## **Executive Summary**

## Blueprint for Academic Excellence College of Pharmacy AY2020-2021

## Introduction

The College of Pharmacy has a vision of improving health through leadership and innovation in pharmacy education, research, and patient care. The College also has a mission statement, core values, goals, and a strategic plan to achieve the vision. College programmatic goals were developed by the faculty and promote the tripartite mission of teaching, research, and service, which includes clinical practice. The College, administration, and faculty are committed to achieving the goals, including continuous assessment of outcomes related to College educational outcomes. The College has successfully completed its major transition from the South Carolina College of Pharmacy (SCCP) to the University of South Carolina College of Pharmacy (USC COP). The last student of the SCCP completed their degree requirements on October 31, 2019. The College petitioned the Accreditation Council for Pharmacy Education (ACPE) to dissolve the accreditation for the SCCP; this request is pending ACPE Board of Directors approval.

## Highlights

- Full 8-year accreditation received from the Accreditation Council for Pharmacy Education
- Implementation of an early entry program (Gamecock Pharmacy Assurance) this cohort will enter the pharmacy program in the fall of 2020.
- Igor Roninson awarded a National Institute of Health P20 Grant
- Michael Shtutman awarded a National Institute of Health R21 Grant
- Wayne Buff awarded the South Carolina Pharmacy Association Bowl of Hygeia Award
- Patti Fabel awarded the South Carolina Pharmacy Association Pharmacist of the Year
- Bryan Love elected as a Fellow of the American College of Clinical Pharmacy
- Teach-out of SCCP has been completed and teach-in of USC College of Pharmacy is completed

Dr. Stephen J. Cutler Dean and Professor University of South Carolina College of Pharmacy



UNIVERSITY OF SOUTH CAROLINA College of Pharmacy



### **Table Of Content**

Executive Summary	1
Introduction	1
Highlights	1
Foundation for Academic Excellence	4
Mission Statement	4
Vision Statement	4
Values Statement	4
Goals - Looking Back	5
Goals - Real Time	7
Goals - Looking Ahead	11
Academic Programs	12
Program Rankings	12
Instructional Modalities	12
Program Launches	12
Program Terminations	12
Academic Initiatives	13
Experiential Learning for Undergraduates	13
Experiential Learning For Graduate Students	13
Affordability	14
Reputation Enhancement	14
Challenges	15
Faculty Population	17
Faculty Employment by Track and Title	17
Faculty Diversity by Gender and Race/Ethnicity	18
Faculty Information	20
Research and Scholarly Activity	20
Faculty Development	21
Other Activity	21
Teaching	23
Analysis of Ratio	23
Analysis of Ratio	
Student Recruiting and Retention	24
Student Recruitment	
Student Retention	25
Student Enrollment & Outcomes	26
Student Enrollments	26
Enrollment by Time Status	28
Student Diversity by Gender	29
Student Retention, Transfer, and Graduation	32
Faculty Awards Nominations	35
Research Award Nominations	

Service Award Nominations	35
Teaching Award Nominations	35
Faculty Awards Received	36
Research Awards	36
Service Awards	37
Teaching Awards	38
Alumni Engagement & Fundraising	39
Alumni	39
Development, Fundraising and Gifts	39
Community Engagement	40
Community Engagements and Community - Based Activities	40
Community Perceptions	40
Incentivizing Faculty Engagement	41
Collaborations	42
Internal Collaborations	42
External Collaborations	42
Other Collaborations	43
Equity and Diversity Plan	45
Concluding Remarks	48
Quantitative Outcomes	48
Cool Stuff	48
Appendix 3. Research & Scholarly Activity	49

## **Foundation for Academic Excellence**

## **Mission Statement**

Our mission is 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.

Updated: 05/11/2017

## **Vision Statement**

Our vision is to be the destination to empower pharmacy students, researchers, educators, and practitioners to transform healthcare, globally.

Updated: 05/11/2017

### Values Statement

We will accomplish our mission by:

- · Continually building a culture of compassion, inclusiveness and collegiality
- Providing comprehensive pharmacy education
- Conducting and disseminating state of the art research
- Establishing optimal student experiences
- Engaging in community outreach
- Expanding pharmacy practice, post-graduate training, and business opportunities
- Growing alumni and partner relationships
- Foster faculty and staff development

We will accomplish our vision by:

- Rigorous education of students and practitioners
- Professional placement of students
- Diversity of professionals
- Successes in research and scholarly output
- National and international recognition of faculty and students
- Partnerships with outside entities
- International collaborations and strategic alliances
- Number in international students
- Entrepreneurship
- Success, growth and engagement of our alumni

Updated: 03/12/2018

Goals for the previous Academic Year.

#### Goal 1 - Gamecock Pharmacy Assurance (Early Entry) Program - GPA

Goal Statement	Create and develop an initiative for Early Admission Program to recruit students high school students directly to the University of South Carolina. This fall will be the first class that is admitted into the College of Pharmacy from this program, which began 2 years ago.			
Linkage to University Goal	<ul> <li>Educating the Thinkers and Leaders of Tomorrow</li> <li>Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>Spurring Knowledge and Creation</li> <li>Building Inclusive and Inspiring Communities</li> <li>Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>			
Alignment with Mission, Vision, and Values	The development of an Early Admission Program will ensure we recruit a high quality student in our program. This, in turn, will ensure we are better able to produce practitioners who are at a more advanced level in delivering healthcare to their patients. Furthermore, this program will help offset the national decline in students seeking admission into pharmacy schools.			
Status	Completed successfully			
Action Plan	The College of Pharmacy is developing the brand of the GPA as we launch this program. The first class will enter in the Fall 2018. Our goal was to have 20-25 students apply for the GPA. In the fall of 2018, there were 73 applications.			
Achievements	?			
<b>Resources Utilized</b>	?			
Goal Continuation	?			
Goal Upcoming Plans	?			
Resources Needed	?			
Goal Notes	Faculty approved this program during the 2017-18 academic year and this program is being implemented for the fall 2018 admission class. The College of Pharmacy needs a stronger partnership with University Admissions to help streamline the application process for the GPA. In the fall of 2018, 73 students enrolled in this program, exceeding our expectations of 20-25 students.			

## **Goals - Looking Back**

Obais - Looking Dack				
Goal 2 - Branding the University of South Carolina College of Pharmacy				
Goal Statement	Become a national leader in pharmacy education, research and service			
Linkage to University Goal	<ul> <li>Educating the Thinkers and Leaders of Tomorrow</li> <li>Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>Spurring Knowledge and Creation</li> <li>Building Inclusive and Inspiring Communities</li> <li>Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>			
Alignment with Mission, Vision, and Values	As the College separates from the SCCP and returns to its legacy program of UofSC College of Pharmacy, it is vital that our College strive to be a national leader in pharmacy education, research, and service.			
Status	Progressing as expected (single year goal)			
Action Plan	Focus resources on the branding of our College by highlighting the differential advantages offered by the University of South Carolina College of Pharmacy			
Achievements				
<b>Resources Utilized</b>				
Goal Continuation				
Goal Upcoming Plans				
Resources Needed				
Goal Notes	This initiative is the number 1 priority in the UofSC College of Pharmacy 5-year strategic plan			

Goals for the current Academic Year.

#### **Goal 1 - Gamecock Pharmacy Assurance (GPA) Program**

Goal Statement	The GPA program was an initiative created by Dean Cutler in 2017 with the first group of high school students enrolling at the University of South Carolina in 2018. Currently, this program has provided 40 students in our fall 2020 P1 pharmacy class, which represents 36% of our class. This initiative is helping the College of Pharmacy to create a pipeline of qualified students to be admitted into our program. This is especially important today as the national trend among high school students to pursue a career in pharmacy is very low (some schools/college in the U.S. are closing as a result of this decline in applicants.
Linkage to University Goal	<ul> <li>Educating the Thinkers and Leaders of Tomorrow</li> <li>Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>Spurring Knowledge and Creation</li> <li>Building Inclusive and Inspiring Communities</li> <li>Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>
Alignment with Mission, Vision, and Values	
Status	Extended to following Academic Year
Action Plan	
Achievements	
<b>Resources Utilized</b>	
Goal Continuation	
Goal Upcoming Plans	
<b>Resources Needed</b>	
Goal Notes	

## **Goals - Real Time**

Goal 2 - Robot Sterile	Compounding		
Goal Statement	In partnership with Nephron Pharmaceuticals, the College of Pharmacy and the College of Engineering and Computing are developing an initiative that will allow pharmacy students and engineering students to be educated side-by-side. The use of robots to produce sterile compounded pharmaceuticals is driven by the new federal requirements, which have become very stringent and complex. Today, many hospitals in the U.S. and South Carolina are not able to meet these requirements. The use of robots to compound prescriptions exceeds those new federal guidelines and provides a more sterile environment with better accuracy and precision than traditional methods of compounding.		
Linkage to University Goal	<ul> <li>Educating the Thinkers and Leaders of Tomorrow</li> <li>Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>Spurring Knowledge and Creation</li> <li>Building Inclusive and Inspiring Communities</li> <li>Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>		
Alignment with Mission, Vision, and Values	This initiative will allows us to meet our mission by allowing the College of Pharmacy to prepare the next generation of innovative and collaborative pharmacists and health scientists.		
Status	Newly Established Goal		
Action Plan			
Achievements			
Resources Utilized			
Goal Continuation			
Goal Upcoming Plans			
Resources Needed	Nephron Pharmaceuticals is paying for the build-out of a sterile facility on campus (McNair/SCRA) and the robots. In addition, they are providing support with the hiring of an engineer to help oversee the project.		
Goal Notes			

## **Goals - Real Time**

Goal 3 - Develon Fmer	gency Contingency Plans			
Goal Statement	The College of Pharmacy has been engaged in developing contingency plans in an effort to continue the educational and research mission of the University of South Carolina College of Pharmacy in the event of natural disaster or emergencies that disrupt the college.			
Linkage to University Goal	<ul> <li>Educating the Thinkers and Leaders of Tomorrow</li> <li>Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>Spurring Knowledge and Creation</li> <li>Building Inclusive and Inspiring Communities</li> <li>Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>			
Alignment with Mission, Vision, and Values	This initiative will help ensure that we meet the teaching and research mission of the College of Pharmacy.			
Status	Newly Established Goal			
Action Plan	The senior administrators, which include the dean, associate deans, assistant deans, and departmental chairs are developing a strategy for managing the college in the event of a natural disaster or emergency that disrupts the day-to-day operations of the college.			
Achievements				
<b>Resources Utilized</b>				
Goal Continuation				
Goal Upcoming Plans				
Resources Needed				
Goal Notes				

## **Goals - Real Time**

Goal 4 - Space - labora	tories and office needs		
Goal Statement	The College of Pharmacy continues to struggle with securing appropriate space to support its teaching and research mission Currently, there are several faculty lines that are open due to r space to accommodate a newly recruited faculty member.		
Linkage to University Goal	<ul> <li>Educating the Thinkers and Leaders of Tomorrow</li> <li>Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>Spurring Knowledge and Creation</li> <li>Building Inclusive and Inspiring Communities</li> <li>Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>		
Alignment with Mission, Vision, and Values	The mission of the College of Pharmacy includes providing a comprehensive pharmacy education, conducting and disseminating state of the art research, establishing optimal students experiences, and other activities that prepare our next generation of pharmacists and health scientists. Adequate and appropriate space is of paramount importance to the college reaching its mission.		
Status	Extended to following Academic Year		
Action Plan	Working with the Provost Office and the University Architecture, the college has been trying to identify space for 4 years.		
Achievements			
<b>Resources Utilized</b>			
Goal Continuation			
Goal Upcoming Plans			
Resources Needed	Adequate and appropriate space for research laboratories and offices are needed.		
Goal Notes			

Goals for the next Academic Year.

#### Goal 1 - Faculty Salaries

Goal Statement	Each year, the American Association of Colleges of Pharmacy publish the average salaries for all ranks, disciplines, public/private, etc of all faculty members in pharmacy education. For the past 30 years, the average annual salary increase has been ~4-5%. The faculty members in the UofSC College of Pharmacy are mostly at the 25 percentile for faculty in the SEC and nationally. Over the past several years, our faculty, especially those with NIH funding, have been targeted for recruitment by other universities. With limited abilities to increase salaries, the college needs help from central administration to help offset the differential in salaries as well as support retention packages.	
Linkage to University Goal	<ul> <li>Educating the Thinkers and Leaders of Tomorrow</li> <li>Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>Spurring Knowledge and Creation</li> <li>Building Inclusive and Inspiring Communities</li> <li>Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>	
Alignment with Mission, Vision, and Values		
Status	Progressing as expected (multi-year goal)	
Action Plan		
Achievements		
<b>Resources Utilized</b>		
Goal Continuation		
Goal Upcoming Plans		
Resources Needed		
Goal Notes		

### **Program Rankings**

Academic programs that were nationally ranked or received external recognition during the Academic Year.

•In 2016-17, the UofSC College of Pharmacy underwent an 18-month self-study in preparation of the accreditation site visit in the spring of 2017 by the Accreditation Council for Pharmacy Education (ACPE) with the college receiving a full 8-year accreditation.

•Residency Match Rate: The college has a significantly higher match for post graduate pharmacy training compared to the national average. This has been a trend for the past several years.

•The teach-out phase of the South Carolina College of Pharmacy (merged program with MUSC) was completed on October 31, 2019. The teach-in phase for the UofSC College of Pharmacy will be completed in May 2020. The merged program (SCCP) has petitioned the Accreditation Council for Pharmacy Education to dissolve the SCCP.

## **Instructional Modalities**

Innovations and changes to Instructional Modalities in unit's programmatic and course offerings that were implemented during the Academic Year.

We have completed the 'teach-out' phase of the SCCP, which ended on October 31, 2019. The 'teach-in' phase of the University of South Carolina College of Pharmacy will be completed in May 2020; these phase represent the transition of the University of South Carolina College of Pharmacy to our legacy program, the UofSC College of Pharmacy. The College of Pharmacy is very excited to navigate through the four-year demerger process so that our UofSC-COP students will receive 100% of their professional pharmacy education via a live interaction with professors at the UofSC-COP. We are pleased that all of our students received a high quality education during this 4-year transition.

## **Program Launches**

Academic Programs that were newly launched during the Academic Year; those that received required approvals but which had not yet enrolled students are not included.

The College of Pharmacy received approval by the Accreditation Council for Pharmacy Education (ACPE), with a full 8-years of accreditation, to return of our legacy program (UofSC College of Pharmacy) for the education of pharmacists.

## **Program Terminations**

Academic Programs that were newly terminated or discontinued during the Academic Year.

The South Carolina College of Pharmacy (SCCP), which is a merged program with MUSC College of Pharmacy, graduated its last student on October 31, 2019. Currently, we are waiting on news from the Accreditation Council for Pharmacy Education (ACPE) Board of Directors to approve our request to dissolve the accreditation of the SCCP program.

### **Experiential Learning for Undergraduates**

*Initiatives, improvements, challenges, and progress with Experiential Learning at the Undergraduate level.* 

Professional pharmacy students complete 3-years of didactic coursework and a minimum of 11 pharmacy practice experiences. As such, the experiential learning of our PharmD students represent approximately 1/3 of the total pharmacy curriculum. This experiential learning is mandated by the accreditation standards set forth by the Accreditation Council for Pharmacy Education (ACPE) as part of their accreditation standards. The total time students spend in experiential learning exceeds 1760 practice hours. They are required to complete two Introductory Pharmacy Practice Experiences (IPPEs), one in Community Pharmacy and the other in a Hospital/Health System, which occurs following the P1 and P2 curriculum years, respectively. During the P4 year of the PharmD program, pharmacy students complete a minimum of 9 Advanced Pharmacy Practice Experiences (APPEs) with 5 rotations in required experiential categories and 4 electives that include a variety of settings. Below is an overview of changes to our Experiential Learning:

Experiential Office. New accreditation standards and the accreditation from the Accreditation Council for Pharmacy Education (ACPE) forced changes to the experiential opportunities of our program. For example, the experiential office developed education outcomes and mapped the experiential curriculum to the outcomes. Subsequently, all course syllabi were updated with the new outcomes and preceptors across the state were trained on the process.
Experiential Office – Challenges. The number of high quality Introductory Pharmacy Practice Experiences (IPPE) and Advance Pharmacy Practice Experience (APPE) practice experiences, especially in introductory institutional practice and advanced acute care, continue to be an issue due to their limited availability in South Carolina. The accreditation required IPPEs in the State of South Carolina are limited and this restricts the College's ability to grow enrollment. We have implemented an Advanced IPPE Hospital rotation for eligible students who have extensive experience as interns in this practice setting, which opens up a few more regular IPPE Hospital placements for other students.

## **Experiential Learning For Graduate Students**

*Initiatives, improvements, challenges, and progress with Experiential Learning at the Graduate or Professional level.* 

The role of experiential education is very important in graduate education as this allows students to use critical thinking to gain a deeper understanding of the subject matter they are learning. This idea was encapsulated by David Kolb in 1975 with his four-staged cycle of learning, which includes concrete experience, reflective observation, abstract conceptualization, and active experimentation. Basically, there is a difference between those students who primarily watch the educator and those students who actual engage and participate in the learning process.

In the College of Pharmacy, graduate students learn basic concepts of experimental design. As these students transition into candidacy status, they begin to do more than simply conduct experiments. They learn to ask questions about their results and to build off the answers to those questions. Over time, this develops the student into an independent scientist. Within

# Academic Initiatives

the college, all graduate students undergo experiential learning opportunities.

One area that needs to be improved within the graduate program of the College of Pharmacy is the opportunity for graduate students to explore their teaching aptitude. There are not many teaching opportunities within the College's graduate program and this stems from the lack of funds to support a Teaching Assistantship program. We are exploring mechanisms to support such a program; this would include the use of institutional resources.

## Affordability

Assessment of affordability and efforts to address affordability.

The affordability of the College of Pharmacy professional program is measured against peerinstitutions in the Southeastern Conference (SEC) and other regional institutions (within a 150-mile radius). The SEC peers include Auburn University, the University of Florida, the University of Georgia, the University of Kentucky, University of Mississippi, and the Texas A&M, while the regional institutions include Campbell University, Mercer University, Presbyterian College, South University, and Wingate. The tuition for the professional program of the SEC schools of pharmacy is \$25,500 and the regional schools is \$34,400. The tuition costs for the University of South Carolina College of Pharmacy is near the average of the peer SEC schools and well below the average of the other regional programs.

We will continue to monitor the peer SEC and other regional programs in order to ensure we remain competitive in our tuition costs. Additionally, the college will continue to raise scholarship money for our students in order to off-set these costs.

## **Reputation Enhancement**

Contributions and achievements that enhance the reputation of UofSC Columbia regionally and nationally.

•The USC COP has an 89% four-year graduation rate of PharmD students

•The number of PharmD graduates from our program secure residency matches that are well above the national average (82% UofSC versus national average of 68%)

•Our PharmD graduates had a First Time Pass Rate of 97% on the National American Pharmacist Licensure Exam (NAPLEX). This is well above the national average, which was 87%.

•Our PharmD graduates had a 96% job placement at graduation, many in local community pharmacies (chain and independent); we are unable to account for 3 students and it is possible that they are employed.

•KPIC has expanded its entrepreneurial education of our PharmD students to include hihgcapacity students being co-educated with engineering students on the development of robots to perform 503B sterile compounding of aseptic pharmaceuticals.

•Our partnership with Nephron continues to grow as we develop a number of initiatives for our students, including internships, research scholarships, and development for careers as an industrial pharmacy.

•The College of Pharmacy serves as a provider of Continuing Pharmacy Education and was recently accredited for another 6-years by the Accreditation Council for Pharmacy Education (ACPE). This affords the college a tremendous advantage over other regional schools/college of pharmacy who don't offer this service to pharmacists.

# Academic Initiatives

•The College of Pharmacy has developed a penicillin allergy assessment and skin testing certificate program, which includes a 15-hour continuing education program designed to hone skills of healthcare providers in allergy assessment. This, in turn, leads to improving antibiotic selection and better patient outcome.

•The College of Pharmacy is engaged in rural health and several facutly members were awarded a Rural Healthcare Innovation grant from the South Carolina Center for Rural and Primary Healthcare. This initiative allows the college to place greater emphasis on meeting the rural healthcare needs of South Carolina as we support pharmacists and pharmacy students working in these geographical regions.

•The University of South Carolina Interprofessional Education (IPE) for the Health Services, affords the College of Pharmacy a wonderful opportunity for our pharmacy students to interact and engage with students from other health science disciplines at UofSC. Although this is an accreditation requirement from the Accreditation Council for Pharmacy Education (ACPE), this education results in the development of better members of the healthcare team.

## Challenges

Challenges and resource needs anticipated for the current and upcoming Academic Years, not noted elsewhere in this report and/or those which merit additional attention.

As pointed out in the previous 3 Blueprints for the College of Pharmacy, as the University of South Carolina College of Pharmacy demerges from the South Carolina College of Pharmacy, it was anticipated that some costs in operating our college will increase. There were several items that are split with the Medical University of South Carolina College of Pharmacy including professional memberships, electronic subscriptions, Continuing Education programs, etc. As we exit out of that merged program, the UofSC College of Pharmacy is discovering that we are now responsible for covering approximately \$200,000/year for students to matriculate through our program. Moving forward, it will be necessary for the college to make adjustments in the fees charged to students; fortunately, the college has one of the lowest fees among the UofSC schools/colleges as well as among the other SEC pharmacy programs.

A challenge for the college is in balancing the teaching loads without the unintended consequences of an impact on other areas. From 2011-2017, there were loss of faculty lines in the college; this was, in part, due to the merged program with MUSC. One of the hardest hit areas is int he Department of Clincal Proactice and Outcomes Sciences, which had an attrition of 6 faculty lines during that timeframe in the clinical practice area. This resulted in increased teaching loads and loss of areas of expertise; even so, they have continued to advance the department in other key areas such as service, clinical practice, and research. As a result of the loss of faculty-lines, the college does have gaps in some areas of clinical expertise, which, over the long-term, could impact the education of our professional students. Fortunately, Provost Gabel helped helped develop a hiring plan to replace these faculty lines, which was accepted by the Accreditation Council for Pharmacy Education (ACPE).

There is a national decline among high school students interested in pursuing pharmacy as a career. Recent numbers show there are only 1.01 students applying for every seat in a

# Academic Initiatives

school/college of pharmacy. The American Association of Colleges of Pharmacy (AACP) urgently requested that all schools/colleges of pharmacy in the U.S. dial back expansion. The UofSC College of Pharmacy has created and launched several initiatives that should help protect our program from this national trend.

## **Faculty Employment by Track and Title**

The following data was provided by UofSC's Office of Institutional Research, Assessment, and Analytics.

	Fall 2019	Fall 2018	Fall 2017
Tenure-track Faculty	0	0	0
Professor, with tenure			
Associate Professor, with tenure			
Assistant Professor			
Librarian, with tenure			
Research Faculty	0	0	0
Research Professor			
Research Associate Professor			
Research Assistant Professor			
Clinical/instructional Faculty	0	0	0
Clinical Professor			
Clinical Associate Professor			
Clinical Assistant Professor			
Instructor			
Lecturer			
Visiting			
Adjunct Faculty			

#### Table 1. Faculty Employment by Track and Title

# **Faculty Population**

## Faculty Diversity by Gender and Race/Ethnicity

Note: UofSC follows US Department of Education IPEDS/ National Center for Education Statistics

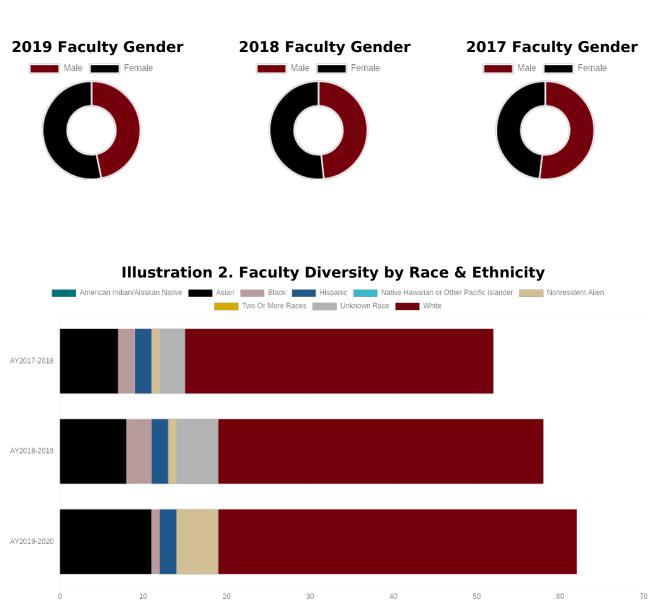
guidance for collecting and reporting race and ethnicity. See

https://nces.ed.gov/ipeds/Section/collecting\_re

#### Table 2. Faculty Diversity by Gender and Race/Ethnicity.

	Fall 2019	Fall 2018	Fall 2017
Gender	62	55	51
Female	33	29	26
Male	29	26	25
Race/Ethnicity	62	55	51
American Indian/Alaska Native	0	0	0
Asian	11	8	7
Black or African American	1	3	2
Hispanic or Latino	2	1	1
Native Hawaiian or Other Pacific Islander	0	0	0
Nonresident Alien	5	1	1
Two or More Races	0	0	0
Unknown Race/Ethnicity	0	4	3
White	43	38	37

Illustrations 1 and 2 (below) portray this data visually.



#### Illustration 1. Faculty Diversity by Gender

# **Faculty Information**

## **Research and Scholarly Activity**

Please refer to Appendix 3, which provides detailed information from the Office of the Vice President for Research, department of Information Technology and Data Management, including:

1) The total number and amount of externally sponsored research proposal submissions by funding source for the appropriate Fiscal Year.

2) Summary of externally sponsored research awards by funding source for the appropriate Fiscal Year. Total extramural funding processed through Sponsored Awards Management (SAM) in the Fiscal Year, and federal extramural funding processed through SAM in the Fiscal Year. (Available at: http://sam.research.sc.edu/awards.html) Amount of sponsored research funding per faculty member for the appropriate fiscal year (by rank, type of funding; e.g., federal, state, etc., and by department if applicable).

*3)* Number of patents, disclosures, and licensing agreements for three most recent Fiscal Years.

Having adequate (guantity and guality) research space for our faculty to conduct their research and scholarly activity is a major problem for the college, especially for faculty members in the Department of Drug Discovery and Biomedical Sciences (DDBS). Currently two tenure and tenure track faculty are housed in offices and laboratories that the college is borrowing from the Department of Biology. This arrangement is slated to end in February 2020. Added to this issue is the recent success of several of our faculty members who recently received, or who are on track to receive, R01 funding from NIH. The space allocated for pharmacy in Coker Life Sciences is not adequate to meet this growth and additional space in other areas of Coker/Jones are being explored. In early 2019, the Provost Office was able to identify 3 areas in Coker (CLS 406, 408, 410) that pharmacy was to use; unfortunately, this space was not assigned to pharmacy for its use. The lack of adequate research space is having a negative impact on the college's growth as well as its ability to recruit faculty members; we've have faculty lines that are not being filled due to this constraint. Lastly, as part of the accreditation report from the Accreditation Council for Pharmacy Education (APCE) in 2017, it was noted that there were plans to acquire space from the Department of Biology; at this point, we are not in compliance with that report, which could become a major accreditation issue if not addressed soon.

From 2011 to 2018, the total tenure and tenure track faculty numbers in DDBS have grown from 12 to 17. Faculty growth is partly attributed to the hiring of new junior faculty under Dr. Roninson's COBRE Center for Targeted Therapeutics (CTT), a \$11.3 M – 5-year, which has now transition into the Phase II award from NIH/NIGMS. This COBRE will further development of the college's research initiatives.

With respect to the Department of Clinical Pharmacy and Outcomes Sciences (CPOS), which includes 25 faculty members, workload is a critical challenge for these faculty members. Currently, our clinical partners (local and regional hospitals and retail stores) require faculty to be at the practice site for 6 months per year (in essence, this department is operating with ~13 FTE). Our clinical partners are vital for us to meet the accreditation standards set by the Accreditation Council for Pharmacy Education (ACPE). Participating in a 6-month commitment makes developing class time by our clinical faculty members very difficult and challenging. The 6-month commitment is also difficult for clinical faculty members to develop a consistent research focus to achieve department and college goals. Therefore, the total number of clinical faculty in quantitative numbers is much higher than actual hours the department can

# **Faculty Information**

utilize their skill and ability. For example, 10 clinical faculty have a practice site at Prisma Midlands (Richland). Because Prisma Midlands has a 6-month practice requirement, the College / Department only has 6 months of their time for teaching and service. This issue is coupled to the attrition of the 6-facutly lines described elsewhere in this Blueprint. Fortunately, the Provost (Gabel) and Dean Cutler have created a strategic plan for replacing these positions, which was favorably received by the accreditation body, ACPE. Furthermore, Dr. Sutton, chair of CPOS, and Jennifer Bair, Director of Pharmacy at Prisma Midlands, are creating a new partnership in which pharmacists at Prisma can participate as educators of our pharmacy students.

## **Faculty Development**

*Efforts at Faculty Development, including investments, activities, incentives, objectives, and outcomes. Optional* 

Faculty development in the Department of Clinical and Outcome Sciences (CPOS) and in the Department of Drug Discovery and Biomedical Sciences (DDBS) is highly encouraged and supported. Faculty development is one of the initiatives in the College's 5-year Strategic Plan. Specific examples are that all faculty members are actively engaged in attending and presenting their pedagogical and scientific research at national and international scientific meetings both as oral and poster presentations. Faculty are also involved in the planning of scientific conferences and serve as chairs of scientific sessions within conferences. Faculty are also encouraged to join and actively participate in professional societies that align with their research and scholarly activities. Most faculty members are actively engaged in manuscript reviewing and many sit on editorial boards. In addition, several faculty members are actively involved in grant reviewing at the NIH level. Support is provided for faculty to attend the annual conference of the American Association of Colleges of Pharmacy (AACP).

Initiatives for faculty development utilized this past year include:

1) The Grant and Research Incubation Forum (GRIF), which was designed to facilitate the development of faculty member into independent scientists.

2) The College of Pharmacy Academy Leader Program, which is designed for those faculty, staff and students who want to expand their leadership capacity and build a common leadership language through a proven system of tools, frameworks, and development processes. There are 3 programs currently being developed and each offers separate and distinct development for pharmacy students, staff members, and faculty members. The overall Program is for 12 months (spring and fall 2018) and designed for a cohort of 8 Fellows. The Fellows meet twice monthly for processing and apprenticeship in addition to learning new leadership concepts, principles, and tools. In the Academy Leader Program, members build on their leadership "core," meaning extensive work is devoted to areas of <u>self-awareness</u> and <u>emotional intelligence</u>. The capacity to understand oneself, how to interact with others including students, fellow staff, faculty and administrators are critical skills that are further refined over time.

## **Other Activity**

*Efforts at Faculty Development, including investments, activities, incentives, objectives, and outcomes. Optional* 

This year, the college explored additional international opportunities for the faculty and

# **Faculty Information**

students. This includes strengthening the relationship with the College of Pharmacy at Zhejiang University, China (for faculty and graduate students) and exploring a new partnership with the University of Gothenburg for our pharmacy and graduate students as well as our faculty members.

## Teaching

### **Faculty to Student Ratio**

The following data was provided by UofSC's Office of Institutional Research, Assessment, and Analytics.

The formula used to compute the ratio uses data from Faculty Population by Track and Title and Student Enrollment by Time Basis, as follows:

(Total Full-time Students + 1/3 Part-time Students)

((Total Tenure-track Faculty +Total Research Faculty + Total Clinical/Instructional Faculty) + (1/3 Adjunct Faculty))

#### Table 4. Faculty-to-Student Ratio.

	Fall 2019	Fall 2018	Fall 2017
Analysis of Ratio		01:13.4	1:14.22

### **Analysis of Ratio**

Analysis of the ratio, agreement with the data, and plans for the future to impact this ratio.

Currently, the college has 53 faculty member (with several lines open and recruitment of new faculty underway) consisting of tenured/tenure track, and non-tenure clinical, and research faculty. The college also has 27 support staff. There are 436 students enrolled in the Pharm.D. program and the ratio of students-to-faculty is 14:1. The ratio was calculated using faculty that are teaching within the professional program. The college has faculty members are research professors paid via National Institutes of Health (NIH) grants who are unable to teach. Additionally, select faculty have administrative responsibilities with minimal teaching in the program. It should be noted that the Accreditation Council for Pharmacy Education (ACPE) recommends a faculty to student ratio of 10:1. The hiring plan that the Provost (Gabel) and Dean Cutler shared with the ACPE in 2017, will help the college get closer to the ACPE recommended ratio.

## **Student Recruitment**

Efforts, including specific actions, to recruit students into College/School programs.

The College of Pharmacy recruits students from all over the state and country. Recruiting efforts at the high school level include attending science-based AP classes, healthcare career classes, career fairs, and specific after-school clubs and organizations. The College also hosts several events for high school students on campus, including targeted high schools and AHEC groups. Tours are given to the groups and hand-on activities are arranged in our labs. Current pharmacy students and a pre-pharmacy advisor speak with each of the groups. We also participate in the university-wide Carolina Masters Scholars camp for the pharmacy profession. Student rosters are obtained for each visit. These students are tracked to determine if they enter our USC Pre-Pharmacy program and if they enroll in our PharmD program.

We also attend two meetings of the Healthcare Health Occupations Students of America (HOSA) for the state of South Carolina. The college provides a formal presentation to college students who are unaware or misinformed about the pharmacy profession. Furthermore, we educate the guidance counselors and HOSA advisors about the profession and the pre-pharmacy and PharmD programs available at USC. Using the list of students we interact with during this event, we send follow-up information a few days after the conference is finished.

College students are recruited through various mechanisms including visits with specific pharmacy or healthcare-related student organizations, career fairs, and opportunities to attend a college class. Furthermore, a college advisor will attend these events with one of our current pharmacy students. We also host 2 Annual Open Houses for prospective students and their families to showcase our facilities, curriculum, and other programs; the dean greets these families and offers an introduction to the event. All attendees are provided an electronic survey in order to assess the quality of the program and to make improvements. It has been our experience that our faculty and students spend the majority of their time during these Open Houses changing public misperceptions of the pharmacy profession.

The USC College of Pharmacy is involved in the following recruitment efforts:

- •Open Houses (high school & transfer students)
- •Open Houses (current college students)
- •Gamecock Pharmacy Expo (high school and college students, instructors, counselors, advisors, etc.)
- •Participation in Admitted Students Day, Scholar Socials, and Meet the South Carolina Honors College events for admitted pre-pharmacy majors
- Participation in Gamecock Gateway and Galen Health Fellows recruitment/retention events
- Individual & group tours (i.e. AHEC and high school group requests)
- •Participation in Carolina Masters Camp (exposes high school students to the profession of pharmacy)
- •Scholarships for underrepresented students to participate in the college's summer camp
- •Mentoring of underrepresented students in regional middle and high schools
- •Summer internships for underrepresented college students
- Internal recruitment with UofSC life sciences majors (i.e. biology and public health)
- •Internal recruitment with professional and academic honors programs & organizations, such

# **Student Recruiting and Retention**

as the SC Honors College, Capstone Scholars, Opportunity Scholars, the American Society for Biochemistry and Molecular Biology, and the Association of Minority Pre-Health Students •Visitations to state-wide health organizations such as the South Carolina Health Occupations Students of America

•Visitations to high schools and colleges throughout the state and Southeast

•Participation at regional and national recruitment events such as the SC and International HOSA Conferences

•Development and implementation of the Gamecock Pharmacy Assurance program which allows the college to recruit students directly from high school into the University of South Carolina College of Pharmacy

•Participation in virtual fairs through organizations such as American Association of Colleges of Pharmacy

## **Student Retention**

Efforts at retaining current students in College/School programs.

From the standpoint of the pre-pharmacy and pharmacy program, the college is vested in the following measures to retain students through services that expose students to the profession and enhance their chances of success:

•Pre-pharmacy advisement that emphasizes admissions preparation and career exploration in addition to course selection

•Resume, mock interview, test preparation (i.e. PCAT), professionalism in pharmacy, and admissions workshops

•Assistance in obtaining job shadowing and pharmacy technician opportunities

•Research opportunities with College of Pharmacy faculty members

•Opportunities to join one pre-professional (Carolina Association of Pre-Pharmacy Students) & two professional

organizations (Student National Pharmacy Association & American Pharmacists Association)

•Presentations in our non-sterile compounding, community, sterile compounding, and clinical assessment labs that expose pre-pharmacy majors to professional labs and careers in this area

•Faculty-led tours of research labs within the College of Pharmacy

Network consisting of pre-pharmacy majors, pharmacy students, faculty, and practitioners
For students who struggle academically or in terms of career selection, referrals to the

Student Success Center, University Advisement Center, and Career Center

 Introduction to Pharmacy in the United States or PHAR 401, which is a summer course to expose students to the pharmacy profession, available career fields, and pharmacy faculty
 Multiple pre-pharmacy sections of University 101

•Strategic use of Rho Chi members (pharmacy's academic honor society) to tutor first year pharmacy students

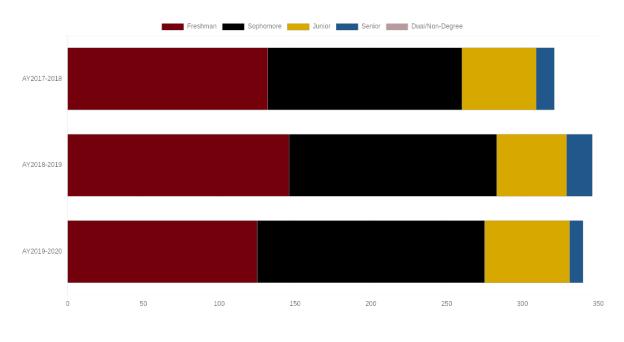
The following data was provided by UofSC's Office of Institutional Research, Assessment, and Analytics.

Note: Student enrollment and outcomes data are calculated by headcount on the basis of primary program of student only.

## Student Enrollment by Level & Classification

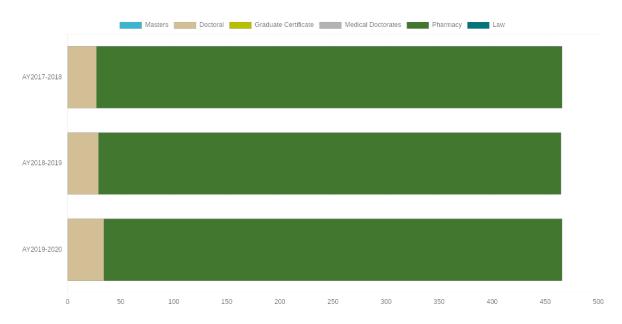
Table 5. Student Enrollment by Level & Classification.

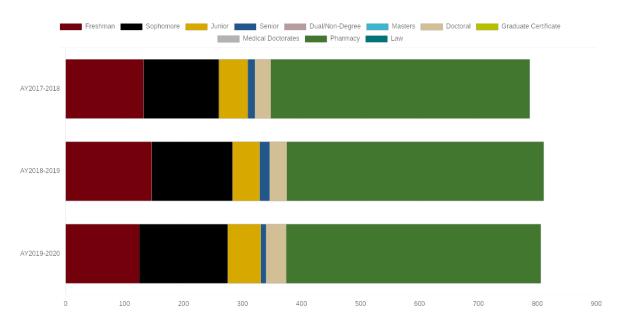
	Fall 2019	Fall 2018	Fall 2017
Undergraduate Enrollment			
Freshman	125	146	132
Sophomore	150	137	128
Junior	56	46	49
Senior	9	17	12
Sub Total	340	346	321
Graduate Enrollment			
Masters	0	0	0
Doctoral	34	29	27
Graduate Certificate	0	0	0
Sub Total	34	29	27
Professional Enrollment			
Medicine	0	0	0
Law	0	0	0
PharmD	432	436	439
Sub Total	432	436	439
Total Enrollment (All Levels)	806	811	787



#### Illustration 3. Undergraduate Student Enrollment by Classification

#### Illustration 4. Graduate/Professional Student Enrollment by Classification





#### Illustration 5. Total Student Enrollment by Classification (All Levels)

### **Enrollment by Time Status**

#### Table 6. Student Enrollment by Level and Time Status.

Table 0. Student Enronment by Level and Time Status.			
	Fall 2019	Fall 2018	Fall 2017
Undergraduate	340	346	321
Full-Time	336	340	306
Part-Time	4	6	15
Graduate/Professional	466	465	466
Full-Time	456	459	440
Part-Time	10	6	26
Total - All Levels	806	811	787
Full-Time	792	799	746
Part-Time	10	6	26

### **Student Diversity by Gender**

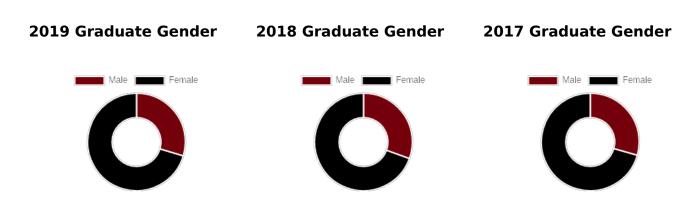
Table 7. Student Enrollment by Gender.

	Fall 2019	Fall 2018	Fall 2017
Undergraduate	340	346	321
Female	218	223	207
Male	122	123	114
Graduate/Professional	466	465	466
Female	328	323	329
Male	138	142	137

### Illustration 6. Undergraduate Student Diversity by Gender

2019 Undergrad Gender Male Female Male Female

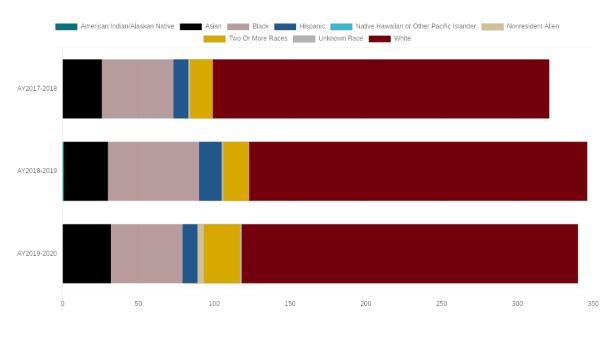
Illustration 7. Graduate/Professional Student Diversity by Gender



## **Student Diversity by Race/Ethnicity**

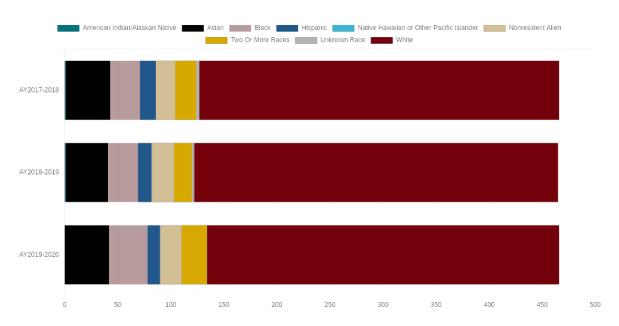
Table 8. Student Enrollment by Race/Ethnicity.

	Fall 2019	Fall 2018	Fall 2017
Undergraduate	340	466	346
American Indian/Alaska Native	0	1	0
Asian	32	29	26
Black or African	47	60	47
Hispanic or Latino	10	15	10
Native Hawaiian or Other Pacific Islander	0	0	0
Nonresident Alien	4	1	1
Two or More Races	24	17	15
Unknown Race/Ethnicity	1	0	0
White	222	223	222
Graduate/Professional		465	466
American Indian/Alaska Native	0	1	1
Asian	42	40	42
Black or African	36	28	28
Hispanic or Latino	12	13	15
Native Hawaiian or Other Pacific Islander	0	0	0
Nonresident Alien	20	21	18
Two or More Races	24	17	20
Unknown Race/Ethnicity	0	2	3
White	332	343	339



#### Illustration 8. Undergraduate Student Diversity by Race/Ethnicity

#### Illustration 9. Graduate/Professional Student Diversity by Race/Ethnicity

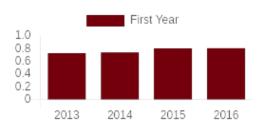


## **Undergraduate Retention**

### Table 9. Undergraduate Retention Rates for First-time Full-time Student Cohorts

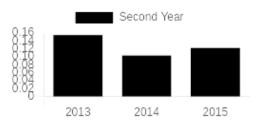
	First Year	Second Year
Fall 2017 Cohort	74.3%	14.3%
Fall 2016 Cohort	81.2%	12.3%
Fall 2015 Cohort	80.7%	10.4%
Fall 2015 Cohort	74.4%	15.5%

### Illustration 10. Undergraduate Retention, First and Second Year



**First Year** 





## Student Completions Graduation Rate - Undergraduate

Table 10. Undergraduate Graduation Rates for First-time Full-time Student Cohortsat 4-, 5-, and 6 Years.

	Fall 2011	Fall 2010	Fall 2009
4-Year Same	0%	0%	0%
4-Year Diff	28.9%	23.2%	23.9%
4-Year Total	28.9%	23.2%	23.9%
5-Year Same	0%	0%	0%
5-Year Diff	40%	33%	39.1%
5-Year Total	40%	33%	39.1%
6-Year Same	22.6%	26.5%	23.9%

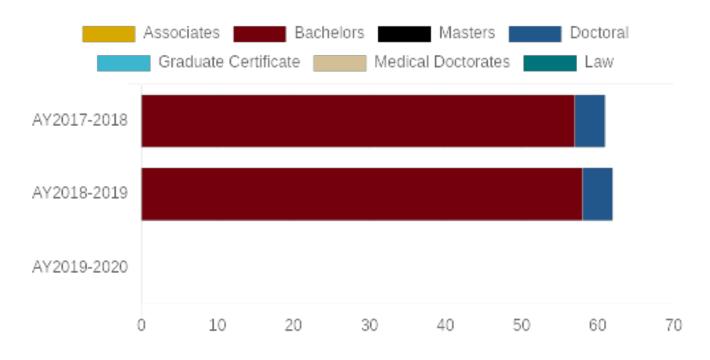
6-Year Diff	42.6%	36.8%	42%
6-Year Total	65.2%	63.3%	65.9%

### **Degrees Awarded by Level**

Table 11. Degrees Awarded by Level.

	AY2019-2020	AY2018-2019	AY2017-2018
Associates Degree		0	0
Bachelors		58	57
Masters		0	0
Doctoral		4	4
Medical		0	0
Law		0	0
Pharmacy Doctorate		106	104
Graduate Certificate		0	0

Illustration 11. Degrees Awarded by Level



Faculty nominated for the following awards in the categories of Research, Service, Teaching, or Other.

## **Research Award Nominations**

Recipient(s)	Award	Organization
Sahin, Ozgur	Overcoming Tamoxifen Resistance in Breast Cancer	American Cancer Society
Hofseth, Lorne	Harnessing the Power of P53 with Panaxynol from American Ginseng to Suppress Colitis and Prevent Colon Cancer	National Institute of Health
Roninson, Igor	Targeted Therapeutics	National Institutes of Health

## **Service Award Nominations**

Recipient(s)	Award	Organization
Fabel, Patti	SCPhA Pharmacist of the Year	South Carolina Pharmacy Association
Buff, Wayne	Bowl of Hygeia	South Carolina Pharmacy Association
Love, Brian	Fellow of the American College of Clinical Pharmacy	American College of Clinical Pharmacy
Dunn, Brie	National Phi Lambda Sigma Outstanding Chapter Advisor	Phi Lambda Sigma Leadership Honor Society

## **Teaching Award Nominations**

Recipient(s)	Award	Organization
Niro, Kristi	M. Stuart Hunter Award for Outstanding Teaching	University of South Carolina, Columbia

Faculty of PHAR were recognized for their professional accomplishments in the categories of Research, Service, and Teaching.

## **Research Awards**

Recipient(s)	Award	Organization
Hofseth, Lorne	Harnessing the Power of P53 with Panaxynol from Amer Ginseng	National Institutes of Health
Roninson, Igor	Targeted Therapeutics	National Institutes of Health
Hofseth, Lorne	Member USC Council for Research Excellence	USC Office of Research
Sahin, Ozgur	Overcoming Tamoxifen Resistance in Breast Cancer	American Cancer Society

### Service Awards

Recipient(s)	Award	Organization		
Buff, Wayne	SCPhA Bowl of Hygeia	South Carolinal Pharmacy Association		
Fabel, Patti	SCPhA Pharmacist of the Year	South Carolina Pharmacy Association		
Dunn, Brie	National Phi Lambda Sigma Outstanding Chapter Advisor	Phi Lambda Sigma Honor Society		
Love, Brian	Fellow - American College of Clinical Pharmacy	American College of Clinical Pharmacy		

## **Teaching Awards**

Recipient(s)	Award	Organization
Dunn, Brianne	P2 Class Professor of the Year	P2 Pharmacy Class USC College of Pharmacy
Mardis, Caitlin	P3 Professor of the Year	P3 Class USC College of Pharmacy
Wyatt, Michael	P1 Professor of the Year	P1 Class USC College of Pharmacy
Quarles-Moore, Kathy	National Compounding Champions	MEDISCA

#### Alumni

Substantial activities, engagements, and initiatives with alumni, focusing on relationships and activities with alumni.

#### **Annual Progress**

Alumni activities, engagements and initiatives have seen progress this past year. This includes: 1) expanding the relationships of Dean Cutler with alumni and friends of the college; 2) revamping our alumni communications strategy; 3) Enhancing our "Reconnection Events" for alumni; and 4) partnering with Central Development to enhance our development activites

#### Goals

We have opportunities to expand our alumni activities, engagements and initiatives largely because of the continued expansion of an alumni communications strategy. We will continue the successful initiatives from the past 3 years while incorporating new goals focused on growth and expansion. We continue strengthening our initiatives of 1) development of a new alumni engagement strategies focusing on lifelong engagement initiatives and related special events; 2) creation of additional social media platforms for alumni engagement; 3) strategy development for obtaining updated contact and biographical information for our alumni; and 4) improvement to the function and utilization of our alumni page on the College's website.

#### **Development, Fundraising and Gifts**

Substantial development initiatives and outcomes, including Fundraising and Gifts.

#### Annual Progress

This past year has been very good for the college our dean continues meeting and engaging with the top tier donors and prospects. 1) A strong effort is being made to personally connect the dean with key donors and prospects; 2) returning to our legacy program (October 31, 2019) as the UofSC College of Pharmacy alleviates one of our obstacles for optimum fundraising performance; 3) we have successfully strengthened our relationship with the Office of Foundations and Corporations in Central Development; and 4) hiring a new director of communications.

#### Goals

Our fundraising success will be largely connected to 1) the DOD's ability to focus primarily on major gift fundraising, including the creation of a systematic strategy for engaging the dean in both broad and focused development efforts that inspire trust; 2) gaining clarity around key fundraising priorities; 3) revising our major gift portfolio ensuring that prospects are well qualified; 4) adding to our major portfolio to establish a well-qualified pipeline; 5) effective prospect engagement initiatives 6) strategic stewardship initiatives; 7) increased focus on planned giving; and 8) heightened awareness and participation in our annual giving program including the college's Family Fund and Give 4 Garnet.

#### **Community Engagements and Community - Based Activities**

Community engagement and community based research, scholarship, outreach, service or volunteerism conducted, including activities at the local, state, regional national and international levels.

The College of Pharmacy is engaged in many activities within the community. These activities include students, faculty, and staff involvement. It is recognized that these types of engagement are healthy and help facilitate the development of an individual and our program. Activities include service to various organizations such as the American Heart Association, Glo for a Cure, St. Jude, and various non-profits organizations. Additionally, the college engages with the community to help educate people on good health care.

Current pharmacy students complete multiple events within the community throughout the semester. These events include health fairs, sponsored walks, support of single mothers and their children, collection of goods for less fortunate individuals, etc. The student organizations receive feedback from each of the groups they interact with to determine if their efforts were useful and if it should be continued. In addition, some students volunteer on an individual basis in pharmacy and non-pharmacy settings. All of the student and faculty community engagements were presented to President Caslen during his visit to the college in February.

Pharmacy students have the opportunity to participate in research efforts with faculty. These efforts usually lead to poster or platform presentations at state and national meetings and respected journal publications. Students also attend regional and national professional pharmacy conferences to compete in competitions, present posters, and network.

Students also complete rotations throughout the curriculum at sites throughout the state, nation, and world. During these rotations, students complete patient care, but also provide presentations and volunteer events for the public. Students are evaluated by the site regarding their work and accomplishments.

Many students volunteer to participate in many university and state recruiting events so that prospective students and their families gain a perspective from a current student on the academic process. This usually entails after-hour events, of which the majority of these events require travel by our students. This type of engagement is very helpful in our recruitment strategies.

The College of Pharmacy Poison Center is the only facility of its type in South Carolina. This Center offers support of the state's health care needs. The State shows that for every \$1 invested in the Center, \$13 is saved by the state. This Center is an excellent example of community engagement by our faculty, staff, and students who work in the Center.

## **Community Perceptions**

How unit assesses community perceptions of engagement, as well as impact of community

# **Community Engagement**

engagement on students, faculty, community and the institution.

The College of Pharmacy engagements help build a strong relationship between the university and our community. Further, this helps strengthen the quality of healthcare of people in our state. We also use some of these activities to help recruit students in our professional program as well as to the university. We often hear from people in the community about our interactions with them and others and the comments about the college, faculty, staff and students are always positive.

## **Incentivizing Faculty Engagement**

Policies and practices for incentivizing and recognizing community engagement in teaching and learning, research, and creative activity.

As part of our annual review of faculty activities, service to the community is one of the metrics that is evaluated. Additionally, these activities are also evaluated as part of the promotion and tenure process of faculty members in the College of Pharmacy.

## Internal Collaborations

*Our most significant academic collaborations and multidisciplinary efforts characterized as internal to the University.* 

Kennedy Pharmacy Innovation Center (KPIC)

•KPIC Pharmacy Ownership Business Plan is a collaborative effort for students and faculty in the College of Pharmacy

•Sterile Compound Training affords collaborations with faculty member in the college and in the College of Engineering and Computer Science as we develop robotic compounding; this affords students enrolled in pharmacy and engineering to be educated together

#### DDBS

•COBRE – NIH Center grant that is multidisciplinary and includes  $\sim$ 1/3 of the departmental faculty who are collaborating with faculty members within the college as well as in others schools/colleges on campus

•Neuroscience - several faculty members are engaged in collaborative research and training across campus; we are building a cohort of faculty engaged in addiction research and education

#### COPS

•Infectious Diseases – several faculty members are engaged in collaborative research and training

•Cancer – several faculty members are engaged in collaborative research and training

## **External Collaborations**

*Our most significant academic collaborations and multidisciplinary efforts characterized as external to the University.* 

The College of Pharmacy faculty members are engaged in a variety of external collaborations. Among these are:

•American Association of College of Pharmacy (AACP) affords professional development of our faculty

•Accreditation Council for Pharmacy Education (ACPE) affords the College the opportunity to be current in its overall operation as an accredited program

•Nephron Pharmaceutical Company provides a training facility for our students and faculty

•Kennedy Pharmacy Innovation Center (KPIC)

Prisma Health System (Upstate) and the USC School of Medicine (Greenville campus) provides a world-class teaching and learning environment for our pharmacy students
Blue Cross and Blue Shield (outcomes sciences on health care in South Carolina) offers tremendous support for the college and the Poison Center

•Health Sciences South Carolina (outcomes sciences on hospital healthcare in South Carolina)

•National Association of Chain Drug Stores (KPIC offers pharmacy ownership training in collaboration with NACDS

•BMW (developed and maintain a residency site with this auto manufacturer)

# Collaborations

•Several of our faculty members are engaged in research collaborations and scholarly activities with numerous scientists in the US and abroad

#### DDBS

•Several DDBS faculty members are engaged in external collaborative scientific research, including neuroscience and cancer research

CPOS

- •Residency Programs for post-graduate training of pharmacists
- Preceptor contracts
- Preceptor development and training
- •Partnerships with local and regional clinics
- •Clinical service to hospitals
- •Clinical service to retail pharmacies

The College of Pharmacy is involved in various collaborations with the Medical University of South Carolina. These include:

- •Introductory Pharmacy Practice Experiences (IPPE)
- •Advanced Pharmacy Practice Experiences (APPE)
- •Training of Preceptors
- Drug discovery research program

•Massachusetts Board of Higher Education - Special exemption for USC pharmacy and medical students to engage in rotations in the state of Massachusetts

### **Other Collaborations**

Our most significant academic collaborations and multidisciplinary efforts that are not otherwise accounted for as Internal or External Collaborations.

The College of Pharmacy remains heavily engaged in international collaborations. These include:

- International exchange programs:
  - Misr International University Cairo, Egypt
  - Zhejiang University Hangzhou, China
  - Qatar University Doha, Qatar
  - Saudia Arabia National Guard Health Affairs King Abdulaziz Riyadh, Saudi Arabia
  - Kuwait University Safat, Kuwait
  - King Fisail University Al-Ahsa, Saudi Arabia
- The Palmetto Experiential Educational Program (PEEP) has international collaborations for teaching and learning of our pharmacy students. These are:

Site/Location # students/year

## **Collaborations**

Kingston University – Kingston, England	4	
One World Health - ElViejo, Nicaragua	2	
One World Health - Tola, Nicaragua	2	
One World Health – Misindi, Uganda	2	
Robert Gordon University – Aberdeen, Scotland	2	
Tullamarine Radiopharmacy – Victoria, Australia	2	
US Naval Hospital Sigonella – Sicily, Italy	2	

#### Improve Under-Represented Minority (URM) Student Enrollment

When Dean Cutler arrived in 2016, the number of underrepresented students enrolled in the College of Pharmacy was approximately 8%. Through initiatives developed and implemented, the currently number of underrepresented students enrolled in the college is  $\sim 15\%$ .

The initiatives developed include:

•Week-long college orientation for 1st year students prior to the start of classes, which orients student's towards success

- •Monitoring and intervention of students performing poorly
- •Scholarships for underrepresented students to participate in the college's summer camp

•Mentoring of underrepresented students in regional middle and high schools; funds were raised to create an endowment to support this recruitment strategy

•Summer internships for underrepresented college students

Internal recruitment with UofSC life sciences majors (i.e. biology and public health)
Internal recruitment with professional and academic honors programs & organizations, such as the SC Honors College, Capstone Scholars, Opportunity Scholars, the American Society for Biochemistry and Molecular Biology, and the Association of Minority Pre-Health Students

•Visitations to state-wide health organizations such as the South Carolina Health Occupations Students of America

•Visitations to high schools and colleges throughout the state and Southeast, particularly those that have a high number of underrepresented students

• Developed a preparatory program for the North American Pharmacist Licensure Exam

#### Improve The Number Of Full-Time URM Faculty Across Academic Units

Every faculty search committee in the College of Pharmacy is charged with identifying a diverse pool of candidates. They are encouraged to conduct an active search, which includes reaching out to potential candidates and personally making them aware of the job opportunity, the culture of the college, and an invitation to apply for the position.

# Enhance Outcomes For URM Undergraduate and Graduate/Professional Students

Although we don't have an undergraduate program, we do engage in enhancing the outcomes of our professional and graduate students. Within the college, we train our Rho Chi members to serve as tutors. The Rho Chi is a national pharmacy honor society that represents the top 20% of students in a pharmacy class. These bright students work with the faculty members to develop tutorial plans that are used to help students succeed in pharmacy school. This tutorial plan was revamped by the dean in 2018 and today, we see high success in students matriculating through our program.

# **Equity and Diversity Plan**

Faculty in the college have strengthened the post-graduate education of our students. Currently, the college has ~85% success rate in placing students in residency/post-graduate training compared to a ~65% national rate. This initiative includes the cultivation of our students beginning in their first year of school. This developmental program gradually increases in intensity and rigor as the student matriculates through our program.

The Kennedy Pharmacy Innovation Center (KPIC) affords our student the opportunity to hone business and entrepreneurial acumen that will make them competitive for novel areas of pharmacy practice.

#### Improve Post-Graduate Outcomes For URM Undergraduate and Graduate/Professional Students

The tutorial program offered by the Rho Chi Honor Society members, which represent the brightest students in a pharmacy class, has afforded us the opportunity to strengthen the quality of students enrolled in our program. Since this program was recently revamped by the dean, the overall impact on post-graduate outcomes will not be seen for a few years. Even so, the college will monitor this program on an annual basis to gauge its success.

Faculty in the college have focused on the development of our students so that they are competitive for post-graduate education opportunities. This initiative includes the cultivation of our students beginning in their first year of school. This developmental program gradually increases in intensity and rigor as the student matriculates through our program. The college has an ~85% success rate in placing students in residency/post-graduate training compared to an approximately ~65% national rate.

The Kennedy Pharmacy Innovation Center (KPIC) affords our student the opportunity to hone business and entrepreneurial acumen that will make them competitive for novel areas of pharmacy practice.

# Increase the engagement of students, faculty, staff, administrators in Equity and Inclusion

The College of Pharmacy Diversity Committee has been very busy with engaging students, faculty, and staff with increasing awareness of diversity. They host regular events to enhance this engagement. One such event includes "Safe Zone" training, which was hosted by our professional organization, Student National Pharmaceutical Association (SNPhA), and co-sponsored by the Dean's Office of the College of Pharmacy. This program aims to build safe space across campus by visibly identifying students, staff, and faculty who support a diverse population.

#### Improve The Sense Of Inclusion Amongst All University Community Members

The College of Pharmacy is committed to improving a sense of inclusion among its students,

# **Equity and Diversity Plan**

staff, faculty, and the community. This is evident by the number of events hosted by the college that train and educate its members on diversity, inclusion, and equity.

### **Quantitative Outcomes**

*Explain any surprises regarding data provided in the quantitative outcomes modules throughout this report.* 

No surprises were noted.

### **Cool Stuff**

Describe innovations, happy accidents, good news, etc. that occurred within your unit not noted elsewhere in your reporting.

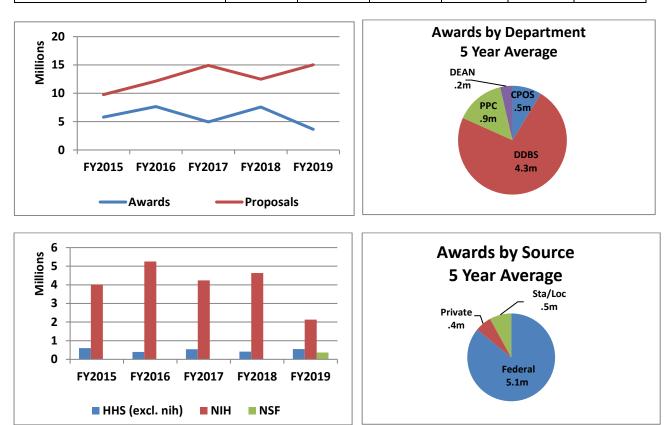
The College of Pharmacy received the highest scores among the university's schools/college during the most recent ModernThink survey of job satisfaction of staff and faculty members.

# Appendix 3. Research & Scholarly Activity

## Office of Research IT and Data Management Office

#### SC College of Pharmacy Summary of Awards

SAM ACTIVITY	FY2015	FY2016	FY2017	FY2018	FY2019	% Change (Avg. 15-18) & 2019
Division Award Totals	5,787,242	7,658,617	4,960,283	7,580,340	3,644,847	(43.9)
Unit Totals						
Clinical Pharmacy and Outcomes Sciences	787,371	743,518	529,823	450,392	78,267	(87.5)
Drug Discovery and Biomedical Sciences	3,723,853	4,808,473	3,761,545	6,643,128	2,686,415	(43.3)
Palmetto Poison Center	981,070	1,832,392	413,474	279,385	830,747	(5.2)
Dean & Graduate Program	294,948	274,234	255,441	207,435	49,418	(80.8)
Source						
Federal	4,620,831	5,827,314	4,785,229	7,136,057	3,055,706	(45.4)
Private	616,411	421,303	174,226	429,633	179,141	(56.3)
State/Local	550,000	1,410,000	828	0	410,000	(16.4))
Proposals						
Submissions	47	65	75	53	65	8.3
Dollars Requested	9,772,302	12,154,127	14,914,760	12,429,034	15,031,367	21.9



COLLEGE OF PHARMACY					
	Invention Disclosures	Patent Patent		Issued Patents	
TOTALS:	6	6 10 6		4	
Department Breakdown					
Drug Discovery & Biomedical Sciences	<b>6</b> (ID no. 1352, 1386, 1390, 1404, 1405, 1409)	<b>10</b> (ID no. 1352(1), 1317, 1390, 1352(2), 1386, 1404, 1386, 1405, 1338, 1390)	<b>6</b> (ID no. 1288, 1307, 1315, 1338, 1150 (shared w/ School of Medicine), 1320 (shared w/ Engineering & Computing))	<b>4</b> (ID no. 910, 881, 878, 1140)	