

Priority 3

**EAST CAROLINA UNIVERSITY
UNC-GA Mission Review
Academic Program Development Form**

COLLEGE/SCHOOL: Allied Health Sciences **DEPARTMENT:** Biostatistics

API DISCIPLINE SPECIALTY TITLE: Biostatistics

API DISCIPLINE SPECIALTY NUMBER: 1299

LEVEL: Bachelor X Master 1st Professional Doctoral

PROPOSED YEAR OF: Establishment 1992 Deletion Redesign

**DESCRIPTION OF PROGRAM AND RELATIONSHIP TO
INSTITUTIONAL MISSION AND UNIT VISION:**

This degree program is designed to train biostatisticians at the bachelor's level for positions as statistical assistants in regional research institutions and both public and private health care facilities offices. Graduates would also be well prepared to pursue advanced degrees in biostatistics/statistics and other fields. Advanced programs are available at East Carolina University or other regional universities.

Biostatistics is a specialized field, yet multidisciplinary in its training and application. The proposed Biostatistics degree program would add to the University's distinction while at the same time provide trained professionals to the local area (School of Medicine, Burroughs-Wellcome, Pitt County Memorial Hospital). The Biostatistics degree program will add to the visability of the Biostatistic unit, aid in our consulting services throughout the University and provide the means for greater service to the region.

RATIONALE FOR PROGRAM ADDITION/DELETION/REDESIGN

There is a need for bachelor's level biostatisticians in N.C. and especially in the eastern region of the state. For example, the School of Medicine has several positions for Statistical Research Assistants, most of which are now filled by individuals who are not specifically trained for such a job, and must be trained upon hiring. Opportunities for employment in the private sector exist with Burroughs Wellcome, Glaxo, and other industries within the Research Triangle Park as well as at the Research Triangle Institute. There are currently four faculty biostatisticians at ECU. There is an established, unique set of courses and an ongoing consulting practice across the campus for practicum needs. We have met with Drs. Robert Bernhart, Said Said and John Daughtry of the department of Mathematics to discuss curriculum and courses. They are very supportive of this degree program, and together we plan to have joint offerings and combine our strengths in the statistical sciences. The Biostatistics unit teaches a variety of applied statistical courses in support of graduate programs in mathematics, and the two units are currently exploring further cooperative ventures. Recently we were contacted by individuals at PCMH regarding the possibility of hiring students or providing a location for practicum, and in the past the Department of Family Medicine, and the Center for Health Services Research have served as practicum sites or employed non-degree students taking our courses. There are several inquiries each year regarding a degree

program in biostatistics/epidemiology, or the possibility of obtaining a minor. The nearest such programs are those at UNC-CH or MCV in Richmond. There is a state wide need for individuals with quantitative skills who understand the application of statistics within the health sciences, and who also have practical data analysis skills. No such program currently exists in the eastern part of North Carolina. With the Biostatistics unit, the campus has the resources and skills necessary to begin a degree program at East Carolina University.

Budget Considerations

We believe that current resources are sufficient to begin the program and maintain it for at least the first year of operation. The budget requests are for increased supplies and copying that may be necessary, and a subscription to Chance magazine. Beginning in the second year the need for full time secretarial support, and the addition of a full time statistical research assistant to help with the consulting program is anticipated. Beyond the second year of operation the expansion of the unit will be tightly linked to grants and contracts obtained. During the course of development we plan to pursue outside sources such as training grants and awards to support the department and its degree program. The initial operating expenses for the program are relatively low, since most of the required library resources, courses and computers are already available at ECU. The Department of Mathematics has reviewed our curriculum and is fully supportive regarding their offering of mathematics courses required. We intend to purchase the computing package BMDP in 1992. The purchase of computers for the secretary and any new faculty member or research assistant will be necessary. Further software purchases like DataDesk, JMP or EGRET will be considered in the second year or later. Initial student enrollment is expected to be limited, building to 8-12 students. This number should be sufficient to satisfy the area job market and contribute to the state needs with some graduates going on for advanced degrees. The current resources are entirely sufficient to operate a degree program at this time, and possibly for several years.

ENROLLMENT PROJECTIONS:

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Black	0	1	1	1	2	3	3	3	4	4
White	0	2	2	3	2	5	6	6	5	5
Other	0	0	0	0	0	0	1	1	1	1
Total	0	3	3	3	4	8	10	10	10	10

Percent non-resident: 15%

ADDITIONAL FACULTY AND STAFF REQUIREMENTS:

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Faculty	0	0	0	0	1	0	0	0	0	0
Staff	0	0	1	0	1	0	0	1	0	0
Total	0	0	1	0	2	0	0	1	0	0

BUDGETARY IMPLICATIONS:

(A: Annual continuation dollars; B: One-time dollars)

YEAR: 1992

Category	Reallocation of Unit Resources		Self-supporting funds (grants and contracts)		Additional Allocations		Total	
	A	B	A	B	A	B	A	B
Personnel								
Operating					200.00		200.00	
Library					35.00		35.00	
Computing						500.00		500.00
Other								
Total					\$235.	500.00	235.00	500.00

Copies,
Supplies
chance
BMDP

BUDGETARY IMPLICATIONS:

YEAR: 1993

Category	Reallocation of Unit Resources		Self-supporting funds (grants and contracts)		Additional Allocations		Total	
	A	B	A	B	A	B	A	B
Personnel					33,000		33,000	
Operating					500.00		500.00	
Library								
Computing						2450		2450.
Other								
Total					33,500	2,450	33,500	2,450.

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YEAR: 1994

Category	Reallocation of Unit Resources		Self-supporting funds (grants and contracts)		Additional Allocations		Total	
	A	B	A	B	A	B	A	B
Personnel			5000 ⁺				5,000.	
Operating								
Library						1500.00		1500.00
Computing						6000.00		6000.00
Other								
Total			5000 ⁺		35.00	7500.00	5000 ⁺	7500.

Grant funds

Texts & Char

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YEAR: 1995

Category	Reallocation of Unit Resources		Self-supporting funds (grants and contracts)		Additional Allocations		Total	
	A	B	A	B	A	B	A	B
Personnel			60,000 ⁺		10,000		70,000	
Operating								
Library								
Computing		7500.00						7500.00
Other								
Total			60,000					

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