This is an example of a response to “UNC Tomorrow….ECU Tomorrow…And the Implications for Academic Degree Program Planning.”

Program planners should review “UNC Tomorrow Commission Final Report (December 2007)” and ECU’s Phase I response to that report as well as “ECU Tomorrow: A Vision for Leadership and Service.” Responses to the “Tomorrow” reports should appear in the program planning documents at the points designated below as well as throughout the document as appropriate.

Request for Inclusion: 1. b)
Notification of Intent to Plan: 1. b)
Request for Authorization to Plan: 1. b)  
Request for Authorization to Establish: II.A.1.

The following are points from the UNCT report that are congruent with the proposed master’s degree program.

- 4.1.1 “Improve student proficiency in the “soft skills” including oral and written communication, critical thinking and analytical reasoning, problem solving, creativity, and innovation, teamwork ....”

A research oriented program requires by its very nature critical thinking, problem solving, and creative reasoning skills to define problems, propose a testable hypothesis and finally design experiments to test the hypothesis. The soft skill of writing will be honed by writing a research proposal, a thesis, and finally the manuscripts resulting from the research findings. In addition the soft skill of oral presentation will be developed by the seminar program as well as the oral defense of the thesis. In addition to the usual teamwork required by the research team in the laboratory in which the student will conduct his/her research, the interdisciplinary nature of the program will require interaction and teamwork with others in the program.

- 4.1.1 “Improve student proficiency in 21st knowledge emphasizing science technology, engineering and math (STEM)

The students in this program will be working in modern biomedical science laboratories and will be exposed to the newest scientific methods and techniques this insuring they will gain proficiency in 21st knowledge.

- 4.1.2 “Maintain and strengthen the quality and high standards of academic curricula, research, and scholarship activities to world standards of excellence”

These are constant goals of the faculty mentors involved in this program and are required in order to secure external funding needed to support this program.

- 4.1.2 “Continue to expand basic and applied research activities consistent with the priorities and missions of UNC.

This program will expand the basic research activities in the biomedical sciences at East Carolina University and is consistent with the mission of UNC to increase involvement in human health.

- 4.4.3 “Develop degree programs and continuing education programs to meet the regional and statewide needs of specific employers……..”
Some of the graduates of this program will be immediately employed in the biomedical industry while others will enroll in doctoral programs and eventually also be employed in the biomedical industry at a higher level. Note also, in their publication “Science Professional: Master’s Education for a Competitive World” (July 2008) The Committee on Enhancing the Master’s Degree in the Natural Sciences of the Board on Higher Education and Workforce of The National Research Council of the National Academies noted the need for more master’s level students in the sciences in the workforce.

- 4.5.2 “UNC should educate more health professionals”

Some of the graduates of this program are expected to enroll in medical school and thus increase the number of health care professionals.

The following are points from ECU’s Phase 1 response to the UNCT report that are congruent with the proposed master’s degree program.

- Page 7. ECU commitment to Student Access and Success (UNCT Nos. 4.1, 4.2, 4.7, 5.7). The University will foster the enrollment of promising students (from all sectors of society) and work to ensure that when they depart the University, they will be poised to succeed both as individuals and as members of society. It is ECU’s goal for its graduates to have the capacity in their chosen discipline and the intellectual skills for like-long learning.

One of the goals to this program is to identify and accept students with the potential for success but who for one reason or another do not have the credentials for acceptance into a PhD or MD program. The rigor of this program will not only provide the graduates with the necessary credentials for acceptance into more advanced degree programs, but will also provide them with the skills for success in these programs as well as in their subsequent professional careers.

- Page 15. Graduate Education, Leadership and the Workforce for a New Economy (UNCT Nos. 4.1, 4.4, 4.5, 5.7). ECU recognizes the strong link between graduate education, the production of knowledge, and economic and social prosperity. The University is committed to producing highly skilled leaders in a barite of fields to address the needs and challenges of the region. ECU is committed to producing professionals in the fields of education and health care and to developing leaders for the business, nonprofit, and government sectors. Additionally, ECU will produce more graduates in the STEM fields to provide the workforce for a new regional economy based on industry/university/government clusters, for example in bioscience, biotechnology, and advanced manufacturing.

The graduates of this program will be in a STEM field. Some of these graduates will become part of the workforce and become leaders in industry/university/community college/government clusters in the bioscience and biotechnology industry.

- Page 20. ECU will significantly expand its biomedical and health care related external research funding. Among the key research interests are the metabolic problems of diabetes and obesity.

The students in this program will be conducting biomedical research thus increasing our capacity for biomedical research which will motivate the faculty mentors to apply for funding to support this research.