## NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY

## **Division of Research & Economic Development**



STRATEGIC PLAN

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#### STRATEGIC PLAN

The Division of Research & Economic Development (DORED) administers and manages research, sponsored programs, outreach and economic development for the University. Headed by the Vice Chancellor for Research & Economic Development, the division is made up of the Vice Chancellor's management team, the Office of Sponsored Programs, the Office of Technology Transfer and Outreach, the Office of Compliance and the Office of Research Services. The DORED coordinates interdisciplinary funding opportunities among the University's colleges and schools and assists in transforming research into viable economic opportunities. Continuing to build on its marketable strengths in eight core research areas, the research enterprise at North Carolina A&T is consistently recognized as competitive and valuable locally, state-wide and nationally. The Division of Research and Economic Development's mission is to increase research through enhanced faculty participation and to aid in transforming and transitioning more of the University's research into new products and jobs for economic development. True to that mission, the DORED works aggressively to expand the University's relationship among research sponsors, develop relationships with the larger community and enhance the University's competitiveness in the mainstream.

#### Goal

Increase scholarly and creative research consistent with our status as a "high research activity" institution that addresses significant regional, statewide, national and global issues.

#### Objectives

#### 1. Foster an environment that encourages interdisciplinary research

An environment that encourages interdisciplinary research emphasizes societal priorities such as education, energy, transportation, and health. Recognizing the need to maintain, enhance and expand the University's position as a leading research institution, key partnerships must continue to be established with federal agencies, business and industry. Centers and institutes currently on the campus must play a pivotal role in enhancing the University's position. New centers and institutes must be formed to complement existing graduate programs and to support new programs as they are developed.

#### 2. Increase faculty participation in research

Active involvement by the entire faculty is essential to the growth of the research profile of the university. Currently, less than half the faculties are active in research. Providing incentives and support for the currently inactive faculty members is key in the plan for growth in the division of research. Additionally, recognition and promotion of newsworthy research and economic development events will assist in enhancing faculty participation.

3. Strengthen linkages between research and academic programs

Close linkages between research and degree granting academic programs is important to allow faculty and students to participate fully in enhancing research productivity. Further, it is imperative to engage undergraduate students in research. Undergraduate research will educate students to embrace the holistic approach needed in this evolving world. Students must be taught to think broadly across disciplines and to consider the human dimensions that are in each challenge and problem to be solved.

4. Foster Economic Development and Engage Community Stakeholders

Over the last five-six years, the division of research has increased its role in regional economic development. The creation of local start-up companies and its potential for high paying jobs is an obvious result of this activity. Continued growth in economic development through community engagement will remain a priority.

#### Action Strategies/Activities

- Provide timely and accurate information on research opportunities
- Offer additional incentives to researches who work collaboratively.
- Provide mentors to junior faculty members
- Provide training to faculty (grant writing courses, lunch & learn seminars, new faculty orientations)
- Provide the ability to capture proposal information and track it as institutional information from concept to completion of a research project
- Provide a forum for state and community leaders, agency officials, business and industry to interact with university researchers
- Provide infrastructure to support and promote research.
- Plan a core facility that houses high end equipment for use by all schools and colleges (centrally managed and offers experiential learning for students)
- Accelerate the development of additional research spaces in the various schools/colleges
- Enhance Post-Award Management (e.g. C&G, Purchasing, facilities support, etc)
- Publicize the research efforts of faculty
- Participate in economic development and outreach activities
- Promote undergraduate and graduate student research opportunities with industry and governmental agencies
- Increase the visibility of NC A&T researchers and their work through publications in journals such as Science and Nature
- Work with the Provost to increase the number of academic programs that grant MS and PhD degrees
- Increase funding for students doing research using the overhead money
- Create a *Community of Research* whereby research and academic discovery are infused throughout each School on campus.
- Promote and support interdisciplinary research collaboration within the academic community and the community at large
- Seek new partnerships in targeted strategic areas (e.g., biotechnology, food sciences, public health/health disparities, energy, etc)
- Functionalize research clusters as models of internal partnerships as well as capabilities to

attract and sustain external partnerships

- Create a focused strategic plan for the creation of a non-profit NC A&T Research Foundation (501-c-3) to streamline research and economic development activity
- Structure venture development partnerships to accelerate the commercialization of intellectual property and growth of university-based ventures
- Provide resource base for local business community (partnerships, student internships, joint-projects, consulting, etc)
- Help local business secure funding for R&D through SBIR, STTR, and other sources
- Promote and participate in business development show cases/competitions in the region
- Make graduate assistantships available to more graduate students each year

#### **Expected Outcomes**

- Research funding will increase
- More faculty members from diverse disciplines will perform research collaboratively
- Research activities will be integrated with academic programs
- Economic development will increase resulting in increased job opportunities

#### Success Indicators/Performance Metrics

- Increase the number of interdisciplinary proposals submitted by 5% each year
- Increase faculty participation in clusters by 5% each year
- Increase research funding an average of 3% over the next five years
- Develop at least two large, multi-year proposals each year
- Implement other modules of the Research Administration software to handle technology transfer and compliance.
- Publish two articles each month about A&T researchers, graduate and/or undergraduate student research and/or economic development activities
- The number of invention disclosures, licenses and university startups will increase by 3% each year
- Partnerships with government and private labs will increase by 2% each year.
- Increase the number of graduate assistantships by 2% each academic year.
- Increase the number of summer research interns by 3% each year
- Increase funding of undergraduates participating in research programs and University centers/institutes by 3% each year

#### Resource Needs

- Faculty positions
- Tuition funds for graduate students
- Funds for building construction
- Funds for equipment maintenance