Federal Priorities Selection Committee

Dr. Deirdre Mageean, VC for Research and Graduate Studies, Chair

Mr. Al Delia, Director of Federal Relations, Co-Chair

Dr. Austin Bunch, Chief of Staff,

Dr. Mike Lewis, Vice Chancellor for Health Sciences

Catherine Rigsby, Chair, Faculty and Associate Professor of Geology

Dr. Marilyn Sheerer, Interim VC for Institutional Advancement and Dean, College of Education

Dr. James L. Smith, Provost and VC for Academic Affaris,

Dr. Stephen Thomas, Dean, School of Allied Health Sciences

Dr. Alan White, Dean, Harriott College of Arts and Sciences

Ms. Terri Workman, Associate Vice Chancellor for Health Sciences Communications and Special Programs and Interim Director, Office of Sponsored Programs

SouthEast Crescent Authority

Proposal for UNC Board of Governors Federal Priority 2006-07

Background

The purpose of the SouthEast Crescent Authority (SECA) is to promote economic growth and alleviate poverty and unemployment in distressed areas of the southeastern United States. East Carolina University's Regional Development Institute (RDI), in collaboration with North Carolina State University, North Carolina A & T University, UNC-Wilmington and the regional development organizations (RDO) from the seven states in the proposed SECA region have been working together to obtain federal authorization and funding for its creation.

Congressman Mike McIntyre, re-introduced the SECA legislation (H.R. 20) on the opening day of the 109th Congress. Senator Elizabeth Dole introduced companion legislation in the Senate (S. 1865) in October 2005. The bills call for the formation of a federal initiative titled the SouthEast Crescent Authority and authorizes \$200 million over five years for economic development and job-creating activities in the most distressed areas of eastern North Carolina, Virginia, South Carolina, Georgia, Alabama, Florida, and Mississippi.

In 2003, the Southern Governors Association (SGA) unanimously endorsed the creation of SECA and urged Congress to authorize creation of the Authority. The subcommittee on Economic Development, Public Buildings and Emergency Management of the House Transportation and Infrastructure Committee, unanimously passed HR 141, a predecessor bill to H.R. 20. The legislation authorizing SECA was not acted upon by the full Committee before the end of the 108th Congress.

The SECA region includes the coastal and central portions of the seven southeastern states from Virginia to Mississippi. It has a total population of 40.26 million and is America's last large area of economic distress not being addressed by a special federal funding program.

SECA would be patterned after the highly successful Appalachian Regional Commission (ARC), which has assisted in eliminating large pockets of poverty in Appalachia. Each of the seven states' governors or his/her appointee shall serve on the SECA board of directors, along with a federal cochair appointed by the President of the United States. The governors shall elect one of the seven governors to serve as the other co-chair.

Projects that are submitted for funding approval must address one or more of the following broad criterion for community betterment:

- Infrastructure
- Education & Training
- Entrepreneurship
- Leadership Development

In order to direct the SECA resources toward communities in greatest need, grants will be made according to the degree of SECA-designated distress. In general, the five funding priorities for SECA shall be, in descending order:

- 1. Distressed rural counties (as defined by SECA)
- 2. Distressed urban counties (as defined by SECA)
- 3. Pockets of distress in non-distressed rural communities
- 4. Pockets of distress in non-distressed urban communities
- 5. Selected projects that involve multiple communities or communities of varying distress.

SECA will emphasize the capability to enjoin a local, state, and federal partnership to carry the most disadvantaged portion of each state to a point that is commensurate with the balance of their state. It will work in a manner that will seek to address localized problems as well as issues that transcend state boundaries. Emphasis will be placed on addressing problems in the worst areas of SECA, rather than simply spreading program funding over the geographic whole.

"SouthEast Crescent Authority: A Proposal for Economic Growth in the Southeastern United States," can be found in its entirety at http://www.ecu.edu/rds/.

Action Requested

The North Carolina Congressional delegation is requested to support legislation authorizing creation of the SouthEast Crescent Authority (H.R. 20 and S. 1865).

Program in Racial Disparities and Cardiovascular Disease

Proposal for UNC Board of Governors Federal Priority 2006-07

Background

According to statistics from the National Institutes of Health (NIH), cardiovascular diseases are the most common cause of morbidity and mortality in the United States, accounting for nearly half of all deaths and health care expenditures. Compared to the rest of the nation, the State of North Carolina ranks high with respect to the magnitude of this problem. In 2000, death rates for cardiovascular disease for all North Carolinians exceeded the national average by 4%, but the rates for minority populations were a staggering 50% higher than the national average (226 vs. 154 per 100,000 populations) with much of the increase attributed to counties in the eastern part of North Carolina. Despite the fact that this situation is not new, physicians do not presently understand the basis of these disparities among minorities. Fortunately, resources are now available to address this problem systematically, including the Human Genome Project and the large sets of genomic, genetic and population information encompassed by that effort.

Against this backdrop, a significant hurdle remains: the lack of sufficiently advanced computer-based information technology to integrate enormous data sets containing tens of thousands of genes and 3 billion units of information per patient, with clinical and population information. This challenge is amplified by the fact that these data sources are not designed to integrate with one another. Unfortunately, traditional funding mechanisms do not exist for the development of the novel information system and operational infrastructure needed for a multidisciplinary approach to this problem.

Program in Racial Disparities and Cardiovascular Disease

The State of North Carolina and the University of North Carolina are uniquely positioned to understand and find solutions to the problem of racial disparities in cardiovascular diseases based on demographic, clinical and scientific resources, resulting in a greater understanding of how racial disparities contribute to differences in wellness, health care needs and outcomes. North Carolina is home to a diverse people including the Lumbee Tribe, the largest Native American population east of the Mississippi, a significant African-American population (21.6% of the state population versus 12.3% nationally) and the fastest growing Latino population in the country, with 400% growth between 1990 and 2000. Of particular relevance to this issue is that Eastern North Carolina African-American individuals living in some counties have a significantly higher than average risk of cardiovascular disease while in other counties the risk is average. Such disparities, even among minority populations, offer insight into the general problem of racial health disparities and its solution.

The University of North Carolina at Chapel Hill, through its nationally recognized Schools of Medicine and Public Health, provides a unique, highly interactive team approach to finding solutions to address racial disparities in cardiovascular disease. The Brody School of Medicine at East Carolina University supports the fastest growing clinical division of cardiology in the region and serves a racially diverse population with a high prevalence of cardiovascular disease and a death rate exceeding the state and national averages. This partnership between UNC-Chapel Hill and East

Carolina University, also known as the joint Program in Racial Disparities and Cardiovascular Disease, will enable unprecedented access to diverse cardiovascular patient populations and collaborations among world renowned cardio-thoracic surgeons and cardiologists, as well as scientifically-based data outcomes that do not currently exist.

The Program in Racial Disparities and Cardiovascular Disease will assemble the patient access and computational resources necessary to address the problem of racial disparities in cardiovascular disease. The primary areas of focus of this multidisciplinary effort will be the development of hardware (a state-of-the-art computer database platform); "middleware" (specific computer applications for database communications between different data sets, in collaboration with the IBM Life Sciences Research Division and computer scientists at the ECU School of Computer Science and Technology); technology development (new tools and "rules" that will allow for the integration and mining of genomic data to crack the code of ethnic and racial disparities in cardiovascular diseases; and human resources (physicians, basic scientists, computer scientists, programmers, database managers and population scientists).

While the technology will enable a greater understanding of disease prevalence and targeting, equally important benefits will include improved overall health care and greater access to cardiovascular health care for minorities, and opportunity for economic development in rural, disadvantaged areas. In Fiscal Year (FY) 2005, Congress appropriated \$725,000 in Federal funds to help initiate the Program in Racial Disparities. The promise of those funds has already allowed East Carolina University to hire a renowned cardiovascular faculty member for additional work in this field. FY2005 funding and subsequent awards will target congestive heart failure in eastern North Carolina; establish a state-wide congestive heart failure registry and a heart failure education program for primary care doctors. Further, the Program will employ novel information systems to transmit data to the registry at ECU while providing samples for genetic and proteomic analysis from a racially diverse group to project partners at UNC-Chapel Hill. By establishing community-based heart failure clinics, the joint Program can immediately address issues of access, improve the care of patients near their homes, decrease hospitalization, improve mortality, and decrease the cost of care, including a resulting decreased dependence upon Medicaid/Medicare services. It is anticipated that such programs can be generalized to the State and nation as a whole and can also be adapted for other cardiovascular diseases such as stroke, diabetes, hypertension and atherosclerosis.

Action Requested

The North Carolina Congressional Delegation is requested to support additional funding to assemble the computational resources and provider and patient access to address the problem of racial disparities in cardiovascular disease.

Labor, Health and Human Services and Education FY 2007 Appropriations

Item: Program in Racial Disparities and Cardiovascular Disease

Request: \$2,275,000

Agency: Department of Health and Human Services: Centers for Disease Control

Account: Public Health Improvement and Leadership

North Carolina Coastal Hazards: Implications of Climate Change, Sea-Level Rise and Storms

Proposal for UNC Board of Governors Federal Priority 2006-07

Background

More than half of all Americans now live on or near coast. This represents over 153 million people living in coastal communities, an increase of 33 million since 1980. For many of these communities, tourism is essential to their continued economic well-being. In North Carolina the impact of coastal tourism in the 20 coastal counties reaches into the several billions of dollars annually and affects the economic lives of nearly every one of the 865,000 residents. The natural resources that support the coastal economy have crucial components of recreation, tourism, fisheries, agriculture, and silvaculture - it's all about water and the adjacent lands!

North Carolina has about 325 miles of barrier islands with ocean shoreline and 24 inlets/outlets. The State has the second largest estuarine and wetland system in the US, with approximately 4,000 miles of estuarine shoreline and eight major drainage basins with their abundant water supply.

Coastal Hazards are real! While much of coastal North Carolina is less than 18 inches above sea-level, scientists agree that sea level is rising in North Carolina at a rate up to 18 inches per century. In the last decade, 10 major hurricanes affected the coast, the most ever recorded in such a short period of time. Climatologists predict this high frequency will continue for several more decades, with increased intensity storms. Submarine slumps along the Atlantic continental margin and oceanic earthquakes occur infrequently in this portion of the Atlantic Ocean, but when they occur they are capable of producing coastal tsunamis. A large portion of NC's fresh surface-water resources come from the frequent storms that impact the coastal system. Several years without major storms quickly develop drought conditions. Drought severely impacts coastal communities dependent on surface water resources, as well as tourism, agriculture and silvaculture.

The NC coastal system is a high energy system that is dominated by change. Change is driven by the interaction of long-term climatic and sea-level changes in concert with the short-term high energy storm events. Since these changes operate within human time scales, there is an imminent conflict brewing between the natural dynamics and human economic expectations. Understanding the complex evolutionary history of sea-level rise, coastal system evolution, and the dynamic processes driving the barrier islands and associated water systems is crucial for both the human economic component and the natural coastal system.

North Carolina's coast, its inhabitants, economy, infra-structure, and natural environment are subject to many threats, including climate change, sea-level rise and storms. The proposed program will address these and other issues and will provide reliable geologic, biologic, economic and sociologic data upon which informed coastal management decisions can be based for both hazards planning and long-term economic development.

This five-year research program is a large inter-disciplinary, inter-departmental, and inter-institutional cooperative program in which the ECU will be the lead institution and the Department of Geology will be the program managers and lead scientists. Other institutions participating in this work include:

University Partners

Western Carolina University, Dr. Rob Young, Coastal hazards, wetland ecology University of Delaware, Dr. John Wehmiller, Age dating, Quaternary stratigraphy University of Pennsylvania, Dr. Ben Horton, Holocene sea level, micropaleontology Virginia Institute of Marine Sciences, Dr. Jesse McNinch, Shoreface dynamics, geophysics

Other Cooperating Agencies

US National Park Service: Cape Hatteras and Cape Lookout National Seashores
US Fish & Wildlife Service: Pea Island, Alligator, Pungo Lakes, Swanquarter, and Cedar Island
National Wildlife Refuges

US Army Corps of Engineers: Field Research Facility—Duck

NC Division of Coastal Management and Coastal Resources Commission

NC Division of State Parks: Jockeys Ridge and Merchants Millpond State Parks

NC Department of Transportation

NC Sea Grant College Program

Action Requested

The North Carolina Congressional Delegation is requested to support additional funding to undertake the research to provide reliable geologic, biologic, economic and sociologic data upon which informed coastal management decisions can be based to determine the coastal hazards.

Interior FY 2007 Appropriations

Item: Program in Coastal Hazards
Request: \$5,000,000 per year for 5 years

Agency: Department of the Interior: United States Geological Survey

Account: U.S.G.S Coastal and Marine Geology Program