

Blueprint for Academic Excellence March 5, 2012

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#### I. Executive Summary

The South Carolina College of Pharmacy (SCCP) was formed in 2004 to integrate the Colleges of Pharmacy at the University of South Carolina (USC) and the Medical University of South Carolina (MUSC). Integration promotes the most efficient use of state resources to advance pharmacy education and research and provide for the pharmaceutical care needs of South Carolina.

The South Carolina College of Pharmacy vision statement is: "Improving Health through Leadership and Innovation in Pharmacy Education, Research, and Patient Care." The College has defined an aspiration vision to achieve quality of programs comparable to "TOP-10" colleges of pharmacy. To achieve this vision we have implemented a comprehensive program called SCCP Excellence, which includes pillar goals, key performance measurement, behavioral standards, and individual performance assessment based on goals and measures.

#### A. Top 10 Pharmacy Colleges are (5 tied at #9)

University of California San Francisco
University of North Carolina--Chapel Hill
University of Minnesota
University of Texas--Austin
Ohio State University
University of Kentucky\*
University of Michigan--Ann Arbor
Purdue University
University of Arizona
University of Florida
University of Illinois-Chicago
University of Waryland- Baltimore
University of Wisconsin--Madison
University of Washington

#### **Peer Institutions:**

Auburn University
University of Connecticut\*
University of Georgia\*
University of Tennessee\* - Memphis
Rutgers University\*

<sup>\*</sup> Peer institutions for USC

#### B. Colleges top strengths and important accomplishments in the last 5 years

- Achievement of full accreditation for SCCP and implementation of the integrated program with graduation of the first SCCP class in 2010.
- Increased NIH funding since 2007 by 42% to \$7.5 million (FY 2010). NIH funding ranked #17 in US.
- Establishment of the Kennedy Pharmacy Innovation Center with a \$30 million gift.
- Recruitment of 5 CoEE-SmartState Chairs in Medication Safety, Drug Discovery, Tissue Death, Injury, and Regeneration, and Translational Cancer Therapeutics.
- Establishment of pharmacy program at Greenville Hospital System.
- Achievement of SCCP Excellence goals related to graduating student satisfaction (96%) and faculty satisfaction (81%).

#### C. College Weaknesses and Plans for Addressing Weaknesses

- Inadequate and insufficient space for faculty and graduate student offices, courses, laboratory research, and centers. Need improved space for active learning activities. Work with SNAP to request space.
- Quality and reliability of synchronous distance education transmission / technology / classrooms to multiple sites: Classroom facilities and network transmission have been improved. A new lecture capture system is being used.
- Status of non-tenure track faculty members: We will work with USC Provost office
  on key non-tenure track policies including revision of promotion policies. Small size
  of the graduate program: We are rebuilding the PhD in pharmaceutical outcomes
  and plan to increase involvement in integrated biomedical graduate program at USC
- Insufficient financial resources to support teaching and research activity. Lack of recurring revenue source to enhance and expand infrastructure to support the mission of the college. Work with Provost's office to secure additional funding.
- Diversity: At present, about 10% of the student body and only 2 of 75 faculty members are from underrepresented minority groups. The College has been implementing a Diversity Plan and needs to develop a plan to more effectively recruit URM faculty members.

#### II. Goals

#### **B. Five-Year Goals**

#### 1. Education

Goal 1 Provide the highest quality professional pharmacy education by instilling requisite knowledge, competencies and values in graduates of the Doctor of Pharmacy program.

- Continued curriculum revision based on comprehensive assessment and changes in the pharmacy profession.
- Conduct research in instructional methods to improve learning outcomes.
- Provide faculty development in teaching methods including distributive education.

- Develop the Greenville Hospital System component of the College (grow the faculty, improve communications, and establish a long-term funding model).
- Goal 2 Achieve graduate level research training programs leading to a PhD that are qualitatively and quantitatively comparable to TOP-10 pharmacy colleges.
  - Support faculty members with active funded research programs to accept more graduate students.
  - Secure an NIH graduate program training grant.
  - Expand participation in the Integrated Biomedical Graduate Program
  - Expand the PhD program in pharmaceutical outcomes.
- Goal 3 Achieve greater than 90% satisfaction with the Doctor of Pharmacy program and the SCCP by students, faculty, alumni, and employers.
  - Improve classroom, office and laboratory facilities.
  - Provide sufficient opportunities for mentorship from senior individuals.
  - Provide adequate resources for learning and research
  - Fully implement the Kennedy Pharmacy Innovation Center
  - Establish a pharmacy leadership program
- Goal 4 Become a nationwide model for interprofessional education in the doctor of pharmacy curriculum.
  - Establish interprofessional learning models with other health professions schools on all 3 campuses
  - Develop journal publications and grants for IP activities.

#### 2. Research

- Goal 5 Increase the level of scholarship, particularly external research funding and the number of peer reviewed publications to be comparable with TOP-10 colleges of pharmacy.
  - Provide mentorship to junior faculty members to improve their competitiveness for grant funding.
  - Increase the number of tenure-track faculty members.

#### 3. Service and Outreach

- Goal 6 Develop donor and alumni programs to increase external support of SCCP education, research, and academic programs.
  - Development plan will be provided upon request
  - Expand cultivation of top donor prospects

- Goal 7 Attract and enroll highly qualified, motivated students from diverse backgrounds in the College's education programs.
  - Fully implement SCCP Diversity plan
  - Expand recruitment activities
- Goal 8 Increase entrepreneurial activity through research, service, and education programs.
  - Increase the number of private ventures that emanate from the College
  - Expand entrepreneurial opportunities through the Kennedy Center
  - Become actively involved in the MUSC Center for Innovation and Entrepreneurship.
- Goal 9 Establish international partnerships that enhance our teaching, research and service missions and support the strategic plans of USC and MUSC.
  - Establish and maintain 4 active international partnerships to enhance teaching, service, or research.

#### 4. Other

Goal 10 Break ground on a new College of Pharmacy building on the MUSC campus.

#### C. 2012-2013 Academic Year Goals

As a part of the *SCCP Excellence Program*, the College selected a series of "Pillar Goals" under the categories of PEOPLE, SERVICE, QUALITY, GROWTH, and FINANCE. These goals are updated each year. The formal document is attached (Appendix 2) and the individual goals are listed below (with progress and plans). Progress with each goal is tracked with a specific performance measure. See Appendix 3 with our full report of Key Performance Indicators.

#### People

- Faculty Satisfaction ≥ 85% by 2013. For 2011 it was 81%. This is being addressed by faculty development programs, performance recognition awards, and achievement of full faculty hiring.
- ≥ 90% of students, faculty, & staff feel the SCCP is welcoming to individuals with diverse backgrounds. 98% of students agreed or strongly agreed and 98% of the faculty. We are revising and implementing a College Diversity Plan (available upon request).

- > 90% of staff are satisfied with their job. In our 2011 staff satisfaction survey, 85% of the staff were satisfied with their job. Over the past few years we have reorganized staff duties and reporting structure, we added staff award recognitions, and included SCCP Excellence as part of the annual review process.
- Faculty and staff retention maintained at ≥ 95% of current numbers. The faculty attrition rate for FY 2011 (departures not including retirements) was under 5%. ≥ 90% of faculty and staff are respectful to one another.

#### Service

- > 90% of graduating students would choose the SCCP again for their pharmacy education. In 2011 92% of graduating students agreed or strongly agreed that they would choose SCCP again.
- ≥ 90% of our P1 P3 students are satisfied with the SCCP Doctor of Pharmacy. For FY 2009-10 the percentage was 86%. To increase student satisfaction we implemented a revised advisement process, improved the course handout policy, added a number of elective courses, revised the curriculum, and upgraded classrooms on each campus.
- At least two faculty members serve in leadership roles in state or national organizations. In 2011, eleven faculty members served in state and national elected office. This is a significant increase from previous years.
- Improve faculty satisfaction with classroom technology to ≥ 70%. Each
  month last year we surveyed the faculty regarding satisfaction with
  classroom technology. The satisfaction rate ranges from 50-75% with 75%
  achieved in January 2011. We are working to upgrade classroom technology
  and renovate or replace distance education classrooms.
- Improve student satisfaction with classroom technology to ≥ 70%. For the
  questions, "The classroom technology allowed me to respond to instructor
  questions and ask questions as needed" and "The quality of the classroom
  technology (e.g. quality of transmission) met my needs for a learning
  environment" the percent that agreed or strongly agreed were 50% and
  66%, respectively. We have upgraded classroom technology and renovated
  the distant education classrooms.

#### Quality

Achieve a ≥ 95% pass rate on first time takers of the NAPLEX. The NAPLEX pass rate for the class graduating in May 2011 was 96%, up from 92% the year before. We have developed and implemented a plan to increase the pass rate for the class of 2012.

- Achieve a 95% graduation rate within 4 years of starting the program. For the first (2010) and second (2011) classes of the SCCP program, 93% graduated within four years of starting the program.
- On a scale of 1 to 5, achieve an average score of ≥ 4.2 that students feel the faculty member is an effective teacher. The average response was 4.39 for FY 2011.
- Maintain a top 20 ranking for NIH funding for colleges of pharmacy. For 2011 the College ranked 17 of 125 colleges of pharmacy (for FY 2010).
- Increase the # of peer-reviewed publications to 1.8 / faculty member in 2012.
   For calendar 2010 it was 1.5 per faculty member. We will need to develop new strategies to increase this rate.
- Increase the # of students seeking a residency, fellowship, or graduate education to 25%. For the 2010 graduating class 39/183 applied for residency positions (21%) and 26/183 were matched (14.2%).

#### Growth

- Achieve a top 20 ranking in NIH funding for Colleges of Pharmacy. In FY 2009 the College was ranked 28<sup>th</sup> in NIH funding. This improved to 17<sup>th</sup> in 2010. Also, the percent of research faculty who are funded was 56%, ranking 3<sup>rd</sup> in the U.S.
- Increase the total amount of private funds received as gifts to \$4.2 million (\$3 million at MUSC and \$1.2 million at USC). Last fiscal year \$4.16 million was received in private gifts by the College (both campuses).
- The number of graduate students increased to 40 by 2012. This fiscal year the number of graduate students in the SCCP on both campuses is 38. We plan to expand the PhD in pharmaceutical outcomes and increase involvement in integrated biomedical graduate program. More research faculty members have been hired and this will expand graduate enrollment.
- Expand 3<sup>rd</sup> year of the Doctor of Pharmacy Curriculum to Greenville. This has been implemented in Fall 2011. The Accreditation Council for Pharmacy Education conducted an on-site visit in April 2011 to assess the Greeneville site and the College received continued accreditation.
- Implement new curriculum in the P2 year.
- > 90% of students agree their interprofessional training within the SCCP has been valuable.
- Complete the joint Appointment, Promotion, and Tenure policy. This is nearing completion and is ready for SCCP vote.
- Align MUSC & USC strategic plan with SCCP Strategic plan.

#### **Finance**

- Actual expenses will not exceed any revised budgets for FY2012. The College maintains a balanced budget.
- Implement a plan for the RCM budget model on the MUSC campus.

#### **Unit Statistical Profile**

Data for 1-12 to be supplied by the Office of Institutional Compliance and Assessment

### Scholarship, Research, and Creative Accomplishments

Data for 1-6 to be supplied by the Office of Research's IT and Data Management

Q1. The total number and amount of external sponsored research proposal submissions by agency for FY2011

### FY2011 PROPOSAL SUBMISSIONS

Pharmacy

	Number	Dollars Requested
NIH	22	\$4,407,964
HHS (excl. nih)	4	\$568,670
NSF	1	\$230,604
DOD	0	\$0
DOE	0	\$0
USDE	0	\$0
OTHER FEDERAL	4	\$1,169,892
STATE	0	\$0
LOCAL	0	\$0
PRIVATE	19	\$1,294,324

#### Q2. Summary of external sponsored research awards by agency for FY2011

### Awards by Source/Agency

#### **Pharmacy**

**Total Funding** 

FY2011	Funding
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\$3,999,738

NIH	\$1,593,111
HHS (excl. nih)	\$1,204,424
STATE	\$747,559
PHI (Non-Profit)	\$241,118
COMMERCIAL	\$22,126
OTHER	\$191,400

#### Q3. Total extramural funding and Federal extramural funding in FY2011

## Summary of Awards Pharmacy

 Total Funding
 Total Federal

 \$3,999,738
 \$2,797,535

# Q4. Amount of sponsored research funding per faculty member in FY2011 (by rank, type of funding)

TITLE_DESC	PI_NA	TOTAL	СОММ	FEDERAL	LOCAL	OTHER	PHI (NON- PROFIT	STATE
								•
DIRECTOR	Ball, Sarah	300,000		300,000				
	_							
PROFESSOR	Bennett, Charles	22,126	22,126					
	Dickson, W.	75,394		75,394				
POST-								
FELLOW	Felder, Tisha	55,000					55,000	
ASST	Stafkey-	15 000					15,000	
	wancy, Dana	10,000					10,000	
CLINICAL ASSISTANT								
PROF	Michels, Jill	653,710		569,310		29,400	55,000	
DIRECTOR	Ball, Sarah	747,559						747,559
PROFESSOR	Creek, Kim	405,954		405,954				
	DiBiro							
DEAN	Joseph	250,000		250,000				
ASSOC.	Hofseth,	249 122		249 122				
THOI ECCON	Lomo	240,122		240,122				
ASSOC.	McInnes,							
PROFESSOR	Campbell	230,420		230,420				
ASSOC. PROFESSOR	Petkov, Georgi	543,771		543,771				
ASSOC.	Wyatt,	450.04		450.0				
PROFESSOR	Michael	153,844		153,844				
ASST								
PROFESSOR	Zhu, Jun	10,000		10,000				
DEAN	DiPiro, Joseph	116 118					116 118	
F F OF C F OF OF OF	PROFESSOR  POST- DOCTORAL FELLOW  ASST PROFESSOR  CLINICAL ASSISTANT PROF  DIRECTOR  PROFESSOR  ASSOC. PROFESSOR  ASSOC. PROFESSOR  ASSOC. PROFESSOR	PROFESSOR Bennett, Charles  Dickson, W.  POST- DOCTORAL FELLOW Felder, Tisha  ASST PROFESSOR Mailey, Dana  DIRECTOR Ball, Sarah  PROFESSOR Creek, Kim  DIPIro, Joseph  ASSOC. Hofseth, PROFESSOR DiPiro, PROFESSOR Campbell  ASSOC. Petkov, PROFESSOR Georgi  ASSOC. Wyatt, PROFESSOR Michael  ASST PROFESSOR Zhu, Jun  DiPiro, DIPIRO	Dickson, W.   75,394	Dickson, W.   Dickson, W.	Dickson, W.   Dickson, W.	Dickson, W.   PROFESSOR   Dickson, W.   Dickson, W.	Dickson, W.   T5,394   T5,39	### PROFESSOR   Bennett, Charles   22,126   22,126

Pharmacy - (Dean)	CLINICAL ASSISTANT PROF	McGee, Karen	9,720	9,720		
Pharmacy - (Dean)	DEAN	Rowen, Randall	162,000		162,000	
Provost, Office of the	VICE PROVOST	Curtis, Christine	191,382	191,382		

#### Q5. Total sponsored research expenditures per tenured/tenure track faculty for FY2011

Dept	PI	Total Expenditures	Status
		(Direct/Indirect)	
Clinical Pharmacy and Outcome Sciences			
	Ball, Sarah	664,039	
	Bennett, Charles	6,368	Tenured
	Bookstaver, Brandon	15,384	
	Dickson, W.	71,620	
	Felder, Tisha	9,595	
	Miller, April	3,364	
	Piro, Christina	1,073	
	Rowen, Randall	158,191	
	Stafkey-Mailey, Dana	14,551	Tenure Track
	Sutton, Scott	225	
Palmetto Poison Center			
	Michels, Jill	629,062	
Pharmaceutical and Biomedical Sciences			
	Berger, Sondra	5,055	Tenured
	Creek, Kim	340,659	Tenured
	Hofseth, Lorne	344,027	Tenured
	McInnes, Campbell	305,719	Tenure Track
	Petkov, Georgi	298,178	Tenure Track
	Wyatt, Michael	124,320	Tenured
	Zhu, Jun	154,522	Tenure Track
Pharmacy - (Dean)			
	DiPiro, Joseph	109,655	
	McGee, Karen	5,085	

Q6. Number of patents, disclosures, and licensing agreements in fiscal years 2009, 2010 and 2011.

	Invention Disclosures	Provisional patent applications	Non-Provisional patent applications	Issued patents
FY2011	4	3	2	0
FY2010	2	2	0	0
FY2009	0	0	0	1

Source: Office of Technology Commercialization

#### **Total Continuing Education Units**

ACPE Accredited Continuing Education Activities						
Total # of Contact Hours Total # of Participants						
Fall 2010	100	1849				
Spring 2011 37.5 689		689				
Summer 2011	147	2676				

<sup>&</sup>lt;sup>1</sup> SCCP as an accredited provider of ACPE approved CE

#### **Appendix A**

**Graduate Student Placement** 

**Credit Hours Taught in Doctor of Pharmacy and Graduate Programs** 

#### Appendix B

**Student Retention** 

**Student Graduation and Placement** 

**Distributed Learning** 

**USC Connect and Community Engagement** 

Faculty Hiring/Retention and Ph.D. Programs

#### **Appendix C**

**Funding Sources** 

Research

### Appendix A

# 1. Placement of graduate students, terminal masters, and doctoral students, for the three most recent applicable classes (2009, 2010, 2011).

Date	Name	Degree	Placement	Advisor
Summer 2009	Matthew Robinson	M.S.	Pharm.D. Program at Campbell University	S. Berger
Summer 2009	Rahul Telange	M.S.	Research Assistant, Vanderbilt University	T. Smith
Summer 2009	Binfeng Xia	Ph.D.	Novartis Pharmaceutical	L. Fox
Fall 2009	Anthony Branham	Ph.D.		M. Dickson
Fall 2009	Yu Jin	Ph.D.	Postdoctoral Fellow, Harvard University	L. Hofseth
Fall 2010	BeiBei Luo	Ph.D.	Postdoctoral Fellow, Yale University	S. Berger
Spring 2011	Pratik Nagaria	Ph.D.	Postdoctoral Fellow, University of Maryland Medical School	M. Wyatt
Spring 2011	Preeti Rajesh	Ph.D.	Bioinformatics Scientist at SciGenom Labs (India)	M. Wyatt
Spring 2011	Brian Yard	Ph.D.	Postdoctoral Fellow, Cleveland Clinic	D. Pittman
Summer 2011	Kara Estes	M.S.	Toxicology Support Specialist, Physicians Choice Laboratory Services, Charlotte, NC	C. McInnes
Summer 2011	Virginia Noxon	M.S.	Ph.D. Program, Clinical Pharmacy and Outcomes Science, USC	M. Wyatt
Summer 2011	Jayanthi Repalli	Ph.D.	Postdoctoral Fellow, New York University	S. Berger

2. Number of undergraduate and graduate credit hours in Fall 2010, Spring 2011, and Summer 2011, stated separately, taught by tenured and tenure track faculty, by instructors, by non-tenure track faculty, by temporary faculty (adjuncts, affiliates, etc.), by fulltime faculty, and faculty with terminal degrees.

Number of Professional and Graduate Credit Hours					
Doctor of Pharmacy Ph.D.					
Fall 2010 7107 75					
Spring 2011 6809 96					
Summer 2011	2023	23			

<sup>#</sup> No undergraduate courses taught in college.

Number of Professional Program (Pharm.D.) Credit Hours Taught by Faculty					
Faculty Title	Fall 2010	Spring 2011	Summer 2011		
Tenure/Tenure Track	2488	2383	710		
Instructors	284	272	0		
Non-Tenure Track	3625	3473	1011		
Temporary (adjunct etc)	711	681	304		
Fulltime	6400	6128	1720		
Faculty with Terminal Degrees	6822	6537	1618		

Number of Graduate Program (Ph.D., MS) Credit Hours Taught by Faculty					
Faculty Title	Fall 2010	Spring 2011	Summer 2011		
Tenure/Tenure Track	73	96	23		
Instructors	0	0	0		
Non-Tenure Track	0	0	0		
Temporary (adjunct etc)	0	0	0		
Fulltime	73	96	23		
Faculty with Terminal Degrees	73	96	23		

#### Appendix B

#### **Student Retention**

1. Have you assessed your retention methods and activities to determine their effectiveness in retaining freshmen and sophomores?

The South Carolina College of Pharmacy (SCCP) does not offer courses for undergraduates and therefore does not collect any data on freshmen and sophomore retention rates. The undergraduate cohort of pre-pharmacy students (primarily freshman and sophomores) are reflected in data collected by other colleges in the USC system.

The SCCP does collect key performance indicators with one indicator being student attrition rate. This indicator reflects student progression through the professional degree program (Pharm.D.)

SCCP Doctor of Pharmacy Program Attrition						
	2012 (Goal)	2011	2010	2009		
Attrition Rate <sup>1</sup>	< 3%	3%	< 3%	1.3%		

<sup>1</sup> Number of P1, P2, P3 students not progressing to the next year/total number of P1, P2, P3 students

### a. Which retention methods are effective and why do you believe that they work?

Admission to the professional program (Pharm.D.) selects out high academic achievers who are highly motivated and probably more mature and focused than undergraduate freshman and sophomores. The college, through a variety of processes, monitors individual student performance. If a student is at risk of not progressing, the student is contacted by faculty or administration to address the student's poor academic performance.

#### b. What retention methods have you tried that are ineffective?

Generally, we have not experienced retention problems.

2. Describe the advising in your college. How do you determine the effectiveness of your college's advising? Are there any additional advising activities needed to provide students the assistance they need to navigate through the Carolina Core and major to graduate on time?

Advising for pre-pharmacy students is conducted by advisors at the College of Pharmacy. The prepharmacy advisement is conducted one-on-one with each student and the advisor. Advisement is required for the pre-pharmacy students. The advisement sessions typically last 20 minutes each. Course selection, academic progression, academic performance, and entrance requirements for the professional program are common topics of discussion.

In preparation for the advisement sessions, students are provided materials to review and prepare for the session. These include handouts of important program information, information about major changes and on-campus resources, and course registration forms. In addition, a recorded webinar is provided to review the highlights related to the admissions process for the professional program.

Pre-pharmacy students declare two "majors". Typically, students choose biology, chemistry, exercise science, or some other STEM field which qualifies them for the LIFE scholarship enhancements. With two declared majors, the student may be advised both by the college of pharmacy and the other college where the major resides. The benefit to students who have two majors is that students stay on track to finish college with a degree in the shortest amount of time and if students are not admitted to the pharmacy program they are in good position to finish with a degree in 4-5 years.

Advisement for the professional students (PharmD) is optional and conducted with faculty mentors. The focus of advisement in the professional program is career exploration and preparation. Students identify career paths of interest through various publications, presentations, and surveys. A list of faculty mentors, organized by career path, is provided to all professional students. Students then select as many mentors as they would like to make contact with. Faculty – student meetings can be one-on-one or group sessions, depending on the nature of information discussed and the number of students working with a specific faculty mentor.

Academic requirements for the PharmD program are very structured and little guidance is needed in the course selection process. The one exception would be the four elective courses completed in professional year 2 and 3. These courses are presented to the students in group information sessions in which faculty present information about their elective course and answer questions. If students are experiencing academic difficulties, the Assistant Dean, Associate Dean, and faculty member are regularly involved with discussing strategies for improvement. The faculty and Deans monitor exam grades and identify students with multiple deficiencies (grades below C) for intervention.

One method of assessment of the advisement success is the number of pre-pharmacy students that complete the academic curriculum on time and are granted admission to the professional program. The College has a very high percentage of students that complete the pre-pharmacy curriculum (66 credit hours) in two academic years. Approximately 65-70% of pre-pharmacy students are admitted to a professional program upon completion of the Pre-pharmacy curriculum. Another assessment is the attrition rate of students in the professional program, which regularly remains at 3% or less.

Assessment of the pre-pharmacy advising experience has been conducted in the past by individual feedback from students. The College is currently developing a new survey that will be administered to pre-pharmacy students to gather information about student satisfaction with the advisement services offered and the advisement experience. Focus groups are conducted each semester with professional students to discuss a variety of

topics related to the professional program. At least once per year, student services and advisement/mentoring is discussed with these groups (roughly 40 students participating).

## 3. What types of student support do you find to be most beneficial to your students in terms of retention and successful progress toward their degrees?

- Academic performance monitoring through Dean's Office for all major exams; students with deficient exam performance are identified and contacted.
- Academic advisement sessions in Dean's Office based on academic performance monitoring which during the semester identifies students with poor performance in multiple courses.
- Tutoring services offered for individual students by Rho Chi Honor Society members.
- Faculty review/help sessions which are offered for entire class.
- Student meetings with individual faculty to review strategies for improving course performance.
- USC Academic Success Center.
- USC Counseling Services.

#### **Student Graduation and Placement**

## 1. Have you assessed your degree programs to determine if program requirements are reasonable in terms of time toward graduation?

The Doctor of Pharmacy program is a 4-year professional program. Most (>90%) of ACPE accredited Doctor of Pharmacy programs are 4 years in length. Over 90% of students entering the Doctor of Pharmacy program graduate within 4 years. Since implementation of the entry level Doctor of Pharmacy program, 4-year graduation rates have exceeded 90%.

- a) What changes have you made? NA
- b) What further changes are needed? NA

# 2. Outline what measures you have put in place to assist students with intern placement and job placement.

The academic program by nature allows students many opportunities for internship and job placement. Each student completes 11 one-month professional practice experiential rotations over the four year curriculum. The opportunities provide training as well as career exploration and potential job opportunities following completion of the rotation.

The College maintains an online job board for prepharmacy and professional students. This job board consists of internship announcements as well as opportunities for job placement as a student and upon graduation. Many of these announcements come from alumni of the college. Alumni communications regularly include reminders indicating this offering provided by the College. Job/Intern postings are provided at no cost to alumni/employers. Volunteer and job shadowing opportunities are also included on this site. Additionally, a lengthy list of healthcare and job search sites have been compiled and posted in an online portal to aid students in the job search process.

The College, in collaboration with the USC Career Center, hosts Pharmacy Career Day. The Pharmacy Career Day is an on-campus job fair specifically targeting job opportunities for continuing and graduating pharmacy students. This event is held annually in October. During the Fall and Spring semester, the College hosts numerous events in which pharmacy employers are on campus to interact with students. These events typically include speakers for student organizations, career presentations, social events and award ceremonies that employers sponsor, and on campus interview sessions.

## 3. Outline the measures that you use to track graduates with baccalaureate, masters, and doctoral degrees.

We do not have a process in place to track all graduates of our Doctoral degree programs. Graduates are asked for contact information prior to graduation and entered into our alumni/development database. Many times students will stay in contact with faculty, advisers, or be part of our extensive preceptor network. Typically the Ph.D. graduates have built long term relationships with graduate faculty and remain in contact with major advisers.

#### **Distributed Learning**

- 1. Outline your college's involvement with distributed learning.
- 2. What measures have you taken to expand the availability of distributed learning courses in your college?
- 3. What measures have you taken to insure the quality of distributed learning courses?

The College is a multicampus program with students at USC, MUSC, and the Greenville Hospital System University Medical Center. Each day, multiple lectures are transmitted from one of the three sites to the other sites in a synchronous manner. Approximately 50% of the doctor of pharmacy curriculum is delivered by distance education. Because the lectures originate approximately half from Charleston and half from Columbia the typical student has a "live" instructor in class for about 75% of the total curriculum. In August 2011 the program was expanded to GHS with most courses delivered from USC or MUSC. To assure the quality of the distributed learning courses the College regularly offers training to

faculty members. In addition, the DE classroom facilities have been substantially upgraded in the past year. Survey data is collected each year from students and faculty to assess the quality of DE. We do not offer virtual laboratories.

#### **USC Connect and Community Engagement**

#### 1. Outline the measures your college will take to encourage to use USC Connect.

- Integrative learning incorporate into early curriculum (Interprofessional course with Medical School for P1/M1 students); highlight shadowing experiences or other 'beyond the classroom' learning within college and to the University; faculty development on integrative learning.
- Faculty incentives USC will be coming out with small grants focused on USC Connect principles, including integrative learning. Exposure to these and encouragement of participating from SCCP would be great.
- Reflection need to find a way to incorporate this more should be in the form of some sort of publicity – we already highlight these sorts of activities with Roby and the Dean's reports, etc.

## 2. Describe the college's plans to support faculty use of reflection in the classroom and develop expertise in integrated learning.

 Reflection has not been something that has routinely been part of the Doctor of Pharmacy curriculum. USC Connect committee suggestions include development of an ePortfolio (can do this on Blackboard) – and it would be something unique for our students. Faculty have utilized some social media (Facebook, blogging, or other electronic mechanism for sharing) to support educational activities. Several electives do have reflection assignments. Several faculty within the college have interest in integrated learning and have implemented integrated learning into the educational process for students. Faculty utilize technology such as videos, simulations, etc. to build integrated learning.

# 3. How many of your classes involved service learning? Undergraduate research? and international experiences?

- Many of college of pharmacy students participate in service learning projects. Many
  of the student professional organizations organize service learning events and the
  last year of the Doctor of Pharmacy curriculum is experiential with many
  opportunities for service learning.
- Some of the college of pharmacy students are involved in "undergraduate research". Typically this involves a student registering for an independent study course or applying to be a Magellan Scholar.

- The college offers international pharmacy experiences to students who have an
  interest in this area. Many students utilize the break between spring and fall
  semesters to travel abroad. The college has a formal agreement with MISR
  University in Cairo, Egypt for a student exchange program and is in the process of
  developing other similar programs. The college has named a Director of
  International programs to facilitate and grow partnerships with international
  universities.
  - a) Has the number increased with time?
  - b) Is the number appropriate for your discipline?
- 4. What additional opportunities does your college plan to provide for engaging students beyond the classroom?

#### Faculty Hiring/Retention and Ph.D. Programs

1. Number of faculty hired and lost for AY 2009, AY 2010, and AY 2011 (by department, if applicable, and by rank.)

Academic year	Pharmaceutical and Biomedical Sciences		Clinical Pharmacy and Outcome Sciences		
	Hired	Lost	Hired	Lost	
2008	1	2	2	2	
2009	3	0	3	3	
2010	0	1	3	0	
2011	4	1	3	0	

2. Number of post-doctoral scholars (Ph.D., non-faculty hire) in FY 2009, 2010, 2011.

FY 2009 = 29

FY 2010 = 28

FY 2011 = 36

3. Anticipated losses/hiring of faculty by year for the next five years.

#### Losses

FY 2012 – 2 retirements

FY 2013 – 3 retirements

FY 2014 – 1 retirement

FY 2015 – 1 retirement

FY 2016 – 1 retirement

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## 4. Outline your college's actions to improve graduate education, to improve it's NRC and other rankings.

The Department of Pharmaceutical and Biomedical Sciences (PBS) approved a new 5year Strategic Plan on August 16, 2011 for 2011-2016. Several priorities and goals of this new strategic plan included efforts to enhance graduate education that would lead to improved rankings including; as 1-year priority goals the following: (1) Prepare and submit an NIH training grant, (2) Increase the number of graduate students and postdoctoral associates funded by external fellowships, (3) update and organize departmental graduate programs on both campuses, create more joint courses and produce a recruiting brochure to support enhanced recruiting efforts, and (4) increase the number of students recruited into the Pharm.D//Ph.D. program; as 5-year goals the following: (1) achieve graduate level research training programs leading to the Ph.D. that are qualitatively and quantitatively comparable to premier-level schools and colleges of pharmacy, (2) enhance current levels of support through external fellowships and training grant opportunities, (3) offer structured postdoctoral programs that are recognized among the best in the country, as benchmarked against premier-level schools and colleges of pharmacy, and (4) attract and enroll highly qualified, motivated students from diverse backgrounds into the College's professional and graduate programs, with an emphasis on increasing the percentages of domestic applicants in preparation for a training grant application.

Additional efforts to improve the overall quality of the graduate educational experience include: (1) the college supports the College of Pharmacy Graduate Student Association (CPGSA) and the faculty attend CPGSA sponsored events such as Halloween and Christmas gatherings, (2) the executive Dean meets over lunch annually with the graduate students, (3) the graduate students meet over lunch with seminar speakers and special guests, (4) the college encourages and supports the students to present their research findings at national and international meetings, and (5) faculty take graduate education and mentoring seriously and work closely with the graduate students during their Ph.D. studies.

## 5. Describe your methods for placing your Ph.D. and other terminal degree students in tenure track positions at high ranking institutions.

In our field most Ph.D. students must do postdoctoral work before they are competitive for tenure-track positions at high ranking institutions. Thus a priority of our Ph.D. Program is to

make sure that our Ph.D. students publish their results in high impact journals prior to graduation so that they can be place or are competitive for postdoctoral positions at the top universities nationwide. For example recent Ph.D. graduates are currently doing postdoctoral studies at Harvard University, Yale University, Cleveland Clinic, University of Maryland School of Medicine, and New York University. After productive postdoctoral experiences at the top universities our faculty continue to follow their students and provide strong letters of recommendation when the graduates apply for permanent faculty positions.

#### Research

- 1. Describe the interdisciplinary research that is on-going in your college.
  - a) What measures are being taken to increase interdisciplinary research?
  - b) What measures should be taken to promote interdisciplinary research?

Interdisciplinary research is routine in our college. Faculty in the Department of Pharmaceutical and Biomedical Sciences have active collaborations with other faculty in the Department of Biology, Department of Chemistry and Biochemistry, School of Medicine (SOM)-Columbia Campus, Department of Psychology, School of Public Health and College of Engineering and Computing. In addition, several faculty participate in research centers, for example Wyatt, Roninson, Creek, Pittman, Hofseth, Xu, and Shtutman are all actively involved in the Center for Colon Cancer Research, while Hofseth participates in the CAM Center at the SOM and Creek is a PI with the CCE-SPHERE Center housed in the Institutes for Partnerships to Eliminate Health Disparities. Also, many faculty collaborate with the Hollings Cancer Center.

### Appendix C

### **Funding Sources**

1. "E" fund balances, by account, as of June 30th 2009, 2010, and 2011.

2. Gifts and Pledges received in FY 2011.