was named as Pharmacist of the Year by SCPhA.



Alyssa Norwood, '93, received the Ken Couch Distinguished Mentor Award from SCPhA.



Kayla Antosz, '19, has been named lead pharmacist for the Antimicrobial Stewardship Collaborative of South Carolina within the College of Pharmacy.



Nicole Bookstaver,
'09, was named 2021
Health System Woman
Pharmacist of the
Year by the Pharmacist
Moms Group and
Pharmacy Times.



Bryan Ziegler, '01, received the 2021 George Roentsch New Innovator Award from Professional Compounding Centers of America.

FACULTY



The College of Pharmacy Experiential Education team was honored by the American Association of Colleges of Pharmacy Experiential Education Section with the Award of Excellence in Experiential Education.



Michael Wyatt was named chair of the Drug Discovery and Biomedical Sciences Department.





Patti Fabel and Kevin Lu have been named to leadership roles with the American Pharmacists Association. Fabel is president-elect for the APhA Academy of Pharmacy Practice and Management. Lu is chair-elect for the APhA-Academic of Pharmaceutical Research & Science Economic, Social and Administrative Sciences section.



Jennifer Baker, '02, is SCPhA 2021-2022 president and chair of the Board of Directors.



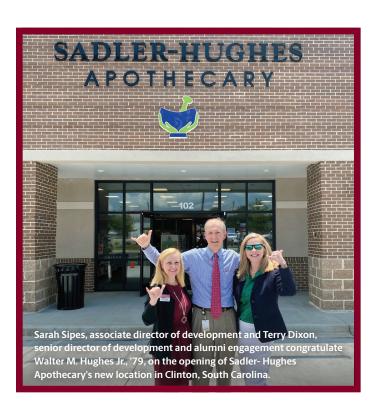
Tessa Hastings was named a High Scholar for the HIV, Infectious Diseases and Global Health Implementation Research Institute through the Center for Dissemination and Implementation at Washington University in St. Louis, Missouri.



Michael Shtutman, Scott Sutton and Michael Wyatt received a fiveyear \$2.1 million National Institutes of Health R01 grant. This is the first known collaborative grant between the college's Clinical Pharmacy and Outcomes Sciences and Drug Discovery and Biomedical Sciences departments.

Do you have news to share with your fellow alumni? Send us your updates at bit.ly/usccop-alumni

PHARMACY IN ACTION









ALUMNI VISITS

Staying connected to our alumni is a priority. Please share your professional and personal updates at bit.ly/usccop-alumni.



JUNETEENTH VACCINE CONFIDENCE EVENT

The College of Pharmacy supported an on-site health clinic at the Juneteenth Freedom Festival June 19. The clinic offered COVID-19 testing and vaccinations, diabetes screening and information on sickle cell disease.

WHITE COAT CEREMONY

The class of 2025 received their white coats in a rite-of-passage ceremony commemorating their transition to a career in health care. Putting on the white coat symbolizes that they are putting on the responsibility of their profession.



DEAN'S DIALOGUE

At the Dean's Dialogue, faculty and staff meet informally with the interim dean to discuss various topics. The Dean's dialogue occurs monthly with both in-person and Teams meetings.



College of Pharmacy Columbia, SC 29208



As a loyal, lifelong Gamecock, **Julian A. Reynolds Jr.** gives back to the college and university because he remembers how his education opened doors for him — and he wants to give those same opportunities to others. After earning his bachelor's degree in pharmacy in 1967, Reynolds began practicing in Andrews, South Carolina — a community he still serves. He is the past president and owner of Reynolds Drug Store Inc., which was started by his father in 1950 and is now run by his niece. He has served on the Tidelands Health board of trustees for 45 years. A leader in his town and his profession, Reynolds is the recipient of numerous statewide awards and received the college's Outstanding Alumni Award in 2013. **I AM SOUTH CAROLINA.**