



The University of North Carolina

GENERAL ADMINISTRATION

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MEMORANDUM

TO: Members, Committee on Educational Planning, Policies, and Programs

FROM: Alan Mabe

DATE: September 29, 2010

SUBJECT: Report on UNC-Chapel Hill/ECSU Doctor of Pharmacy Partnership Program

Background:

There was a major study of pharmacy in 2002 in the system, which led to a recommendation by the team of visiting pharmacy deans that a satellite partnership program between UNC-Chapel Hill and Elizabeth City State University would provide the most cost effective option for addressing pharmacy needs in the northeast.

The program was launched with its first class in the fall of 2005 and it had its first graduating class in 2009.

Jurisdictional Authority:

Report was requested by the Committee.

Issues Involved:

The Report addresses organization, admission, student success and the many programs that have been introduced to prepare and expand the regional pool of students for the program.

The pharmacy building at ECSU opening this fall is another milestone in the progress of the program.

Behind the report is a copy of the 2002 study and the MOU signed in 2005 that established the basis for the partnership.

Recommended Actions:

No recommendations, for information only.

Progress Report

UNC-Chapel Hill/ECSU Doctor of Pharmacy Partnership Program

October 7, 2010



UNC
ESHELMAN
SCHOOL OF PHARMACY

ECSU
ELIZABETH CITY STATE UNIVERSITY

Historical Perspective

- UNC-Chapel Hill/ECSU Pharmacy Task Force appointed in 2002 (Appendix 1)
- Original proposal: PharmD students attend classes at UNC Chapel Hill campus for first two years
- Accepted format: PharmD students attend classes at ECSU campus for all three years of didactic instruction
- Memorandum of Understanding completed in January 2005 (Appendix 2)
- First cohort of students admitted fall 2005
- Students on the ECSU campus receive the majority of their core instruction through VTC from Chapel Hill; on-site instruction occurs periodically

Historical Perspective (cont.)

- A single accreditation is granted to multi-campus programs by the Accreditation Council for Pharmacy Education (ACPE)
- ACPE uses a definition of “oneness” of the program across multiple campuses
- ACPE accreditation applies to the Doctor of Pharmacy program in its entirety. Any issue of noncompliance with accreditation at a distance site will impact the accreditation status of the program.

Objectives for Partnership Program (2005 MOU)

1. Increase number of PharmD graduates from the UNC system.
2. Promote increase in number of pharmacists in NC representing minority and underserved populations.
3. Stimulate economic development and increase pharmacy manpower in northeastern NC.
4. Optimally utilize existing NC resources for most timely and cost-efficient approach to meeting current and future pharmacy manpower needs.

Objectives for Partnership Program (cont.)

5. Stimulate campus development and increase degree-granting opportunities for ECSU (e.g. expand science complex facilities; implement BS pharmaceutical sciences degree at ECSU).
6. Provide ECSU faculty and administrative experience with development and assessment of a professional degree program to facilitate future development of similar programs.

Objectives for Partnership Program (cont.)

7. Provide UNC-Chapel Hill School of Pharmacy with opportunities to develop and implement collaborative educational processes, distance education technologies and pedagogical practices to facilitate future educational program development.
8. Develop an effective model for operating satellite professional degree programs in The University of North Carolina.

Markers of Success (MOU)

- #1: Development of a functional partnership between UNC-Chapel Hill and ECSU (student, faculty, and administrative satisfaction measures)
 - Organizational barriers:
 - Fees
 - Registration and billing
 - Health services
 - Library resources

Markers of Success (cont.)

- #2: Recruitment of an appropriate number of qualified students
 - Admission Process
 - Admission Criteria
 - Admission Statistics, 2005-2011 (per ACPE agreement, there can be up to 15 students at ECSU and 142 students at UNC-Chapel Hill for each class)
 - Comparison of Admission Scores
 - Comparison of Academic Performance

Admission Process

- Identical application process and admission criteria
 - Apply through PharmCAS
 - Submit supplemental online application
 - Application is reviewed and evaluated by the Admission Committee
 - Qualified applicants are invited for on-site, standardized interview. Interviewed by two faculty interviewers.

Admission Criteria

- Holistic approach to admissions
- Application review
 - GPA (overall and pre-requisite courses)
 - PCAT scores (composite and sub-sets)
 - Transcript evaluation
 - Work or volunteer experience
 - Leadership experience
 - Unique perspectives or background that would add to the diversity of the program
 - Letters of recommendation
- Interview
- Final review by Admissions Committee

Regional Characteristics of Students Admitted to ECSU Campus (n=72)

- 28% from 21 northeastern counties in North Carolina
- 19% completed pre-pharmacy coursework at ECSU
- Greater than 88% were North Carolina residents at time of admission

Comparison of Admission Scores

Comparison of PCAT and GPA Scores at Admission between UNC and ECSU Campuses				
	Mean PCAT Score		Mean Entry GPA	
	UNC	ECSU	UNC	ECSU
2009	397 ¹	388	3.48	3.20
2010	392	364	3.52	3.15
2011	87.5 ²	67.4	3.52	3.47
2012	86	82	3.48	3.25
2013	83.5	73	3.50	3.46

¹ Composite Score

² Percentile Score (New reporting format beginning in 2007)

Comparison of Academic Performance

Conclusion To Date: When important student characteristics are accounted for, including incoming GPA and PCAT scores, overall academic performance between the two campuses appears similar.

Comparison of Academic Performance between UNC and ECSU Campuses

Class of 2009 (N=144)						
	Chapel Hill (n=131)		Elizabeth City (n=13)			
Measure	Mean	SD	Mean	SD	ANOVA P-value ¹	ANCOVA P-value ²
Incoming GPA	3.48		3.20			
Incoming PCAT	397		388			
Semester 1 GPA	3.50	0.43	2.93	0.48	<.0001	0.01
Semester 2 GPA	3.39	0.50	3.00	0.47	0.01	0.52
Semester 3 GPA	3.44	0.47	2.94	0.46	0.001	0.11
Semester 4 GPA	3.44	0.39	2.99	0.47	0.0002	0.07
Semester 5 GPA	3.38	0.40	3.05	0.36	0.02	0.77
Semester 6 GPA	3.60	0.37	2.94	0.31	<.00001	<.00001
Semester 7 GPA	3.64	0.54	3.77	0.60	0.20	0.12
Semester 8 GPA	3.69	0.53	3.92	0.28	0.04	0.01
Final Cumulative GPA	3.43	0.39	2.97	0.40	0.0001	0.09
OSCE1	91.98	4.32	94.25	3.66	0.07	0.01
OSCE2	93.44	3.42	92.91	4.73	0.59	0.40
OSCE3	92.94	4.15	90.90	4.88	0.05	0.15
Pre-experiential Exam	62.12	10.64	62.66	7.07	0.67	0.60
NAPLEX & MJPE pass rate	100%		100%			
Class of 2010 (N=142)						
	Chapel Hill (n=133)		Elizabeth City (n=9)			
Measure	Mean	SD	Mean	SD	ANOVA P-value ¹	ANCOVA P-value ²
Incoming GPA	3.52		3.15			
Incoming PCAT	392		364			
Semester 1 GPA	3.30	0.47	3.24	0.57	0.68	0.20
Semester 2 GPA	3.25	0.50	3.21	0.39	0.81	0.18
Semester 3 GPA	3.46	0.44	3.56	0.37	0.52	0.09
Semester 4 GPA	3.53	0.46	3.63	0.28	0.52	0.13
Semester 5 GPA	3.39	0.43	3.43	0.34	0.75	0.24
Semester 6 GPA	3.66	0.54	3.76	0.19	0.60	0.59
Semester 7 GPA	3.69	0.51	3.33	0.50	0.50	0.16
Semester 8 GPA	3.72	0.48	3.67	0.50	0.74	0.43
Final Cumulative GPA	3.438	0.377	3.45	0.29	0.91	0.14
OSCE1	90.19	9.49	90.3	3.38	0.97	0.97
OSCE2	87.83	7.32	83.0	7.38	0.06	0.19
OSCE3	93.92	3.47	90.0	2.23	0.001	0.001
Pre-experiential Exam	62.14	10.64	62.9	7.45	0.82	0.26

Comparison of Academic Performance between UNC and ECSU Campuses

Class of 2011, PY4s (N=146)						
	Chapel Hill (n=136)		Elizabeth City (n=10)			
Measure	Mean	SD	Mean	SD	ANOVA P-value ¹	ANCOVA P-value ²
Incoming GPA	3.52		3.47			
Incoming PCAT	87.5		67.4			
Semester 1 GPA	3.40	0.45	2.61	0.63	0.001	0.002
Semester 2 GPA	3.40	0.44	2.80	0.59	0.001	0.02
Semester 3 GPA	3.59	0.34	3.20	0.48	0.001	0.06
Semester 4 GPA	3.46	0.47	3.13	0.62	0.04	0.22
Semester 5 GPA	3.38	0.50	3.08	0.46	0.06	0.23
Semester 6 GPA	3.73	0.34	3.56	0.35	0.12	0.46
Current Cumulative GPA	3.51	0.43	3.00	0.49	0.0006	0.06
OSCE-1	88.9	6.70	87.4	5.17	0.50	0.58
OSCE-2	86.6	7.7	80.9	10.36	0.03	0.05
OSCE-3	85.6	6.1	79.4	5.8	0.002	0.01
Pre-experiential Exam	68.4	8.6	59.4	13.3	0.002	0.0007
Class of 2012, PY3s (N=152)						
	Chapel Hill (n=142)		Elizabeth City (n=10)			
Measure	Mean	SD	Mean	SD	ANOVA P-value ¹	ANCOVA P-value ²
Incoming GPA	3.48		3.25			
Incoming PCAT	86		82			
Semester 1 GPA	3.34	0.43	3.14	0.63	0.22	0.83
Semester 2 GPA	3.21	0.64	2.94	0.83	0.23	0.53
Semester 3 GPA	3.47	0.41	3.20	0.48	0.06	0.31
Semester 4 GPA	3.39	0.49	3.17	0.49	0.21	0.59
Current Cumulative GPA	3.37	0.43	3.01	0.62	0.07	0.37
OSCE1	85.2	12.4	86.51	8.1	0.76	0.68
OSCE2	86.3	7.13	82.65	9.09	0.15	0.23
Class of 2013, PY2s (N=153)						
	Chapel Hill (n=142)		Elizabeth City (n=11)			
Measure	Mean	SD	Mean	SD	ANOVA P-value ¹	ANCOVA P-value ²
Incoming GPA	3.50		3.46			
Incoming PCAT	83.5		73			
Semester 1 GPA	3.59	0.32	3.62	0.32	0.69	0.05
Semester 2 GPA	3.28	0.49	3.07	0.76	0.16	0.84
Current Cumulative GPA	3.48	0.39	3.31	0.55	0.36	0.64

Markers of Success (cont.)

■ #3: Progression to graduation

Conclusion To Date: Graduation Rates are Comparable

- 2009 PharmD graduates
 - UNC-Chapel Hill: 134 admits, 129 graduates
 - ECSU: 13 admits, 12 graduates
- 2010 PharmD graduates
 - UNC-Chapel Hill: 141 admits, 136 graduates
 - ECSU: 10 admits, 10 graduates

Markers of Success (cont.)

- #4: National and NC Board of Pharmacy licensure

Conclusion To Date: Passing Rates are Comparable

UNC and ECSU NAPLEX Scores, 2009

	Number Tested	Passing Rate	Mean Scaled Score	Mean Area 1 Score	Mean Area 2 Score	Mean Area 3 Score	Passing Rate across all schools in 2009
Overall	140	100.00%	115.89	12.6	12.5	13.1	96.42%
<i>Chapel Hill</i>	127	100.00%	116.29	12.6	12.5	13.1	
<i>Elizabeth City</i>	13	100.00%	112.00	12.0	12.3	12.8	

Markers of Success (cont.)

- #5: Construction of facilities and creation of Elizabeth City State University infrastructure
 - Construction of the new building completed August 2010
 - All classrooms are equipped with technology for synchronous video-conferencing (VTC) and classroom capture
 - 17 offices to support faculty and staff
 - New pharmacy building contains a Pharmaceutical Care Lab and the Drug Information Center (DIC)

New Pharmacy Building at ECSU



VTC from UNC-Chapel Hill to ECSU



Markers of Success (cont.)

- #6: Increased number of pharmacy graduates pursuing careers and creating jobs in northeastern NC
 - 2009 ECSU graduates
 - 4 graduates (33%) stayed in 21-county area
 - 2 (17%) graduates went on to residencies/fellowships
 - 2010 ECSU graduates
 - 1 graduate (10%) stayed in 21-county area
 - 3 graduates (30%) went on to residencies/fellowships

Markers of Success (cont.)

- #7: Demonstration that the partnership program produced efficiencies in state resource allocation through the organization of faculty, staff, and infrastructure
 - Faculty and staff sharing (e.g. basic science faculty)
 - Pedagogy tools (e.g. iLAMsTM)
 - State of the art technology and multipurpose use

Independent Funding

- \$750,000 grant from GlaxoSmithKline Foundation
 - Provides funding to establish advanced practice experiences in northeastern North Carolina, increase the number of professional pharmacy faculty, and establish a drug information center
 - Three-year grant
- \$400,000 grant from Wachovia Foundation
 - Provides support to cover training, recruitment, and retention costs for prospective pharmacy applicants from northeastern North Carolina
 - Example – Wachovia Pharmacy Fellows Program

Independent Funding (cont.)

- \$80,000 grant from the state for Pilot Program for Recruitment of Minority Students into School of Pharmacy (RFA #A101)
 - Resulted in development of DVD that received national recognition from the American Association of Colleges of Pharmacy
- \$2 million from private funds
 - Support pedagogy of campus-based education

Strategies for the Future

- Feeder programs
 - Science Enrichment Program
 - BS in Pharmaceutical Sciences
- Changes at ECSU
 - New building at ECSU
 - Director hired at ECSU
- Rural Pharmacy Health Initiative
- Scholarship programs directed to ECSU enrollment
- Recruitment and Diversity Initiatives progress



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Recruitment and Diversity Initiatives

- The Office of Recruitment and Diversity Initiatives was established in 2007.
 - The focus of the office is to encourage, nurture, advocate, retain, evaluate, and monitor the success of underserved and underrepresented students in the doctor of pharmacy program.
- Carla White Harris was hired as director of the Office of Recruitment and Diversity Initiatives.
 - The UNC Eshelman School of Pharmacy received the 2010 University Diversity Award for exemplary efforts to increase representation of underserved students.

Recruitment and Diversity Initiatives (cont.)

- The Pharmacy Recruitment Ambassador's Program was launched in spring 2008 with a student tier; a faculty tier was established in fall 2008.
 - Participants receive recruitment training and participate in a variety of recruitment activities. There are over 100 ambassadors.
- The Carolina Pharmacy Leadership Excellence And Development (LEAD) programs were launched in June 2009
 - Geared toward underserved and underrepresented high school and college students. These programs are the first in North Carolina and there are few nationwide.

Recruitment and Diversity Initiatives (cont.)

- Other recognized programs in the Office of Recruitment and Diversity Initiatives
 - The College Campus Bus Tours
 - Pre-pharmacy club (Chapel Hill campus), the Apothecary club (ECSU campus)
 - Open houses
 - Tours
 - Promotional DVDs and literature
 - Campus presentations for black history month
 - Sixth annual two-day comprehensive PCAT review

FINAL REPORT**The University of North Carolina
Pharmacy Task Force**

The Pharmacy Task Force was convened July, 2002 to consider options for increasing the number of pharmacy graduates from The University of North Carolina (UNC) system. This was in response to indications that a shortage of pharmacists existed in North Carolina, as documented by a study from Cecil G. Sheps Center for Health Services Research entitled, "The Pharmacist Workforce in North Carolina. (1) The Report concluded an imbalance in supply and demand of pharmacists existed in North Carolina, and a coordinated approach was required to address the problem. Recommended actions included (1) changing the reimbursement policies for prescription drugs (increase allowable days' supply for Medicaid and other insurers from 30 to 100 days, (2) consider establishing new pharmacy program(s), (3) increase funding to the state's loan repayment/forgiveness program to encourage pharmacists to practice in underserved areas, (4) expand the use of pharmacy technicians, (5) increase the use of technology, and (6) seek reimbursement for patient counseling and non-dispensing functions. In addition, one or more public or private institutions of postsecondary education were interested in developing a school of pharmacy, and the North Carolina General Assembly expressed interest in developing a pharmacy program at the Elizabeth City State University.

The UNC Office of the President (OP) assembled a team of consultants, three nationally recognized deans of three pharmacy schools, to provide advice. The consultants' report (attached) identified three options for expanding the number of pharmacy graduates:

1. Develop a stand-alone school of pharmacy at Elizabeth City State University, at a one-time cost for facilities of \$7 – 10 million, and recurring costs of \$4.4 – 5.1 million.
2. Develop a joint program between Elizabeth City State University and East Carolina University, with identical costs to a stand-alone program but the funds would be divided between the two institutions.
3. Develop a joint program between Elizabeth City State University and UNC-Chapel Hill, at a one-time cost for facilities of \$2.3 – 3.3 million and recurring costs of \$2.6 - \$3.2 million.

The consultants recommended Option #3 for the following reasons:

1. Addresses the shortage of pharmacists in the State as presented in the Sheps Center study.
2. Addresses the need for more minority pharmacists in North Carolina.
3. Takes advantage of the existing financial and faculty resources already available in the UNC-Chapel Hill School of Pharmacy.
4. Offers the most cost-effective approach during a time of difficult fiscal circumstances for postsecondary education.
5. Produces measurable results in a more timely manner than options #1 and #2.
6. Makes effective use of the Area Health Education (AHEC) system and increases likelihood graduates will remain in the Northeast region.
7. Provides immediate academic program enhancement for Elizabeth City State University.
8. Addresses the need for economic development in Northeast North Carolina.

Their recommendation was presented to the Educational Planning, Policies, and Programs Committee of the UNC Board of Governors (BOG). On March 6, 2002, the BOG approved "the feasibility study and the recommendation that the Board of Governors support Option #3, a joint pharmacy program between Elizabeth City State University and The University of North Carolina at Chapel Hill."

In consultation with the Chancellors of Elizabeth City State University and UNC-Chapel Hill, a Task Force was formed to develop an "Implementation Plan" for Option #3. Co-chairs of the Task Force were William Campbell, Dean of the UNC-Chapel Hill School of Pharmacy, and Carolyn Mahoney, Interim Vice Chancellor for Academic Affairs at Elizabeth City State University. Three additional representatives from each institution were appointed to the Task Force, plus a person with expertise in distance learning technologies. The names and affiliations of Task Force members are noted following the summary of this Report. Dr. Gretchen Bataille, Vice President for Academic Affairs for the University of North Carolina, convened the initial meeting and charged the Task Force to "think creatively and develop a model that would serve the long term needs of the State." Dr. Bataille stressed the importance of the effort, and the opportunity to create a new model of pharmacy education that relies upon inter-institutional collaboration and makes the most efficient use of scarce resources.

The Task Force first developed a structure for inter-institutional collaboration that would make maximum use of the existing resources for pharmacy education at UNC-Chapel Hill. The following general model was proposed:

PRE-PROFESSIONAL CURRICULUM: standard pre-pharmacy curricula that provides a grounding in physical, biological, behavioral and social sciences. May be completed in two years, but increasingly students complete prepharmacy requirements as part of completing a degree (e.g., biology or chemistry)

2-4 years

PROFESSIONAL CURRICULUM: four-year curriculum that concludes with award of the Doctor of Pharmacy (PharmD) degree. Specialized faculty expertise required in the pharmaceutical sciences and pharmacy practice. Coursework is provided through a combination of didactic instruction, small group instruction, and a specialized teaching laboratory that integrates information across coursework for the first three years. The "Integrated Teaching Laboratory" or Pharmacy Care Laboratory requires specialized facility and faculty resources.

<u>Year and Description</u>		<u>Facility Requirements</u>
Year 1	"Basic Science"	Integrated Teaching Laboratories-1
Year 2	"Science/Practice Interface"	Integrated Teaching Laboratories-2
Year 3	"Pharmacotherapy Applications"	Integrated Teaching Laboratories-3
Year 4	"Clinical Experiences"	AHEC

Assignments were made to all Task Force members to evaluate various components of the four year program and identify problems or opportunities for developing a collaborative program. Issues identified for in-depth analysis included the following:

1. Compare Elizabeth City State University curriculum to UNC-Chapel Hill prepharmacy requirements, and determine whether additional coursework or modifications are required.
2. Review Elizabeth City State University enrollment and career interests, and recommend initial size of Elizabeth City State University cohort for planning purposes.
3. Review years 1-2 of the UNC-Chapel Hill curriculum and identify resource requirements to accommodate additional students.
4. Review Year 3 didactic curriculum to determine feasibility of conducting on-site in Elizabeth City.

5. Review Integrated Teaching Laboratories 1-3 to assess feasibility of developing a comparable facility at Elizabeth City.
6. Review Year 4 (AHEC) and work with AHEC administration to identify resource requirements.

An examination of coursework currently available at Elizabeth City State University confirmed that all coursework required for admission to UNC-Chapel Hill School of Pharmacy would be available through ECSU. A possible area of non-alignment is foreign language however, it was the consensus of the group that this would not present a major challenge. It was concluded students could complete the prepharmacy requirements for pharmacy in two years (or more) at Elizabeth City State University. The Task Force recommended a joint admissions committee, or possibly subcommittee, to review applicants from Elizabeth City State University and admit them into the joint program. As envisioned, there would be one application process, all applicants would have to meet the same requirements for admission, but applicants from Elizabeth City State University would compete for the 8-10 positions (initially) allocated for the joint program.

Discussions of initial and steady-state size of the Elizabeth City student cohort were led by Dr. Carolyn Mahoney. It was recommended the initial cohort would be 8-10 students, increasing over time to a steady state of 15 students. Based upon this size it was agreed a start date of Fall, 2003 should be our planning goal. While Fall, 2003 is an ambitious timetable, the Task Force believes it is best to plan for this start date, and move it back if required by resource or other constraints.

The first two years (PY1 and PY2) for Elizabeth City students at Chapel Hill were discussed at length. Because current laboratories and some classrooms are at capacity, the addition of students from Elizabeth City will require renovation of facilities. Fortunately, planning for renovation of Beard Hall is currently underway and it will be quite possible to add the expansion of teaching laboratories to the current plans. However additional funds will be required, as noted in the proposed budget for UNC-Chapel Hill. (2) Upon completion of the PY-2 year (the fourth year of matriculation), students would be eligible to receive a Bachelor of Pharmaceutical Sciences from Elizabeth City State University. This provides Elizabeth City State University a new degree-granting opportunity, and provides the students with a "marker" in their progress toward the PharmD degree.

The third year (PY-3) relocates students to Elizabeth City, and at this time there must be a critical mass of faculty and support staff, plus a specialized teaching laboratory to serve student needs. In addition, because coursework from UNC-Chapel Hill will be transmitted via videoconferencing and other distance education technologies, including but not limited to use of on-line materials (via internet) to ECSU, some upgrading of classroom facilities in Chapel Hill will be required. This is a cost shown for years 3 and 4 in the implementation budget.(2) Costs associated with faculty, equipment and facilities at ECSU are attached. This will also permit initiation of coursework from ECSU to UNC-Chapel Hill.

The AHEC support required for Elizabeth City State University students should be easily accommodated through the Eastern AHEC program. The School of Pharmacy at UNC-Chapel Hill and the Eastern AHEC Program have a long history of very positive collaboration, and with additional resources it should be easily possible to accommodate the additional students. Tentative budget projections have been made for this portion of the program, but it would not have an impact until 2006-07, allowing more than adequate preparation time.

Upon graduation, the students will have completed all requirements for a Doctor of Pharmacy (PharmD) degree from the University of North Carolina at Chapel Hill, with approximately one-half the credits earned while at Elizabeth City. The Task Force proposed this partnership be recognized in the diploma,

with wording such as "The University of North Carolina at Chapel Hill, in cooperation with Elizabeth City State University."

This program will present several challenges that at this time have not been fully addressed. The most important is the support required by Elizabeth City State University students as they transfer to UNC-Chapel Hill School of Pharmacy. The relocation will likely invoke many stresses on the students, including but not limited to increased cost of living, family separation, living in an urban vs. rural environment, and the demands of a very rigorous academic program. Adequate support systems must be established for the students, and at this time it is unclear how best to meet this need. Discussions with representatives of UNC School of Medicine have been very helpful in clarifying some issues. Mr. Larry Keith and Mr. Greg Cooper met with the Steering Committee to describe the type of support services provided to minority and disadvantaged students in the School of Medicine.

Science Enrichment Program (SEP). This eight-week program is offered in the summer for prospective students in the health professions. It includes career counseling, study skills development, coursework, and direct involvement with health practitioners. Mr. Keith and Mr. Cooper strongly recommended the SEP be required for all students admitted to the UNC-Chapel Hill and ECSU joint program. Costs are modest, approximately \$3,400/student, which includes housing, tuition, fees, and a small stipend for the student. After discussion, the Task Force recommended SEP be required of all students entering the joint program, with special waiver should space not be available in the program or other situations occur that would make it impossible for students to participate. This requirement was not included in the original budget request, and will be added to the Final Report.

Counseling, Advising and Support. Mr. Keith described his role in the School of Medicine Program in which he takes a very proactive approach to monitoring progress, contacting students, arranging tutorial assistance, and working with faculty. He volunteered to assist with pharmacy students, and indicated a strong commitment to working with ECSU and making the program succeed. It also appeared clear that a person similar to Mr. Keith and Mr. Cooper would be required in the Office of Student Services, in the School of Pharmacy, to provide the kind of support required. Budget support for this component was not included in the earlier information provided to the Office of the President, but will be included in the Final Report Budget.

SUMMARY AND RECOMMENDATIONS:

The Task Force believes a collaborative model for pharmacy education is not only desirable, but is uniquely possible given the tradition, culture, and resources of the University of North Carolina. An initial model is proposed that admits Elizabeth City State University students after completing their prepharmacy requirements, places them at UNC-Chapel Hill for two years, and returns them to Elizabeth City State University for the final two years. In a minimum of six years, a student from Elizabeth City State University could graduate with a Doctor of Pharmacy Degree. In order to accomplish this goal we offer the following recommendations:

Recommendation #1. We recommend implementation of a joint pharmacy program between UNC-Chapel Hill and ECSU, following the structure and process described in this report.

Recommendation #2. We recommend an implementation timetable of Fall, 2003, contingent upon availability of resources and administrative feasibility. In order for this ambitious timetable to be completed, the following must occur:

- a. Resources requested through the Office of the President, as part of the 2003-4 enrollment expansion budget, must be either in-hand or assured to the satisfaction of the respective chancellors and Boards of Trustees.
- b. Several deadlines must be adjusted, including adjustment of the applications and admissions process for UNC School of Pharmacy, use of the national March 15 Pharmacy College Application Test (PCAT), feasibility of the March 1 Financial Aid deadline for determining eligibility and aid packages for the following year.
- c. Adequate review and discussion at the central administration level of UNC Chapel Hill and ECSU, to allow a "go-no go" decision by January 1, 2003.

Recommendation #3. Several administrative issues remain unresolved, including the following:

- a. Authorization for ECSU to award a baccalaureate in pharmaceutical science degree upon completion of the fourth year of the joint program.
- b. Clarification of the procedures whereby "joint program" status will be conferred; i.e., acknowledgement on diploma, approval by Board of Governors, listing in respective institutions' academic directories, etc.
- c. Determination of "counting" of students within UNC-Chapel Hill and ECSU for purposes of FTE, budget, and other administrative matters.

Beyond the current proposal, we believe there is significant potential for expanding this model to other institutions in the UNC system. Once Elizabeth City State University and UNC-Chapel Hill have gained experience with sharing curricular responsibilities between two institutions, and distance learning technology, it should be possible to invite other programs into the collaboration. The faculty of the two charter universities will be invaluable resources for implementing a true state-wide model of pharmacy education. Looking further into the future, as distance learning technology makes on-site and distance learning equivalent in measurable outcomes, it may be possible to develop programs with all four professional years at remote sites. While there must be absolute certainty that educational quality will be maintained at the highest level, this approach offers significant advantages in terms of costs/student for faculty and facilities.

RESPECTFULLY SUBMITTED:

Co-CHAIRS:

WILLIAM H. CAMPBELL

Dean, School of Pharmacy

The University of North Carolina at Chapel Hill

CAROLYN R. MAHONEY

Interim Vice Chancellor for Academic Affairs

Elizabeth City State University

<u>MEMBERS:</u>	
Pam Joyner Associate Dean, Professional Education UNC-CH School of Pharmacy	Ronald H. Blackmon Professor and Chair ECSU Biology Department
Bob Shrewsbury Associate Professor UNC-CH School of Pharmacy	Ali A. Khan Professor ECSU Physical Sciences Department
Bill Sollecito Professor and Director Public Health Leadership Program UNC-CH School of Public Health	Ralph Raasch Interim Chair, Division of Pharmacotherapy UNC-CH School of Pharmacy
Kim Stevenson Director of the Virtual College Elizabeth City State University	

MEMORANDUM OF UNDERSTANDING

January, 2005

University of North Carolina at Chapel Hill (UNC-Chapel Hill) School of Pharmacy
and Elizabeth City State University (ECSU)

This memorandum of understanding serves to elaborate and clarify the recommendations of the July 2002 *Final Report of the University of North Carolina Pharmacy Task Force* and the May 17, 2004 *Memorandum of Understanding*. This memorandum of understanding describes several key points, discussed and agreed upon during recent meetings and correspondence, related to the inter-institutional Doctor of Pharmacy program between UNC-Chapel Hill and ECSU, including the meeting of the signatories held November 29, 2004 in Chapel Hill at the Office of the President. The content in this document reaffirms or revises and replaces key recommendations for the collaboration detailed in the previous documents.

1. We reaffirm the primary goal of the partnership *"to respond to the NC pharmacy manpower shortage by increasing the number of pharmacy graduates from the University of North Carolina (UNC) system"* and our intent to do so by expanding enrollment in the UNC-Chapel Hill Doctor of Pharmacy program through an inter-institutional collaboration between the UNC-Chapel Hill School of Pharmacy and Elizabeth City State University. This commitment is predicated on the availability of sufficient resources, as identified in the Task Force report and adapted to facilitate instructional delivery via distance and other instructional technologies. Students will be admitted into a single accredited degree program, through a single admission process, with participation of faculty representing both campuses. Upon completion of degree requirements, students will receive a Doctor of Pharmacy degree from UNC-Chapel Hill with acknowledgement of the partnership with ECSU. Wording on the diploma will read *"The University of North Carolina at Chapel Hill in partnership with Elizabeth City State University."*
2. We reaffirm the following objectives for the partnership:
 - Increase the number of Doctor of Pharmacy graduates from the UNC system.
 - Promote an increase in the number of pharmacists in NC representing minority and underserved populations.
 - Stimulate economic development and increase pharmacy manpower in northeastern NC.
 - Optimally utilize existing NC resources (e.g. UNC-Chapel Hill, ECSU, and AHEC faculty, staff, facilities, clerkship sites and preceptors) for the most timely and cost-efficient approach to meeting current and future pharmacy manpower needs.
 - Stimulate campus development and increase degree-granting opportunities for ECSU (e.g. expand science complex facilities; implement BS pharmaceutical sciences degree at ECSU).
 - Provide ECSU faculty and administration experience with development and assessment of a professional degree program to facilitate future development of similar programs.

- Provide UNC-Chapel Hill School of Pharmacy with opportunities to develop and implement collaborative educational processes, distance education technologies and pedagogical practices to facilitate future educational program development.
 - Develop an effective model for operating satellite professional degree programs in The University of North Carolina.
3. We reaffirm the Task Force findings that a collaborative partnership provides the most efficient and cost effective path to meeting North Carolina's current pharmacy education and manpower needs. To that end, we commit to operating the UNC-ECSU collaborative Doctor of Pharmacy program, at minimum, through FY 2012-13. We agree that decisions to continue, restructure, or discontinue the collaboration should be data-driven, reflecting objective assessment of the program's success in meeting its stated goals and objectives. We agree to collaborate to develop appropriate assessment metrics, both internal and external, that address those programmatic goals and objectives and reflect the interests of all program participants. Markers of success should include, but are not limited to, the following:
- Development of a functional partnership between UNC-Chapel Hill and ECSU (student, faculty, and administration satisfaction measures).
 - Recruitment of an appropriate number of qualified students.
 - Progression of ECSU students to graduation, with rates comparable to those of UNC-Chapel Hill students.
 - Successful national and N.C. Board of Pharmacy licensure of ECSU graduates with passing rates comparable to those of UNC-Chapel Hill graduates.
 - Construction of facilities and creation of Elizabeth City State University infrastructure.
 - Increased number of pharmacy graduates pursuing careers and creating jobs in northeastern North Carolina.
 - Demonstration that the partnership program produced efficiencies in state resource allocation through the optimization of faculty, staff, and infrastructure.

Data will be collected and analyzed annually for the purpose of improving instructional delivery and/or program policies and procedures. Following completion of the 2012-13 academic year, an independent ad hoc committee, appointed by the UNC Office of the President, will evaluate the program's effectiveness in meeting its educational, campus development, pharmacy manpower and economic development goals and will assess whether economic and manpower conditions warrant continued pharmacy enrollment increases in the UNC System. Data collected since program inception, as well as the 2012 American Council on Pharmaceutical Education (ACPE) Evaluation Team Accreditation Report, will be provided to the committee to inform the committee's review. This committee will make recommendations to the Office of the President.

4. We reaffirm the intent to enroll 10-15 students in the initial ECSU cohort. Enrollment increases will be considered after the first year of the collaborative program. Any decision to increase class size will be predicated on positive initial results from the collaboration, sufficient growth of a cohort of competitive ECSU applicants, and availability of sufficient resources (e.g. faculty/staff funding; facility; AHEC resources; technology and instructional development; student financial aid and

scholarship funds) and will occur only with the approval of faculty from both campuses.

5. We reaffirm the intent of ECSU to grant to its students a Bachelor of Science in Pharmaceutical Sciences, with acknowledgement of the partnership with UNC-Chapel Hill, upon completion of all required coursework in the first and second professional years of the Doctor of Pharmacy curriculum, and note the Board of Governors' approval to do so. Wording on the diploma will read "Elizabeth City State University in partnership with The University of North Carolina at Chapel Hill." The UNC-Chapel Hill School of Pharmacy will explore opportunities for granting a B.S. Pharmaceutical Sciences degree to students on the Chapel Hill campus to prevent inequities in opportunities across the two campuses.
6. We have agreed to enroll the first cohort of students at ECSU in the Fall 2005 semester, with priority enrollment of competitive candidates who are current undergraduate students at, or recent graduates from, ECSU. In the event that a full cohort of competitive candidates cannot be recruited from ECSU, we have also agreed to consider admission of applicants from other colleges and universities to the ECSU cohort, with priority given to graduates of high schools in the 21-county area of north eastern North Carolina. The UNC-Chapel Hill School of Pharmacy application has been updated to reflect the addition of the program at ECSU and the applications from the first cohort have been received and are under review. All admission decisions will be made by the UNC-Chapel Hill School of Pharmacy Admissions Committee, composed of faculty representatives from UNC-Chapel Hill and ECSU. Admission offers will emanate from the Office of Admissions at the UNC-Chapel Hill School of Pharmacy, and will clearly specify the campus of residence for which the offer is being made.
7. We have agreed to modify the Task Force recommendations with regards to location and mechanism of instruction. We agree that ECSU students will remain on the ECSU campus for all three years of didactic instruction in the professional education program, with the exception of program orientation, objective structured clinical exams (OSCEs) and other standardized patient assessments, specified professional experience program (PEP) meetings, and special events, such as student organization meetings and programs or hosted speaker programs. Instruction will be delivered via distance technology, including live videoconference and a variety of innovative instructional vehicles. We note that this delivery mechanism will require ECSU-based students to deviate from the ECSU academic calendar and follow the UNC-Chapel Hill School of Pharmacy academic calendar. We anticipate that instruction will originate from the UNC campus in the early years of the collaboration, but over time both campuses will be involved in instructional development and delivery of required or elective course work to the other campus.
8. We agree that enrollment, billing for tuition and fees, and financial aid for students enrolled in the collaborative Doctor of Pharmacy program will emanate from UNC-Chapel Hill. Tuition and fees for students in the collaborative program will flow through UNC-Chapel Hill, based on a per capita formula.

9. We agree that development of a dual-campus funding model is necessary and appropriate for this collaboration and that the aforementioned changes in location and methods of instruction necessitate significant revisions to the budget proposals set forth in the 2002 report of the Pharmacy Task Force. We agree to collaborate to develop revised budget proposals, inclusive of appropriate enrollment growth funding for both campuses, by March 2005.
10. We affirm our shared commitment to identifying optimal financial support for all Pharm.D. students with financial need.
11. We have agreed that representatives of both campuses will collaborate to develop appropriate recruitment and marketing materials, with branding to be agreed upon by both campuses. All such materials will require written approval by both campuses before public release.
12. We have agreed that ECSU will appoint faculty representatives to the 2004-05 UNC-Chapel Hill School of Pharmacy Admissions Committee, Curriculum Committee and Scholastic Achievement and Progression Committee. Additional committee assignments will be made as the ECSU faculty expands.
13. We have agreed that instruction on the ECSU campus will be initiated in temporary, modular structures to be situated adjacent to the Jimmy R. Jenkins Science Center. These facilities will include 2 videoconference classrooms, pharmaceutical care laboratory facilities, faculty and staff offices, work space, student lounge and restrooms. These facilities will be used to house the collaborative Pharm.D. program until a permanent building can be constructed. We agree to collaborate on the facility and technology design for both the temporary and permanent facilities to ensure that programmatic needs are met and that compatible technologies are developed on both campuses.
14. We have agreed to form search committees, with representation from both campuses, to initiate recruitment processes for two faculty positions at ECSU. Both individuals will be hired by ECSU, with secondary faculty appointments at UNC-Chapel Hill, with full faculty rights and privileges on both campuses. These positions will be funded through recurring operational funds allocated to ECSU by the Office of the President. Additional faculty positions will be defined and recruited following appointment of the Associate Dean/Director.

We agree on the following for the lead ECSU faculty position in the Doctor of Pharmacy collaboration:

- Tenured or tenure-track primary appointment at ECSU as Associate Dean, reporting to the Dean of the School of Math, Science and Technology with a joint appointment at UNC-Chapel Hill as Program Director of UNC-Chapel Hill/ECSU partnership, reporting to the Associate Dean for Professional Education in the School of Pharmacy.
- Individual should be a pharmacist with academic experience. Experience with distance education and/or curriculum development desirable.
- Salary negotiable and in line with UNC-Chapel Hill School of Pharmacy salaries.

We agree on the following for the second ECSU faculty position in the Doctor of Pharmacy collaboration:

- Clinical/fixed-term primary appointment at and funding through ECSU reporting to the Associate Dean and Director, with a joint clinical/fixed-term appointment at UNC-Chapel Hill.
- Individual should be a pharmacist with clinical (direct patient care) experience. Clinical and/or classroom teaching experience desirable.
- Search committees will be formed and position descriptions and recruitment advertisements will be written as soon as possible.
- Salary negotiable and in line with UNC-Chapel Hill School of Pharmacy salaries.

Similar procedures will be followed in the recruitment and hiring of staff and faculty at ECSU.

15. We have agreed that certain programmatic and technical details regarding the implementation and operation of this inter-institutional program remain undefined. We will seek to clarify the following issues, and others that may arise:
- Number and type of new faculty and staff positions needed on both campuses to support an innovative collaborative education program.
 - Details of funding and reporting mechanisms for faculty residing on the ECSU campus; compensation mechanisms for additional workload for UNC-Chapel Hill faculty.
 - Effective faculty recruitment, training and development for a collaborative, distance education program (both campuses).
 - Availability and scope of expanded facilities at ECSU to house the pharmacy program.
 - Classroom design/redesign, technology development and technology support for distance education (we need to collaboratively design and build compatible videoconference classrooms on both campuses).
 - Funding for classroom design/redesign, technology development and technology support for distance education.
 - Mechanisms and facilities for delivery of laboratory instruction.
 - Accounting issues for dual campus enrollment, including FTE/budget head-count; identification of students for multiple campus access to facilities and resources (e.g. libraries, athletic events, financial aid), student fees, and travel and housing allocations for ECSU students for required trips to Chapel Hill
 - Mechanisms for providing academic and student services to students residing on multiple campuses.
 - Mechanisms for acknowledging the inter-institutional partnership, e.g. transcript and/or diploma notations.
 - Branding and intellectual property issues for marketing, recruitment, and instructional materials.
 - Program assessment targets, metrics, and priorities to improve instructional delivery and student experience, to satisfy accreditation requirements, and to support program continuation, revision, or discontinuation decisions.

The signatures below reflect agreement to the points stated above.

Robert A. Blouin, 2/1/05
Robert A. Blouin, Dean
School of Pharmacy, UNC-Chapel Hill
Date

Ronald H. Blackmon, 1/31/05
Ronald H. Blackmon, Dean
School of Math, Science and Technology, ECSU
Date

Robert N. Shelton, 2 FEBRUARY 2005
Robert N. Shelton, Exec Vice-Chancellor & Provost
UNC-Chapel Hill
Date

Carolyn R. Mahoney, 01/29/05
Carolyn R. Mahoney, Provost & Vice-Chancellor
ECSU Division of Academic Affairs
Date

James C. Moeser, 04/Feb/05
James C. Moeser, Chancellor
UNC-Chapel Hill
Date

Mickey L. Burnim, January 29, 2005
Mickey L. Burnim, Chancellor
ECSU
Date

Gretchen M. Bataille, 2/8/05
Gretchen M. Bataille, Senior Vice President
for Academic Affairs
Office of the President, University of North Carolina
Date