

## **Request for Authorization to Establish a Bachelor of Science Degree in Engineering Technology at Elizabeth City State University**

### **Introduction**

Elizabeth City State University requests authorization to establish a BS in Engineering Technology (CIP 15.9999) in January 2007.

### **Program Description**

The proposed degree will offer concentrations in “Computer and Information Technology” and “Mechanical and Automation.” Students will complete 43 credit hours in General Education, a 39-hour technical core, 16 hours in related areas, 19 hours in the concentration, and 9 hours of electives. The curriculum includes courses in electronics, electrical systems, network design, network security and management, network and database administration, hardware and software programming, mechanical systems, machine element design, and control and automation. An internship, professional presentations, and a professional electronic portfolio are integral parts of the program. The program will be housed in the Department of Technology, which currently offers BS degrees in Industrial Technology and Aviation Science. The proposed program will incorporate some existing industrial technology and computer courses into the curriculum. The program will apply for accreditation with the Accreditation Board for Engineering and Technology-Technology Accreditation Commission in its third year of operation.

### **Program Need**

There is a need in northeastern NC for programs that support the expansion of business and industry. The proposed BS in Engineering Technology will prepare its graduates with technical knowledge, hands-on experience, and managerial skills necessary to obtain professional careers in design, installation, operation, computer-based applications and automated systems. Graduates will be highly qualified to obtain careers in high-tech industries, government, and business or pursue graduate degrees. The US Bureau of Labor Statistics has projected employment in technical workforce fields to grow by 86% between 2000 and 2010. It is anticipated that the program will enroll 45 full-time and 12 part-time students by its fourth year.

### **Resources**

Dixon Hall, renovated in 2002, has adequate laboratories and classrooms. The Department has 8 state-of-the-art laboratories and has received \$600,000 in the last five years in grants to purchase equipment and software. Current faculty are adequate for the first two years of the program, and an additional faculty member will be added in each of the third and fourth years with enrollment increase funding.

### **Recommendation**

It is recommended that the Board of Governors approve the request to establish a Bachelor of Science degree in Engineering Technology at Elizabeth City State University effective January 2007.

## **Request for Authorization to Establish a Bachelor of Arts Degree in Dance Studies at Appalachian State University**

### **Introduction**

Appalachian State University requests authorization to establish a BA in Dance Studies (CIP 50.0301) effective August 2007.

### **Program Description**

The proposed BA in Dance Studies has the following educational objectives: 1) to expand the dance offerings from a minor to a BA degree, and, 2) to serve the needs of dance students with the following interests: those who wish to pursue graduate work in Dance Choreography and Performance or a related field such as Dance Therapy, Expressive Arts, or Arts Management; those who wish to teach dance in a community or an academic setting; those who wish to dance professionally; and those who wish to pursue dance as an avocation. Students will be guided to integrate cross-disciplinary course work from other disciplines, and they will be encouraged to integrate their dance studies major with their minor area of study. The Department of Theatre and Dance seeks to provide a model collaborative learning environment while emphasizing integrated learning through creative thinking, innovative problem solving, skill development, and related technologies. The proposed major would be unique among dance programs offered in NC in that it requires students to explore an integrated, collaborative relationship between chosen areas of Dance and an outside field.

### **Program Need**

With over 900 students enrolled in dance classes each year, there are over 60 students with dance studies as a minor and significant student interest in establishing a major. As part of ASU's vision to provide "a liberal arts education that emphasizes the fine arts," and "to serve as a center of cultural and professional activity," ASU has created a number of programs and facilities that the BA in Dance Studies will complement along with the existing majors in Art, Theatre, and Music. The program will contribute to a co-curricular production program maintained by ASU that provides exemplary theatre and dance experiences to departmental students, the university community, and the region. It is anticipated that 25 full-time students will be enrolled in the program by its fourth year.

### **Resources**

Funding has been provided to renovate reallocated studio and office spaces for dance, and much of this work was completed this year. ASU has three full-time dance faculty and six part-time faculty, and the coursework for the proposed major is almost completely developed.

### **Recommendation**

It is recommended that the Board of Governors approve the request to establish a BA in Dance Studies at Appalachian State University effective August 2007.

ANNUAL REPORT  
COMMITTEE ON EDUCATIONAL PLANNING, POLICIES, AND PROGRAMS  
JULY 1, 2005 — June 30, 2006

**Creation, Duties and Membership**

The Committee on Educational Planning, Policies, and Programs is one of four standing committees established by the Board of Governors on September 15, 1973. With the addition of Public Affairs, there are now five standing committees. The Committee consists of nine members elected by the Board of Governors for overlapping terms of two years each. It is the duty of the Committee to receive advice and recommendations of the President and in turn make recommendations to the Board of Governors in all areas pertaining to the development of a coordinated system of higher education in North Carolina, including:

- (a) the definition of mission and assignment of functions of each constituent institution;
- (b) the review of requests for the initiation of new degree programs and recommendations for the termination of existing programs; and
- (c) the provision of supportive services, facilities, and other resources for the instructional, research and public service programs of the constituent institutions.

The Committee shall also advise and assist the President and the Board by maintaining close liaison with the State Board of Education, the Department of Community Colleges, and the private colleges and universities. It shall further recommend to the Board procedures and guidelines for the licensing of non-public educational institutions. [Code, Sec. 301C]

In July 2005, the following persons were appointed to the Committee: Peaches Gunter Blank (2007); Charles A. Hayes (2006); Zachary A. Wynne, *ex officio, assigned by chairman*; Charles Norwood (2007); Cary C. Owen (2006); Jim W. Phillips, Jr. (2007); Gladys Ashe Robinson (2006); Irvin A. Roseman (2006); Estelle W. Sanders (2006); Priscilla P. Taylor (2007); and Robert F. Warwick (2005). The Committee subsequently elected Dr. Taylor as Chair, Ms. Robinson as Vice Chair, and Ms. Blank for Secretary.

The terms of Peaches Blank, Charles Hayes, Charles Norwood, Jim Phillips, Gladys Robinson, Irvin A. Roseman, and Robert Warwick ended June 30, 2006.

In August 2006, in addition to the membership shown above the following persons were appointed to the Committee: Laura Buffaloe (2007), William Burns (2008), Phillip Dixon (2008), Ray Farris (2007), Charles A. Hayes (2008); Derek T. Pantiel, *ex officio, assigned by chairman* and William Smith (2007).

The initial 12 members of the Committee were elected by the Board of Governors on October 22, 1973. The terms of members since the initiation of the Committee are shown in Table 1 of this report.

The Committee met in 9 regular meetings between July 1, 2005 and June 30, 2006 and one special session. The major actions of the Committee are summarized below.

### **Academic Program Development**

The Committee recommended and the Board of Governors subsequently approved the planning of the following new doctoral degree programs on the dates indicated:

	<b>Institution</b>	<b>Degree Level</b>	<b>Program Title</b>	<b>CIP #</b>	<b>Committee Approved</b>	<b>Board Approved</b>
1.	NCSU	D	Fisheries and Wildlife Sciences	03.0101	1/12/06	1/13/06
2.	UNCC	D	Nanoscale Science	40.9999	1/12/06	1/13/06
3.	NCA&T	D	Doctor of Philosophy in Computational Science and Engineering	30.9999	5/11/06	5/12/06
4.	UNCG	D	Doctor of Philosophy in Computational Mathematics	27.0303	5/11/06	5/12/06
5.	UNCW	D	Doctor of Education in Educational Leadership and Administration	13.0401	5/11/06	5/12/06
6.	ECU	D	Doctor of Dental Surgery	51.0401	5/11/06	5/12/06

The Committee recommended and the Board of Governors subsequently approved the establishment following new doctoral degree programs on the dates indicated:

	<b>Institution</b>	<b>Degree Level</b>	<b>Program Title</b>	<b>CIP #</b>	<b>Committee Approved</b>	<b>Board Approved</b>
1.	ECU	D	Health Psychology	42.2301	1/12/06	1/13/06
2.	UNCC	D	Organizational Science	30.9999	1/12/06	1/13/06
3.	UNCC	D	Business Administration	52.0201	1/12/06	1/13/06
4.	UNCC	D	Geography & Urban Regional Development	45.0701	5/11/06	5/12/06

The Committee recommended and the Board of Governors subsequently approved the establishment of the following new degree programs on the dates indicated:

	<b>Institution</b>	<b>Degree Level</b>	<b>Program Title</b>	<b>CIP #</b>	<b>Committee Approved</b>	<b>Board Approved</b>
1.	NCSU	BA	International Studies	30.2001	8/11/05	8/12/05
2.	NCSU	BS	Sport Management	31.0504	8/11/05	8/12/05
3.	FSU	BS	Biotechnology	26.1201	8/11/05	8/12/05
4.	FSU	BS	Forensic Science	43.0106	8/11/05	8/12/05
5.	FSU	BS	Management Information Systems	52.1201	8/11/05	8/12/05
6.	ECU	MA	Communication	09.0101	8/11/05	8/12/05
7.	UNCG	MS	Biochemistry	26.0202	8/11/05	8/12/05
8.	WCU	MS	Sport Management	31.0504	8/11/05	8/12/05
9.	ASU	BSN	Nursing	51.1601	10/18/05	10/19/05

	<b>Institution</b>	<b>Degree Level</b>	<b>Program Title</b>	<b>CIP #</b>	<b>Committee Approved</b>	<b>Board Approved</b>
10.	FSU	BA	Communication	09.0101	10/18/05	10/19/05
11.	NCSU	BA	Africana Studies	05.0201	11/10/05	11/11/05
12.	UNCG	MA	Women's and Gender Studies	05.0207	11/10/05	11/11/05
13.	NCSU	BS	Elementary Education	13.1202	11/10/05	11/11/05
14.	NCA&T	BS	Interdisciplinary General Engineering	14.0101	1/12/06	1/13/06
15.	ASU	MS	Criminal Justice and Criminology	43.0104	1/12/06	1/13/06
16.	ASU	MSW	Social Work	44.0701	1/12/06	1/13/06
17.	WSSU	BS	Information Technology	11.0103	2/9/06	2/10/06
18.	FSU	MS	Criminal Justice	43.0104	2/9/06	2/10/06
19.	WCU	MS	Science and Entrepreneurship	30.1501	2/9/06	2/10/06
20.	ASU	BS	Technical Photography	50.0406	4/11/06	4/12/06
21.	ASU	BS	Appropriate Technology	15.0505	4/11/06	4/12/06
22.	NCA&T	BS	Comprehensive Science Education	13.1316	4/11/06	4/12/06
23.	NCA&T	BS	Geomatics	14.3801	4/11/06	4/12/06
24.	UNCG	BS	Marketing	52.0201	4/11/06	4/12/06
25.	NCSU	BS	Turfgrass Science	01.0607	4/11/06	4/12/06
26.	NCSU	BS	Nutrition Science	30.1901	4/11/06	4/12/06
27.	NCSU	BA	Women's Gender Studies	05.0207	4/11/06	4/12/06
28.	UNCC	BS	Mathematics for Business	27.9999	4/11/06	4/12/06
29.	UNCC	BA	Mathematics for Business	27.9999	4/11/06	4/12/06
30.	WCU	BFA	Motion Picture and Television Production	09.0799	4/11/06	4/12/06
31.	WCU	BS	Forsensic Science	43.0106	4/11/06	4/12/06
32.	ECSU	MSA	Master of School Administration	13.0401	4/11/06	4/12/06
33.	ECU	MCM	Master of Construction Management	15.1001	4/11/06	4/12/06
34.	NCA&T	BS	Secondary Education	13.1205	5/11/06	5/12/06
35.	UNCA	BA	Religious Studies	38.0201	5/11/06	5/12/06
36.	NCSU/ UNCG	MS	Human Development and Family Studie (Joint Degree)	19.0701	5/11/06	5/12/06
37.	WCU	MAT	Teaching English as a Second Language or Foreign Language	13.1401	5/11/06	5/12/06
38.	ASU	BA	Philosophy	38.0101	5/11/06	5/12/06
39.	ASU	BA	Religious Studies	38.0201	5/11/06	5/12/06
38.	FSU	BS	Art Education	13.1302	6/8/06	6/9/06
39.	FSU	BS	Fire Science	43.0202	6/8/06	6/9/06
40.	UNCC	BA	Art History	50.0703	6/8/06	6/9/06
41.	UNCC	BS	Construction Management	15.9999	6/8/06	6/9/06
42.	ECU	MS	Athletic Training	51.0913	6/8/06	6/9/06
43.	ECU	MS	Software Engineering	14.0903	6/8/06	6/9/06
44.	NCCU	MS	Computer and Information Sciences	11.0701	6/8/06	6/9/06
45.	UNCC	MA	Ethics and Applied Philosophy	38.0103	6/8/06	6/9/06
46.	WSSU	MAT	Teaching English as a Second Language and Linguistics	13.1401	6/8/06	6/9/06
	UNCC	MBA	Sports Marketing and Management*	52.0201	6/8/06	6/9/06

The Committee recommended and the Board of Governors subsequently approved the discontinuation of the following degree programs on the dates indicated:

	<b>Institution</b>	<b>Degree Level</b>	<b>Program Title</b>	<b>CIP #</b>	<b>Committee Approved</b>	<b>Board Approved</b>
	ASU	MA	Higher Education, Administration	13.0406	8/11/05	8/12/05
	ASU	MA	Higher Education, Developmental Studies	13.0406	8/11/05	8/12/05
	ASU	MA	Higher Education, Teaching	13.0406	8/11/05	8/12/05
	ASU	MA	Higher Education, Adult Education	13.0403	8/11/05	8/12/05
	ASU	EdS	Higher Education, Administration	13.0406	8/11/05	8/12/05
	ASU	EdS	Higher Education, Developmental Studies	13.0406	8/11/05	8/12/05
	ASU	EdS	Higher Education, Teaching	13.0406	8/11/05	8/12/05
	ASU	EdS	Higher Education, Adult Education	13.0403	8/11/05	8/12/05
	UNCP	BS	Special Education, Mentally Handicapped	13.1006	8/11/05	8/12/05
	UNCP	BS	Special Education, Learning Disabilities	13.1011	8/11/05	8/12/05
	UNCCH	MS	Speech and Hearing Sciences, Audiology	51.0202	8/11/05	8/12/05
	UNCCH	DrPH	Doctor of Public Health in Epidemiology	26.1309	8/11/05	8/12/05
	ASU	BS	Habilitative Science	13.1001	11/10/05	11/11/05
	ASU	MA	Health & Physical Education	13.1314	11/10/05	11/11/05
	FSU	BS	Managerial Economics	52.0601	11/10/05	11/11/05
	FSU	MA	History	54.0101?	11/10/05	11/11/05
	NCA&T	BS	Special Education	13.1001	11/10/05	11/11/05
	NCA&T	MS	Middle Grades Education	13.1203	11/10/05	11/11/05
	NCA&T	BS	English, Secondary Education	13.1305	11/10/05	11/11/05
	NCA&T	BS	Mathematics, Secondary Education	13.1311	11/10/05	11/11/05
	NCA&T	BS	Health and Physical Education	13.1314	11/10/05	11/11/05
	NCA&T	BS	Biology, Secondary Education	13.1322	11/10/05	11/11/05
	NCA&T	MS	Biology, Secondary Education	13.1322	11/10/05	11/11/05
	NCA&T	BS	Chemistry, Secondary Education	13.1323	11/10/05	11/11/05
	NCA&T	MS	Chemistry, Secondary Education	13.1323	11/10/05	11/11/05
	NCA&T	BS	History, Secondary Education	13.1328	11/10/05	11/11/05
	NCA&T	BS	Physics, Secondary Education	13.1329	11/10/05	11/11/05
	NCA&T	BS	Engineering Physics	14.1201	11/10/05	11/11/05
	NCA&T	BS	Recreation Administration	31.0301	11/10/05	11/11/05
	NCCU	BS	Family and Consumer Science Education	13.1308	11/10/05	11/11/05
	NCCU	MS	Family and Consumer Science Education	13.1308	11/10/05	11/11/05
	NCCU	MS	Sociology Teacher Education	13.1317	11/10/05	11/11/05
	UNCG	MEd	Elementary Education	13.1202	11/10/05	11/11/05
	UNCG	BS	School Health	13.1307	11/10/05	11/11/05
	UNCG	MEd	Mathematics Education	13.1311	11/10/05	11/11/05
	UNCG	MEd	History Education	13.1328	11/10/05	11/11/05
	UNCG	BA	Communication Studies Education	13.1331	11/10/05	11/11/05
	UNCW	BA	Physics, Secondary Education	13.1329	11/10/05	11/11/05
	UNCW	BS	Physics, Secondary Education	13.1329	11/10/05	11/11/05

	<b>Institution</b>	<b>Degree Level</b>	<b>Program Title</b>	<b>CIP #</b>	<b>Committee Approved</b>	<b>Board Approved</b>
	WCU	MA	Cherokee Studies	05.0202	11/10/05	11/11/05
	WCU	MAEd	Instructional Technology Specialists	13.0501	11/10/05	11/11/05
	UNCG	BS	Human Development Family Studies	19.0706	11/10/05	11/11/05
	UNCCH	MA	Romance Languages and Literatures Portuguese (Luso-Brazilian) Language and Literature	16.09999	1/12/06	1/13/06
	UNCCH	PhD	Romance Languages and Literatures Portuguese (Luso-Brazilian) Language and Literature	16.09999	1/12/06	1/13/06

### **Reports Received and Adopted**

The Committee and the Board of Governors approved the following reports:

	<b>Topic</b>	<b>Committee Approved</b>	<b>Board Approved</b>
1.	Report on Feasibility of Forgiveness of Student Debt for Teachers of Mathematics, Science, and Special Ed (NCSEAA)	8/11/05	8/12/05
2.	2004-2005 UNC Health Care System	9/11/05	9/12/05
3.	Teacher Education/Distance Education Funds	9/11/05	9/12/05
4.	Strategic Directions for the Long-Range Plan 2006-2011	11/10/05	11/12/05
5.	Mission States for the Long-Range Plan 2006-2011	11/10/05	11/12/05
6.	Primary Care Physicians and Providers	11/10/05	11/12/05
7.	Rules for Future Teachers of NC Scholarship Loan Program	11/10/05	11/12/05
8.	UNC Academic Common Market Pilot Program: 2001-2005	11/11/04	11/12/04
9.	Motions regarding the Implementation of the Revised Rules and Standards for Licensure and for the Implementation of the Revised Fee Schedule	11/11/04	11/12/04
10.	Seventh Annual Report on UNC Enrollment Planning	1/12/06	1/13/06
11.	Premajor Agreement in Liberal Arts	1/12/06	1/13/06
12.	Recommendations for Peers for UNC Institutions	2/9/06	2/10/06
13.	Center for School Leadership Professional Development	2/9/06	2/10/06
12.	Existing and New 2+2 Programs between UNC and NCCCS	4/11/06	4/12/06
13.	Prospective Teacher Scholarship Program	4/11/06	4/12/06

	<b>Topic</b>	<b>Committee Approved</b>	<b>Board Approved</b>
14.	Plan for Dentistry in North Carolina	4/11/06	4/12/06
15.	Primary Care Medical Education Plans: 2006 Update	5/11/06	5/12/06
16.	Approval of Priority Settings for UNC	5/11/06	5/12/06
17.	Biennial Report on Distance Learning	5/11/06	5/12/06
18.	Principal Supply and Demand Report	5/11/06	5/12/06

The Committee also received and discussed the following reports:

	<b>Reports</b>	<b>Presented to Committee</b>
1.	Training, Monitoring and Evaluation of Graduate Teaching Assistants	9/8/05
2.	Semi-Annual Report on Academic Planning Activities	9/8/05
3.	Report on Centers and Institutes	10/18/05
4.	Biennial Academic Degree Program Productivity Report	11/10/05
5.	Report on UNC Research and Sponsored Programs Report to the President Fiscal Year 2004	11/10/05
6.	Educational Planning Committee's Annual Report	11/10/05
7.	Student Success, Retention and Graduation	11/10/05
8.	The University of North Carolina Fall 2005 Enrollment Report	11/10/05
9.	Status Report on Recently Established Academic Programs	1/12/06
10.	Report on UNC Study Abroad, 2003-04	1/12/06
11.	UNC International Student Enrollment, Fall 2004	1/12/06
12.	HB 1264 Revised Interim Report and Preliminary Recommendations (Pappas)	1/12/06
13.	Teacher Assistant Scholarship Fund	2/9/06
14.	Tuition Grant Program for Graduates of the NC School of Science and Math	2/9/06
15.	Future Teachers of North Carolina	2/9/06
16.	Update on Teacher Supply and Demand Report	2/9/06
17.	Report on Teacher Education Enrollment Planning	1/13/05
18.	Update on the Task Force on the Safety of the Campus Community	1/13/05
19.	Update on Retention and Graduation	4/11/06
20.	Semi-Annual Report on Academic Program Planning Activity	4/11/06

The Committee recommended, and the Board of Governors subsequently approved, the establishment of the following center on the date indicated:

	<b>Institution</b>	<b>Name of Unit</b>	<b>Presented to Committee</b>	<b>Board of Governors</b>
1.	UNCA	Pisgah Astronomical Research and Science Education Center (PARSEC)	8/11/05	8/12/05



<b>Others Board Actions</b>	<b>Presented to Committee</b>	<b>Board of Governors</b>
1. Reorganize and change the name of the Department of Political Science and Public Administration to the School of Public and International Affairs at NCSU	8/11/05	8/12/05
2. Request to change the name of the Department of Engineering and Technology to the School of Technology within the College of Applied Sciences at Western Carolina University	8/11/05	8/12/05
3. Institute of American Indian Arts to establish a Course Site in the Qualla Boundary of the Eastern Band of the Cherokee Indians to offer a limited number of courses for Academic Credit in the Area of Studio Arts	1/12/06	1/13/06
4. Licensure for Miller-Motte Technical College to offer the following programs in Wilmington: AAS in Criminal Justice; AAS in Paralegal; BS in Criminal Justice	2/9/06	2/10/06
5. Licensure for ECPI College of Technology to offer the following degree programs in Raleigh: Computer & Information Science with a major in Criminal Justice Technology; Associate of Science degree in Computer and Information Science with a major in Management and Information Systems	2/9/06	2/10/06
6. Licensure for South College-Asheville to offer the following degree program in Asheville: Associate of Applied Science degree in Radiologic Technology	2/9/06	2/10/06
7. Licensure for King's College in Charlotte for an Associate in Applied Science in Network Management, and Bachelor of Science in Business Accounting Technology; Business Administration; Criminal Justice; Information Systems Security	2/9/06	2/10/06
8. Licensure for ITT Technical Institute to offer programs in Charlotte, NC: (1) Associate of Applied Science in: Computer and Electronics Engineering Technology; Information Technology – Computer Networks; Information Technology – Multimedia. (2) Bachelor of Science in Business Technology; Business Administration; Criminal Justice; Information Systems Security	4/11/06	4/12/06
9. Licensure for University of South Carolina to offer a program in Charlotte, NC: Professional Master of Business Administration	5/11/06	5/12/06
10. Licensure for ECPI College of Technology to offer additional degree programs in Greensboro, NC: Associate of Applied Science in Computer & Information Science with a major in Criminal Justice Technology; Associate of Science in Computer and Information Science with a major in Management Information Systems;	5/11/06	5/12/06
11. Licensure for Central Michigan University to offer new concentrations at Seymour Johnson Air Force Base in Goldsboro, NC: Leadership in MS in Administration; Public Administration in MS in Administration	5/11/06	5/12/06



# The University of North Carolina

GENERAL ADMINISTRATION

POST OFFICE BOX 2688, CHAPEL HILL, NC 27515-2688

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Technical State  
University

North Carolina  
Central University

North Carolina  
School of  
the Arts

North Carolina  
State University  
at Raleigh

University of  
North Carolina  
at Asheville

University of  
North Carolina  
at Chapel Hill

University of  
North Carolina  
at Charlotte

University of  
North Carolina  
at Greensboro

University of  
North Carolina  
at Pembroke

University of  
North Carolina  
at Wilmington

Western Carolina  
University

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November 1, 2006

## MEMORANDUM

TO: UNC Board of Governors Committee on Educational Planning,  
Policies and Programs

FROM: Dr. Russ Lea, Vice President for Research

RE: Overview of UNC Sponsored Program Activity, FY 2006

For the third consecutive year the University of North Carolina has successfully developed a portfolio of new external funding in excess of \$1 billion. This funding supports projects at all sixteen institutions and across all disciplines, in areas that extend well beyond research and public service to enhance teaching, directly support students, and help transform the state's economy.

Total new external funding to the sixteen constituent institutions of the University during FY 06 was \$1.004 billion. This funding level was achieved despite an increasingly competitive funding environment and the continued flattening of federal funding for research and sponsored programs. Federal funding consistently accounts for approximately two-thirds of the University's awards, but has faced increasing pressure in the federal budget in recent years. Nevertheless, UNC campuses have remained extremely competitive in this arena, holding third place among all systems of colleges and universities for total R&D funding obligations from the federal government.<sup>1</sup> They have also successfully pursued new funding sources in state and local government; business and industry; and associations, foundations, and other not-for-profit organizations to further supplement federal support.

Several campuses, in particular, have made significant strides this fiscal year. UNC-Chapel Hill's external funding total increased by almost \$15 million during

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<sup>1</sup> National Science Foundation, "Federal obligations for science and engineering research and development to systems of universities and colleges, ranked by total amount received, by agency: FY 2003," *Federal S&E Support to Universities, Colleges, and Nonprofit Institutions: FY2003* (2005): <http://www.nsf.gov/statistics/fedsupport/>.

FY06, and East Carolina University, UNC-Charlotte, UNC-Greensboro, and NC State University each added approximately \$5 million to their totals. Additionally, UNC-Asheville more than tripled their external funding total over last year's amount.

The top three external sponsors were: US DHHS National Institutes of Health, US Department of Education, and National Science Foundation. These three federal agencies accounted for nearly 50 percent of total funding but, overall, federal support fell 2 percent from last year. However, funding from State and local sources (NC and other states), foundations, associations, and industry rose to balance this decline and accounted for more than 25 percent of the total.

External funding to UNC campuses supports student services and financial aid (\$20M awarded FY06), as well as instruction and academic services (\$80M awarded FY06). The awards generate significant economic returns as well, bringing hundreds of millions of dollars and thousands of jobs to the State. It is estimated that for every \$1 million in research funding attracted to the state, approximately 39 jobs are created<sup>2</sup>. The research conducted throughout UNC spawns new companies and technologies that are vital to the State's competitive advantage. The most recent figures from the Association of University Technology Managers (AUTM)<sup>3</sup> show that UNC schools had more than 88 new patents, 411 invention disclosures, and generated over \$9.16 million in licensing income during FY 2004 (most recent data available).

To learn about the specific projects supported by external funding at each UNC institutions, please visit <http://uncsparc.northcarolina.edu>.

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<sup>2</sup> Roth, James H., *Enhancing the Ability of North Carolina's Public Research Universities to Contribute to State Economic Development* (Chicago, IL: Huron Consulting Group and the Washington Advisory Group, LLC, 2004): <http://www.unc.edu/news/archives/mar04/ncstate/huronreport.doc>.

<sup>3</sup> The Association of University Technology Managers. *AUTM Licensing Survey: FY 2004* (2006).

**Teacher Assistant Scholarship Fund  
Annual Report  
2005-06 Academic Year**

The Teacher Assistant Scholarship Fund (TASF) was established in 2001 (S.L. 2001-424) to provide scholarship aid to current teacher assistants seeking degrees to become teachers. Grants for the 2005-06 academic year were awarded to 246 full-time teacher assistants at public schools across the state pursuing initial teacher licensure at North Carolina four-year campuses offering teacher education programs. The program funding for 2005-06 was \$964,174.

Priority consideration was afforded to previous TASF and Teacher Assistant Scholarship Loan (TASL) recipients who applied by the deadline and met all program requirements. Next priority went to new students applying for funds and who met all program requirements, with priority given to those with the strongest academic credentials.

**Table I. Summary Application and Recipient Data**

Number of applications	546
Number of recipients	246
Average award	\$3,655
Total awarded	\$899,200

**Table II. Recipient Breakdown by Ethnicity**

	<u>Number</u>	<u>Percentage</u>
Asian	1	0.4%
African-American	48	19.5
Hispanic/Latino	3	1.2
Native American	3	1.2
White	183	74.4
Multi-racial	0	0.0
Other/not specified	<u>8</u>	<u>3.3</u>
Total	246	100.0 %

**Table III. Recipient Breakdown by Institution**

	<u>Number of Students</u>	<u>Percentage of total</u>
Appalachian State University	28	11.4 %
Barton College	5	2.0
Belmont Abbey College	4	1.6
East Carolina University	31	12.6
Elizabeth City State University	11	4.5
Fayetteville State University	14	5.7
Gardner-Webb University	3	1.2
Greensboro College	4	1.6
Guilford College	3	1.2
High Point University	14	5.7
Lees-McRae College	6	2.4
Mars Hill College	27	11.1
North Carolina A&T State University	1	0.4
North Carolina Central University	17	6.9
Pfeiffer University	11	4.5
Salem College	3	1.2
Shaw University	2	0.8
St. Andrew's College	6	2.4
St. Augustine's College	1	0.4
UNC at Charlotte	15	6.1
UNC at Greensboro	3	1.2
UNC at Pembroke	12	4.9
UNC at Wilmington	15	6.1
Western Carolina University	7	2.9
Winston-Salem State University	<u>3</u>	<u>1.2</u>
Total	246	100 %

Recipients at 12 public institutions: 160 (65.0 %)

Recipients at 13 private institutions: 86 (35.0 %)

**Table IV. Recipient Breakdown by County of Residence**

Alamance	1	Gates	2	Orange	4
Alexander	4	Graham	1	Pamlico	3
Beaufort	1	Granville	1	Perquimans	4
Brunswick	2	Guilford	8	Pitt	2
Buncombe	3	Halifax	3	Polk	1
Burke	6	Harnett	2	Randolph	4
Cabarrus	1	Haywood	5	Richmond	5
Caldwell	5	Henderson	12	Robeson	3
Carteret	3	Hertford	1	Rockingham	5
Catawba	7	Hoke	3	Rowan	6
Chatham	3	Iredell	3	Rutherford	6
Cherokee	2	Jackson	1	Sampson	1
Clay	1	Johnston	7	Scotland	1
Cleveland	1	Jones	1	Stanly	7
Columbus	1	Lenoir	3	Stokes	2
Craven	5	Lincoln	3	Surry	1
Cumberland	12	Madison	1	Union	3
Davidson	4	McDowell	3	Wake	4
Davie	2	Mecklenburg	5	Washington	1
Duplin	3	Mitchell	2	Watauga	1
Durham	7	Montgomery	1	Wayne	1
Edgecombe	3	Moore	3	Wilkes	1
Forsyth	5	Nash	3	Wilson	3
Franklin	3	Northampton	1	Yancey	1
Gaston	5	Onslow	11		

**Total = 246 representing 74 counties**

**§ 116-209.35. Teacher Assistant Scholarship Fund.**

(a) There is established the Teacher Assistant Scholarship Fund. The purpose of the Fund is to provide scholarships to teacher assistants who are pursuing college degrees to become teachers. The State Education Assistance Authority shall administer the Fund.

(b) Criteria for awarding the scholarships shall be developed by the Board of Governors of The University of North Carolina in consultation with the State Board of Education and the State Board of Community Colleges and shall include all of the following:

- (1) An applicant shall be employed full time as a teacher assistant in North Carolina.
- (2) An applicant shall be enrolled in an accredited bachelors degree program in an institution of higher education in North Carolina.
- (3) An applicant shall be a resident of North Carolina. For purposes of this section, residency shall be determined by the same standard as residency for tuition purposes pursuant to G.S. 116-143.1.
- (4) Any additional criteria that the Board of Governors considers necessary to administer the Fund effectively, including all of the following:
  - a. Consideration of the appropriate numbers of minority applicants and applicants from diverse socioeconomic backgrounds to receive scholarships pursuant to this section.
  - b. Consideration of the academic qualifications of the individuals applying to receive funds.
  - c. Consideration of the commitment an individual applying to receive funds demonstrates to the profession of teaching.

(c) The scholarships shall be available for part-time or full-time course work through all off-campus or distance education teacher education programs.

(d) The Board of Governors of The University of North Carolina, the State Board of Education, and the State Board of Community Colleges shall: (i) prepare a clear written explanation of the Teacher Assistant Scholarship Fund and the information regarding the availability and criteria for awarding the scholarships, and (ii) shall provide that information to the appropriate counselors in each local school system and shall charge those counselors to inform teacher assistants about the scholarships and to encourage teacher assistants to apply for the scholarships.

(e) The Board of Governors of The University of North Carolina shall adopt rules to implement this section.

(f) The Board of Governors of The University of North Carolina shall report to the Joint Legislative Education Oversight Committee by March 1 each year regarding the Fund and scholarships awarded from the Fund. (2001-424, s. 31.5(a).)

## **Future Teachers of North Carolina Annual Report 2005-06 Academic Year**

The Future Teachers of North Carolina Scholarship Loan (FTNC) was established by the 2005 General Assembly (S.L. 2005-276) in response to the shortage of teachers in mathematics, science, special education, and English as a Second Language in North Carolina's public schools. An appropriation of \$650,000 for 100 students was provided in the initial year of funding to assist juniors and seniors with "B" averages who intend to become certified in the specified fields of study.

The State Education Assistance Authority (SEAA) developed the program in the fall and winter of 2005, creating rules, subsequently approved by the UNC Board of Governors, administrative procedures, applications, and promissory notes to support the program.

Since the 2005-06 academic year had already begun when the program was ready to accept applications, the SEAA advised the deans of the 47 schools of education of the availability of funds through the new FTNC program and sought nominations of qualified students from the schools of education. A total of 121 students were nominated, 91 were offered funding, and 65 college juniors and seniors enrolled at public and private institutions accepted the scholarship-loan funds.

In future years, it is anticipated that all funds will be expended as public knowledge of the program grows and with more time to promote the availability of funding prior to the start of the academic year.

**Table I. Summary Application and Recipient Data**

Number of applications	121
Number of recipients	65
Average award	\$6,500
Total awarded	\$422,500

**Table II. Recipient Breakdown by Ethnicity**

Data not obtained for 2005-06 recipients.  
Will be collected in future years.



**Table III. Recipient Breakdown by Institution**

	<u>Number of Students</u>	<u>Percentage of total</u>
Appalachian State University	4	6.2 %
Barton College	2	3.1
Brevard College	2	3.1
Campbell University	4	6.2
Catawba College	1	1.5
East Carolina University	2	3.1
Elizabeth City State University	1	1.5
Elon University	1	1.5
Greensboro College	1	1.5
High Point University	3	4.6
Lenoir-Rhyne College	2	3.1
Mars Hill College	2	3.1
North Carolina A&T State University	2	3.1
North Carolina State University	1	1.5
North Carolina Wesleyan	1	1.5
Pfeiffer University	3	4.6
UNC at Charlotte	5	7.7
UNC at Greensboro	10	15.4
UNC at Pembroke	3	4.6
UNC at Wilmington	4	6.2
Western Carolina University	8	12.3
Winston-Salem State University	<u>3</u>	<u>4.6</u>
Total	65	100 %
Recipients at 11 public institutions:	43 (66 %)	
Recipients at 11 private institutions:	22 (34 %)	

**Table IV. Recipient Breakdown by County of Residence**

<u>County</u>	<u>Number</u>	<u>County</u>	<u>Number</u>
Buncombe	1	Madison	1
Burke	2	Martin	1
Cabarrus	2	Mecklenburg	4
Carteret	1	Mitchell	1
Catawba	2	Nash	1
Clay	1	New Hanover	1
Craven	1	Orange	1
Cumberland	1	Randolph	1
Davidson	1	Richmond	2
Duplin	1	Rockingham	3
Durham	1	Rowan	2
Forsyth	2	Rutherford	1
Granville	1	Sampson	1
Guilford	8	Transylvania	2
Harnett	1	Vance	1
Haywood	2	Wake	4
Henderson	1	Watauga	2
Jackson	3	Wayne	1
Macon	1	Wilkes	2

**Total = 65 representing 38 counties**

### **§ 116-209.38. Future Teachers of North Carolina Scholarship Loan Fund**

(a) There is established the Future Teachers of North Carolina Scholarship Loan Fund. The purpose of the Fund is to provide a two-year scholarship loan of six thousand five hundred dollars (\$ 6,500) per year for any North Carolina student pursuing a college degree to teach in the public schools of the State. The scholarship loan shall be paid only for the student's junior and senior years. The scholarship loan is available if the student is enrolled in a State institution of higher education or a private institution of higher education located in this State that has an accredited teacher preparation program for students planning to become certified teachers in North Carolina. The State Education Assistance Authority shall administer the Fund and shall award 100 scholarship loans annually.

(b) The Board of Governors of The University of North Carolina, in consultation with the State Board of Education and the State Board of Community Colleges, shall develop the criteria for awarding the scholarship loans under this section and shall adopt very stringent standards for awarding these scholarship loans to ensure that only the best students receive them. Additional criteria for awarding a scholarship loan under this section shall include all of the following:

(1) The student is one who either: (i) maintained a "B" or better average in college and is enrolled as a junior or senior in a teacher preparation program at any of the institutions described by subsection (a) of this section; or (ii) completed a college transfer curriculum at a community college in the State's Community Colleges System, maintained a "B" or better average in the community college courses, and is accepted and enrolled in a teacher preparation program at one of the institutions described by subsection (a) of this section.

(2) The student agrees to become certified in math, science, special education, or English as a Second Language and teach full-time in that subject area in a North Carolina public school for three years within five years after graduation.

(3) Any additional criteria that the Board of Governors of The University of North Carolina, in consultation with the State Board of Education and the State Board of Community Colleges, considers necessary to administer the Fund effectively.

(c) If a student who is awarded a scholarship loan under this section fails to comply with the provisions of this section or the terms of the agreement awarding the scholarship loan, then the student shall repay the full amount of the scholarship loan provided to the student and the appropriate amount of interest as determined by the State Education Assistance Authority.

(d) The Board of Governors of The University of North Carolina, the State Board of Education, and the State Board of Community Colleges shall: (i) prepare a clear written explanation of the Future Teachers of North Carolina Scholarship Fund and the information regarding the availability and criteria for awarding the scholarship loans, and (ii) shall provide that information to the appropriate counselors in each local school system and the appropriate institutions of higher education and shall charge those counselors to inform students about the scholarship loans and to encourage them to apply for the scholarship loans.

(e) The Board of Governors of The University of North Carolina shall adopt rules to implement this section.

(f) The Board of Governors of The University of North Carolina shall report to the Joint Legislative Education Oversight Committee by March 1 each year regarding the Fund and scholarship loans awarded from the Fund.

**HISTORY:** 2005-276, s. 9.11(a).

#### **NOTES:**

EDITOR'S NOTE. --Session Laws 2005-276, s. 1.2, provides: "This act shall be known as the 'Current Operations and Capital Improvements Appropriations Act of 2005'."

Session Laws 2005-276, s. 46.5 is a severability clause.

Session Laws 2005-276, s. 46.6, made this section effective July 1, 2005.

# **Monitoring the Progress of North Carolina Graduates Entering Primary Care Careers**

**November 2006**

Submitted by the University of North Carolina Board of Governors in response to  
General Statute 143-613 as amended by Chapter 507 of the 1995 Session Laws  
(House Bill 230) of the North Carolina General Assembly

# **Monitoring the Progress of Graduates Entering Primary Care**

## **Introduction**

This report, which is submitted by the University of North Carolina Board of Governors to the General Assembly, presents information on the ongoing progress of entry into primary care careers by graduates of the four schools of medicine in the state. The report also presents progress in entering primary care by graduates of programs for nurse practitioners, physician assistants, and certified nurse midwives at UNC system schools.

## **Background**

During its 1993 session, the North Carolina General Assembly expressed its interest in expanding the pool of generalist physicians for the state. In Senate Bill 27, as amended by House Bill 729, the General Assembly required that each of the state's four schools of medicine develop a plan with the goal for an expanded percentage of medical school graduates choosing residency positions in primary care. Primary care was defined as family practice, internal medicine, pediatrics, and obstetrics-gynecology. It set the goal for the East Carolina University (ECU) and UNC Schools of Medicine at 60 percent of graduates entering primary care. For the Wake Forest University and Duke University Schools of Medicine, it set the goal at 50 percent.

General Statute 143-613, as contained in House Bill 230 passed in the 1995 session of the North Carolina General Assembly, requires the UNC Board of Governors to monitor the progress of the private and state-operated schools toward increasing the number and proportion of nurse practitioner, physician assistant, and certified nurse midwife graduates entering primary care. This annual report was prepared in accordance with this statute. The charts contain data for 2006 and also show trends in entry into primary care for recent years.

## **The Data**

Section I of this report provides information from the Wake Forest University School of Medicine, the Brody School of Medicine at East Carolina University, Duke University School of Medicine and the University of North Carolina at Chapel Hill School of Medicine. Each of the four schools of medicine has committed to developing a common database to track medical students. At the request of the four schools, the AHEC Program has assumed responsibility for developing and managing the common database in association with the Sheps Center for Health Services Research at UNC-CH. The development of a common database to track medical students has required a complex process of merging two national data sets, a state data set, and files in alumni and student affairs offices of the four medical schools. The national data sets include the graduate medical education tracking file of the Association of American Medical Colleges and the physician master file maintained by the American Medical Association. The state data set used is the North Carolina Medical Board's file for physicians licensed in North Carolina. The format for Section I on the medical students is consistent with and comparable to the baseline information provided in the May 1994 report "Expanding the Pool of Generalist Physicians for North Carolina." The term "primary care" includes family medicine, general pediatric medicine, general internal medicine, internal medicine/pediatrics, and obstetrics/gynecology.

There is no comparable national database that can be used to longitudinally monitor the specialty practice and location of physician assistants, nurse practitioners, and nurse midwives. For the present report, information on graduates and current enrollment has been provided by the state-

operated schools that train nurse practitioners, nurse midwives, and physician assistants. UNC has nine mid-level provider programs: seven masters-level nurse practitioner programs at East Carolina University, The University of North Carolina at Chapel Hill, The University of North Carolina at Charlotte, The University of North Carolina at Greensboro, The University of North Carolina at Wilmington, Western Carolina University, and Winston Salem State University; one nurse midwifery program at East Carolina University and one master's physician assistant program at East Carolina University. The information on these graduates and students is included in this report as "Section II: Nurse Practitioners, Nurse Midwives, and Physician Assistants."

## **Section I: The Entry of Medical School Graduates into Careers in Primary Care**

The General Assembly established goals for each of the four schools of medicine for entry of their graduates into primary care careers. For the UNC School of Medicine and the Brody School of Medicine at East Carolina University, the General Assembly established a target of 60 percent of the graduates to enter careers in primary care. For the Duke and Wake Forest University Schools of Medicine, the target set was 50 percent of graduates in primary care.

\* Table I-1 shows the percentage of 2000 graduates of each of the four schools who made an initial choice of primary care.

\* Table I-2 shows the same graduates and the percentage that remained in primary care five years (in 2005) after graduation. Of the 415 graduates in 2000 who are still in training or practice as of 2005, 206, or 51 percent, remained in one of the four primary care specialties.

\* Table I-3 shows comparative data for state-supported graduates from Duke and Wake Forest who were in primary care training or practice five years after graduation.

\* Table I-4 shows the percentage of the graduates of the class of 2006 for each of the four schools of medicine who chose residency programs in one of the four primary care specialties of family medicine, pediatrics, internal medicine, and obstetrics and gynecology. In 2006, 208 out of the 417 total graduates, or 49 percent, entered primary care residency training. Only ECU, with 67 percent, met the target established by the General Assembly.

Although initial choice of residency is important, a more important indicator of entry into primary care is reflected in data on graduates five years after graduation. As figure 1 shows, the percentage of physicians who graduated from NC medical schools practicing in primary care five years after graduation increased gradually during the 1990's. The percentage of the class of 2000 entering primary care seems to have plateaued.

Although the four schools continue to offer a variety of curricular and community experiences to interest students in a primary care career, there is a strong national trend away from primary care that is also influencing the medical students in North Carolina. Factors recently pointed to that deter choices of primary care careers include the high levels of debt being incurred by many students, particularly in private schools; lower salary levels associated with primary care careers; and lifestyle choices being made by the current generation of medical students. Students are increasingly gravitating to specialties that allow them to control their hours and which have less call on nights and weekends. As a result, there has been a clear trend away from choosing primary care, particularly family medicine and general internal medicine. These national trends are

reflected in the choices being made by students at the schools of medicine in North Carolina as well.

## Section I: Medical Students

Table I-1

### NC Medical Students – Initial Choice of Primary Care\* 2000 Graduates

School	Total Number of 2000 Graduates	Number of 2000 Graduates not in Training or Practice as of 2005	Number of 2000 Graduates in Training or Practice as of 2005	Number of 2000 Graduates in Training or Practice with an Initial Residency Choice of Primary Care	Percent of 2000 Graduates in Training or Practice with an Initial Residency Choice of Primary Care
Duke	94	4	90	47	52%
ECU	71	2	69	52	75%
UNC-CH	146	4	142	78	55%
Wake Forest	104	2	102	57	56%

\*Primary Care = Family Medicine, General Pediatric Medicine, General Internal Medicine, Internal Medicine/Pediatrics, and Obstetrics/Gynecology.

#### Sources:

Wake Forest SOM Office of Student Affairs  
UNC-CH Office of Student Affairs  
Duke Office of Medical Education  
American Medical Association

ECU Office of Medical Education  
Association of American Medical Colleges  
NC Medical Board

#### Compiled by:

NC AHEC Program  
Cecil G. Sheps Center for Health Services Research



## Section I: Medical Students

Table I-2

### NC Medical Students – Retention in Primary Care\* 2000 Graduates

<b>School</b>	<b>Total Number of 2000 Graduates in Training or Practice as of 2005</b>	<b>Number of 2000 Graduates in Training or Practice with an Initial Residency Choice of Primary Care</b>	<b>Percent of 2000 Graduates in Training or Practice with an Initial Residency Choice of Primary Care</b>	<b>Number of 2000 Graduates in Training or Practice in Primary Care Patient Practice as of 2005</b>	<b>Percent of 2000 Graduates in Training or Practice in Primary Care Patient Practice as of 2005</b>
Duke	90	47	52%	34	38%
ECU	69	52	75%	50	72%
UNC-CH	142	78	55%	73	51%
Wake Forest	102	57	56%	49	48%

\*Primary Care = Family Medicine, General Pediatric Medicine, General Internal Medicine, Internal Medicine/Pediatrics, and Obstetrics/Gynecology.

Sources:

Wake Forest SOM Office of Student Affairs  
UNC-CH Office of Student Affairs  
Duke Office of Medical Education  
American Medical Association

ECU Office of Medical Education  
Association of American Medical Colleges  
NC Medical Board

Compiled by:

NC AHEC Program  
Cecil G. Sheps Center for Health Services Research

## Section I: Medical Students

Table I-3

State Supported North Carolinians Attending  
The Duke and Wake Forest Schools of Medicine – Choice and Retention in Primary Care Specialties\*  
2000 Graduates

<b>School</b>	<b>Total number of 2000 State Supported Graduates in Training or Practice as of 2005</b>	<b>Number of 2000 State Supported Graduates in Training or Practice with an Initial Residency Choice of Primary Care</b>	<b>Percent of 2000 State Supported Graduates in Training or Practice with an Initial Residency Choice of Primary Care</b>	<b>Number of 2000 State Supported Graduates in Training or Practice in Primary Care Patient Practice as of 2005</b>	<b>Percent of 2000 State Supported Graduates in Training or Practice in Primary Care Patient Practice as of 2005</b>
Duke	26	15	58%	9	35%
Wake Forest	55	36	65%	32	58%

\*Primary Care = Family Medicine, General Pediatric Medicine, General Internal Medicine, Internal Medicine/Pediatrics, and Obstetrics/Gynecology.

Sources:

Wake Forest SOM Office of Student Affairs  
Duke Office of Medical Education  
American Medical Association

NC Medical Board  
Association of American Medical Colleges

Compiled by:

NC AHEC Program  
Cecil G. Sheps Center for Health Services Research

## Section I: Medical Students

Table I-4

NC Medical Students – Initial Choice of Primary Care\*  
2006 Graduates

<b>School</b>	<b>Total Number of 2006 Graduates</b>	<b>Number of 2006 Graduates Not Entering Residency Training</b>	<b>Number of 2006 Graduates Entering Residency Training</b>	<b>Number of 2006 Graduates Entering Residency Training Who Chose a Primary Care Residency</b>	<b>Percent of 2006 Graduates Entering Residency Training Who Chose a Primary Care Residency</b>
Duke	105	0	105	43	41%
ECU	68	2	66	44	67%
UNC-CH	146	7	139	75	54%
Wake Forest	98	1	97	46	47%

\*Primary Care = Family Medicine, General Pediatric Medicine, General Internal Medicine, Internal Medicine/Pediatrics, and Obstetrics/Gynecology.

Sources:

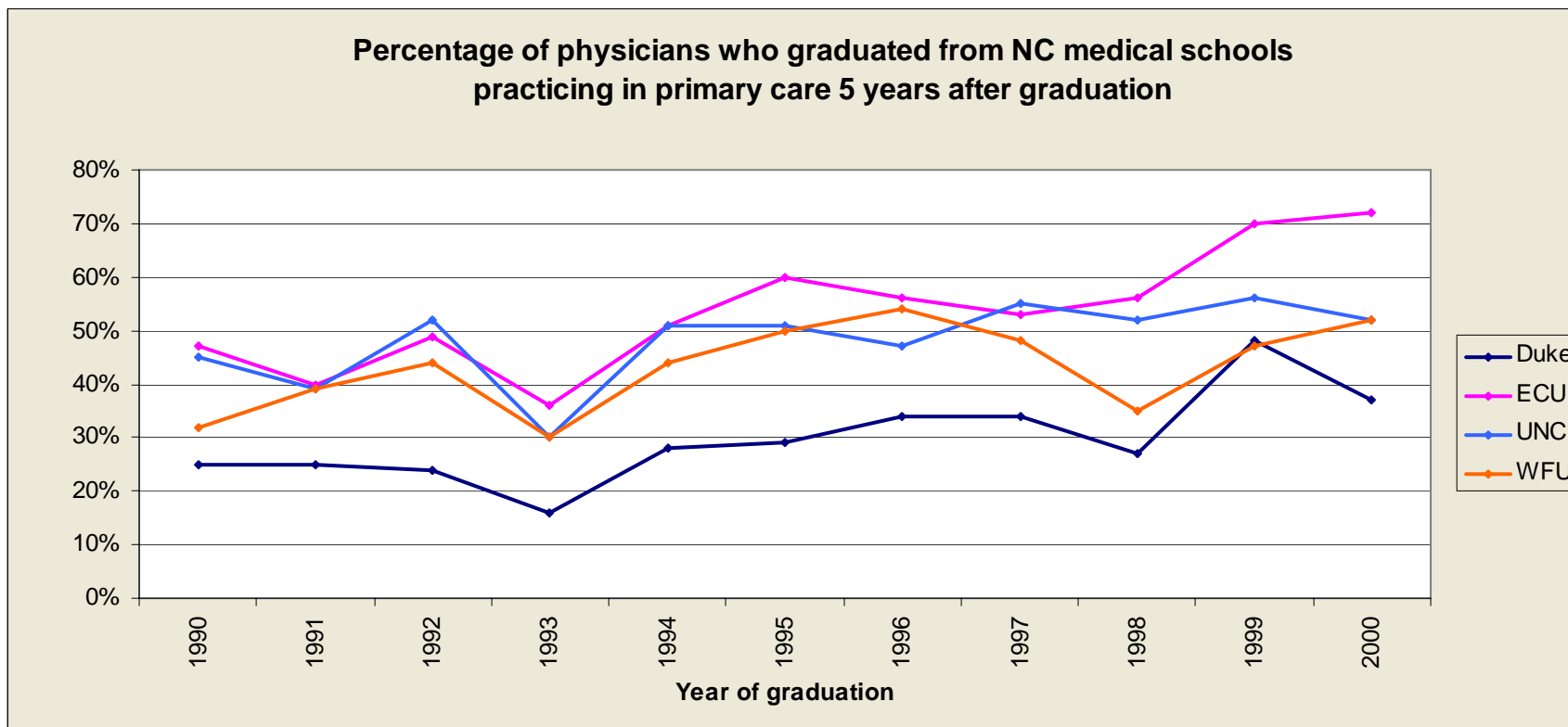
Wake Forest SOM Office of Student Affairs  
UNC-CH Office of Student Affairs  
Duke Office of Medical Education  
American Medical Association

ECU Office of Medical Education  
Association of American Medical Colleges  
NC Medical Board

Compiled by:

NC AHEC Program  
Cecil G. Sheps Center for Health Services Research

Figure 1



## **Choice of Primary Care Career for Nurse Practitioner, Certified Nurse Midwife, and Physician Assistant Students**

The 1995 North Carolina General Assembly required the UNC Board of Governors to monitor the progress of students in nurse practitioner, certified nurse midwife, and physician assistant programs in the state. Table II-1 show the retention five years after graduation of students in nurse practitioner programs who remain in a primary care career. Of the students graduated in 2000, 75% percent remain in primary care as of 2005.

Table II-2 shows the graduates of those programs who have entered primary care practice during the past two years. Not only has the number of students enrolled and the number of graduates increased significantly, the percentage of those graduates choosing careers in primary care has remained high. During the past two years (2005 & 2006), the percentage of graduates entering careers in primary care was 69 percent and 73 percent, respectively.

Tables II-3 and II-4 show enrollment in nurse practitioner programs in the UNC system, broken out by whether the program is an on-campus program or an off-campus program. The UNC system has invested significantly in off-campus distance degree programs in recent years, in order to provide additional opportunities for nurses to obtain graduate degrees while remaining in their home communities to work.

Enrollment in on-campus nurse practitioner programs continues to grow, reaching 433 in 2006 (387 in 2005). Off-campus enrollment also has grown and reached its highest level yet in 2006 at 160 students (110 students in 2005). This significant growth in both on- and off-campus enrollment in nurse practitioner programs in the state has resulted in the nurse practitioner profession being one of the fastest growing health professions in North Carolina over the last five years.

Tables II-5 and II-6 show the enrollment growth for the certified nurse midwifery and physician assistant programs located at East Carolina University. Nurse midwifery showed an increase from last year, but their enrollment is comparable to that of 2004. On-campus enrollment at ECU PA Program has remained steady at 53 students, while off-campus enrollment has dropped from 27 to 10 students in 2006.

Tables II-7 and II-8 show initial practice choice for both ECU nurse midwifery and PA programs in 2006.

Table II-1  
North Carolina Nurse Practitioner Students: Retention in Primary Care 1998-1999 and 1999-2000 Graduates

School of Nursing/Programs	Number of graduates		Number of 98-99 and 99-00 Graduates in Primary Care as of		Percentage of 98-99 and 99-00 Graduates in Primary Care as of	
	1998-99	1999-00	2004	2005	2004	2005
<b>University of NC-Chapel Hill</b>						
Family Nurse Practitioner (Degree)	39	20	24	11*	62%	55%
<b>University of NC-Greensboro</b>						
Adult/Gerontological Nurse Practitioner (Degree&Post MSN)	19	34	10	19	53%	56%
<b>East Carolina University</b>						
Family Nurse Practitioner (Post MSN)	10	1	5	1	50%	100%
Family Nurse Practitioner (Degree)	9	21	9	18	100%	86%
<b>University of NC-Charlotte</b>						
Family Nurse Practitioner	23	19	unknown	15	unknown	79%

Source: Schools of Nursing at UNC-CH, UNC-G, ECU, UNC-W, UNC-C & WCU.

\* Unable to locate all graduates

**Section II: Nurse Practitioners, Nurse Midwives,  
and Physician Assistants (continued)**

Table II-2  
N. C. Nurse Practitioner Students: Initial Practice Choice:  
Graduates of 2004-2005 and 2005-2006

Schools of Nursing/Programs	Number of Graduates		Number of Graduates With Initial Practice Choice of Primary Care		Percent of Graduates With Initial Practice Choice of Primary Care	
	2004-05	2005-06	2004-05	2005-06	2004-05	2005-06
<b>University of NC-Chapel Hill</b>						
Family Nurse Practitioner (Degree)	18	25	7	24	39%	96%
Family Nurse Practitioner (Post MSN)	1	1	1	1	100%	100%
Pediatric Nurse Practitioner (Degree)	8	7	5	4	63%	57%
Pediatric Nurse Practitioner (Post MSN)	1	1	1	1	100%	100%
OB-GYN Nurse Practitioner (Degree)	3	8	0	6	0	75%
OB-GYN Nurse Practitioner (Post MSN)	2	0	1	0	50%	
Adult Nurse Practitioner (Degree)	9	8	4	5	44%	63%
Adult Nurse Practitioner (Post MSN)	2	0	0	0	0	
<b>UNC-CH Sub-Total</b>	<b>44*</b>	<b>50</b>	<b>19</b>	<b>41</b>	<b>43%</b>	<b>82%</b>
<b>University of NC-Greensboro</b>						
Adult and Gerontological Nurse Practitioner (Degree & Post MSN)	17	9	16	3	94%	33%
<b>University of NC-Charlotte</b>						
Family Nurse Practitioner	27	12*	21	5	77%	42%
Adult Nurse Practitioner	13	9	5	7	38%	78%
<b>East Carolina University</b>						
Family Nurse Practitioner (Degree)	4	8	4	6	100%	75%
Family Nurse Practitioner (Post MSN)	2	2	2	2	100%	100%
<b>Western Carolina University</b>						
Family Nurse Practitioner (Degree & Post MSN)	13	0	13	0	100%	0
<b>University of NC - Wilmington</b>						
Family Nurse Practitioner	9	5	6	1	67%	20%
<b>Winston Salem State University</b>						
Family Nurse Practitioner (Degree & Post MSN)	23	20	23	19	100%	95%
<b>Total Nurse Practitioner Graduates</b>	<b>139</b>	<b>115</b>	<b>96</b>	<b>84</b>	<b>69%</b>	<b>73%</b>

\* Students may be waiting certification

Source: UNC Schools of Nursing

**Section II: Nurse Practitioners, Nurse Midwives, and Physician Assistants (continued)**

Table II-3  
Enrollment in State Operated Nurse Practitioner Programs: On-Campus 2001 to 2006

<b>Schools of Nursing/Programs On Campus Enrollment</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b>University of NC-Chapel Hill</b>						
Family Nurse Practitioner (Degree and Post MSN)	64	56	64	66	60	46
Pediatric Nurse Practitioner (Degree and Post MSN)	34	36	28	23	21	20
OB-GYN Nurse Practitioner (Degree and Post MSN)	13	11	8	11	9	9
Adult Nurse Practitioner (Degree and Post MSN)	31	25	29	25	32	38
Woman's Health Nurse Practitioner (Post MSN)	3	0	0	0	0	0
Psych Mental Health Nurse Practitioner (Degree)			5	12	22	34
<b>UNC-CH Sub-Total</b>	<b>145</b>	<b>128</b>	<b>134</b>	<b>137</b>	<b>144</b>	<b>147</b>
<b>University of NC-Greensboro</b>						
Adult/Gerontological Nurse Practitioner (Degree&Post MSN)	43	53	52	48	46	75
<b>University of NC-Charlotte</b>						
Family Nurse Practitioner	37	35	48	56	41	40
Adult Nurse Practitioner	37	40	42	27	25	32
<b>East Carolina University</b>						
Family Nurse Practitioner	37	30	0	0	0	0
<b>University of NC - Wilmington</b>						
Family Nurse Practitioner	27	19	21	20	11	16
<b>Western Carolina University</b>						
Family Nurse Practitioner (Degree and Post MSN)	42	17	28	30	40	40
<b>Winston Salem State University</b>						
Family Nurse Practitioner (Degree and Post MSN)			48	60	80	83
<b>Total on Campus Enrollment</b>	<b>368</b>	<b>322</b>	<b>373</b>	<b>378</b>	<b>387</b>	<b>433</b>

Source: UNC Schools of Nursing



**Section II: Nurse Practitioners, Nurse Midwives,  
and Physician Assistants (continued)**

Table II-4  
Enrollment in State Operated Nurse Practitioner Programs: Off-Campus  
2001 to 2006

Schools of Nursing/Programs	# Enrolled					
	2001	2002	2003	2004	2005	2006
<b>Off-Campus Enrollment</b>						
University of NC - Chapel Hill: Family Nurse Practitioner	0	0	0	0	0	0
University of NC - Charlotte: Adult Nurse Practitioner	7	5	5	0	0	0
East Carolina University: Family Nurse Practitioner	20	7	35	67	110	128
Adult Nurse Practitioner						32
<b>Total Off-Campus Enrollment</b>	<b>27</b>	<b>12</b>	<b>40</b>	<b>67</b>	<b>110</b>	<b>160</b>

Source: UNC Schools of Nursing

**Section II: Nurse Practitioners, Nurse Midwives,  
and Physician Assistants (continued)**

Table II-5  
Enrollment in State Operated Nurse Midwifery Programs:  
2001-2006

	Enrollment					
<b>Nurse Midwifery Programs</b>	2001	2002	2003	2004	2005	2006
East Carolina University						
On-Campus Enrollment	11	0	0	0	0	0
Off-Campus Enrollment	3	13	16	25	16	24
<b>Total Nurse Midwifery Enrollment</b>	<b>14</b>	<b>13</b>	<b>16</b>	<b>25</b>	<b>16</b>	<b>24</b>

Source: ECU School of Nursing

Table II-6  
Enrollment in State Operated Physician Assistant Programs  
2001-2006

	Enrollment					
<b>Physician Assistant Programs</b>	2001	2002	2003	2004	2005	2006
East Carolina University						
On-Campus Enrollment	59	56	54	58	52	53
Off-Campus Enrollment	12	30	42	31	27	10
<b>Total Physician Assistant Enrollment</b>	<b>71</b>	<b>86</b>	<b>96</b>	<b>89</b>	<b>79</b>	<b>63</b>

Source: ECU Department of PA Studies

**Section II: Nurse Practitioners, Nurse Midwives,  
and Physician Assistants (continued)**

Table II-7  
ECU Nurse Midwifery Students: Initial Practice Choice  
2005-2006 Graduates

<b>School of Nursing</b>	<b>Total Number of Graduates</b>	<b>Number of Graduates Who Have Not entered Practice</b>	<b>Number of Graduates who have entered practice</b>	<b>Number of Graduates with Initial practice choice of primary care</b>	<b>Percent of Graduates with initial practice choice of primary care</b>
	2005-2006	2005-2006	2005-2006	2005-2006	2005-2006
East Carolina University	4	1	3	3	100%

Source: ECU School of Nursing

**Section II: Nurse Practitioners, Nurse Midwives,  
and Physician Assistants (continued)**

Table II-8  
ECU Physician Assistant Students: Initial Practice Choice  
2005-2006 Graduates

	<b>Total Number of Graduates</b>	<b>Number of Graduates Who Have Not Entered Practice</b>	<b>Number of Graduates Who Have Entered Practice</b>	<b>Number of Graduates with Initial Practice Choice of Primary Care</b>	<b>Percent of Graduates with Initial Practice Choice of Primary Care</b>
	2005-2006	2005-2006	2005-2006	2005-2006	2005-2006
East Carolina University	78	3	75	36	46%

Source: ECU Department of PA Studies

## **Conclusion**

This report responds to the mandate of the 1993 and 1995 sessions of the General Assembly to monitor the progress of graduates of the schools of medicine into primary care, as well as the graduates of the programs in the UNC schools for nurse practitioners, certified nurse midwives and physician assistants. With the exception of East Carolina University medical graduates, the interest in primary care has declined somewhat among medical school graduates in the state. This decline matches a national trend, but needs to be monitored since a number of counties, particularly in rural and economically depressed areas of the state, are reporting increasing shortages of primary care physicians over the last several years. Because of the work of the medical and other health science schools, the North Carolina AHEC Program, the State Office of Rural Health, and related programs, North Carolina's rural areas continue to have a higher supply of physicians than comparable rural areas elsewhere in the country. Nevertheless, it will be important to monitor these trends in the coming years to assure that there still remains a steady supply of primary care providers to meet the needs of North Carolina communities.