# STRATEGIC PLAN 2012-2016 Office of Research, Innovation and Economic Development

#### **OUR FOUNDATION**

#### NC STATE MISSION:

As a research-extensive land-grant university, North Carolina State University is dedicated to excellent teaching, the creation and application of knowledge, and engagement with public and private partners. By uniting our strength in science and technology with a commitment to excellence in a comprehensive range of disciplines, NC State promotes an integrated approach to problem solving that transforms lives and provides leadership for social, economic, and technological development across North Carolina and around the world.

#### **ORIED MISSION:**

The Office of Research, Innovation and Economic Development supports the research, scholarship, and creative activities of the NC State community, provides a collaborative research and innovation environment, and translates results to achieve social, economic, and technological development across North Carolina and around the world.

- ORIED assists the NC State community by identifying strategic research areas and specific funding sources, supporting proposal development, providing professional development, facilitating partnerships, and providing administrative services and oversight.
- ❖ ORIED provides an efficient and collaborative research and innovation environment by maximizing access to existing resources, identifying needs, coordinating activities to secure new resources, and promoting an interdisciplinary research culture.
- ORIED translates results by licensing IP, leveraging resources, launching start-up companies, communicating the value of our work, and fostering partnerships that lead to social, economic, and technological development.

#### NC STATE VISION:

NC State University will emerge as a preeminent technological research university recognized around the globe for its innovative education and research addressing the grand challenges of society.

#### **ORIED VISION:**

The Office of Research, Innovation and Economic Development will be instrumental in NC State's emergence as a preeminent research university making an impact on society's grand challenges.

#### **NC STATE VALUES:**

Consonant with our history, mission, and vision, NC State University affirms these core values:

Integrity in the pursuit, creation, application, and dissemination of knowledge Freedom of thought and expression

Respect for cultural and intellectual diversity
Responsibility for individual actions and service to society
Stewardship in sustaining economic and natural resources
Excellence in all endeavors

#### ORIED'S STRATEGIC PLANNING PROCESS

The initial draft strategic plan was developed at a Research and Graduate Studies Retreat in August 2009. Comprehensive input on this draft was obtained from additional stakeholders at the URC/ROC/RSC joint meeting (October 21, 2009) and Research Administration Retreat (February 11-12, 2010).

After incorporating this feedback, the Research and Graduate Studies Strategic Plan was published March 12, 2010. During the next 18 months, the division formerly known as Research and Graduate Studies underwent multiple re-organizations and changes in mission, namely:

- Research,
- Research and Innovation, and
- Research, Innovation and Economic Development.

Although it was recognized during this period that the RGS Strategic Plan no longer reflected the entire mission and goals of the division, updating the plan was delayed until the University's strategic planning process was complete.

After finalization of the NC State Strategic Plan, we:

- 1) developed new strategies to reflect the entire scope and mission of the Office of Research, Innovation and Economic Development;
- 2) incorporated relevant strategies from the NC State Strategic Plan and Implementation Plan; and
- 3) obtained feedback from ORIED senior staff.

This draft ORIED Strategic Plan (2012-2016) includes the new strategies resulting from steps 1-3. It is completely restructured with all ORIED strategies assigned to one of the five goals stated in NC State's Strategic Plan. Language from the NC State Strategic Plan was adopted for actions assigned to the VC for RIED and wherever possible for other actions.

#### **NC STATE'S GOALS**

- 1. Enhance the success of our students through educational innovation.
- 2. Enhance scholarship and research by investing in faculty and infrastructure.
- 3. Enhance interdisciplinary scholarship to address the grand challenges of society.
- 4. Enhance organizational excellence by creating a culture of constant improvement.
- 5. Enhance local and global engagement through focused strategic partnerships.

## GOAL 1: ENHANCE THE SUCCESS OF OUR STUDENTS THROUGH EDUCATIONAL INNOVATION

While balancing access with quality, NC State must ensure that our students make timely progress toward an NC State degree, and along the way, must provide educational opportunities that inspire them to lead, to serve, to challenge, to take responsibility, to build problem-solving skills, and to engage with complex problems.

#### **ORIED STRATEGIES**

- A. Expand high impact educational experiences for undergraduates, (e.g., support undergraduate research and entrepreneurship).
- B. Facilitate opportunities for advanced training, (e.g., professional science masters, graduate certificates, and entrepreneurship education) to prepare the workforce for economic growth.

### GOAL 2: ENHANCE SCHOLARSHIP AND RESEARCH BY INVESTING IN FACULTY AND INFRASTRUCTURE

NC State's research culture permeates every aspect of our essence as a university. It structures our thought, informs our teaching, and directs our engagement beyond the campus. It is the foundation on which we build an innovative learning environment that engages our faculty, undergraduates, and graduate students alike. NC State's research quality determines our impact on the work force, on the economy, on the advance of knowledge, and on the human condition.

#### **ORIED STRATEGIES**

#### A. Increase and optimize research funding and development.

- 1. Expand and unify proposal development efforts across campus.
- 2. Expand opportunities for professional development for faculty (e.g., mentoring new faculty, training in grant development, leadership skills, and effective networking).
- 3. Establish university-wide seed and travel grants to faculty and staff for local and global research and engagement activities.
- 4. Advocate for policies and review, promotion and tenure processes that encourage and reward research, innovation, and economic development activities across units on campus.
- 5. Work with University Advancement to develop an Endowed Interdisciplinary Research Fund.

- 6. Improve awareness of funding and partnership opportunities.
- 7. Increase use of Master Agreements.

#### B. Improve research and innovation infrastructure and resources.

- 1. Create a Research Facility Task Force to analyze and report on existing facilities, equipment and instrumentation and to develop an improvement plan to upgrade and optimize our inventory.
- 2. Develop a process for prioritizing and funding high end, specialized equipment for shared facilities and service centers.
- 3. Develop and grow the Chancellor's Innovation Fund and increase linkages to external funding sources to help launch NC State startups.

### GOAL 3: ENHANCE INTERDISCIPLINARY SCHOLARSHIP TO ADDRESS THE GRAND CHALLENGES OF SOCIETY

The history and mission of NC State call for us to address the major challenges that confront the world. Addressing complex problems with many disciplinary aspects requires assembling teams of scholars with varied skills and diverse perspectives. We will maximize the impact of NC State's research by concentrating our research resources in areas where we have strategic strengths and by creating a culture of collaboration and interdisciplinarity that will enrich not only our research activities, but also our teaching and engagement.

#### **STRATEGIES**

## A. Continually refine Strategic Research Areas by working with faculty and stakeholders to identify the critical research questions or "Grand Challenges."

- B. Reallocate resources to strategic interdisciplinary programs.
  - 1. Provide funding for seed grants that support interdisciplinary research and engagement.
  - 2. Develop a program for targeted and competitive hiring of lead scholars who build opportunistic areas of strength to increase the research capacity of interdisciplinary programs/research collectives.
  - 3. Support interdisciplinary and/or cluster faculty hires.
  - 4. Create a central pool of funding to allow university administration the resources to invest in strategic priorities.
- C. Create an environment that fosters interdisciplinary research, innovation and economic development.

- 1. Develop mechanisms to reward and recognize interdisciplinary research.
- 2. Develop shared spaces to inspire community, collaboration, and innovation.
- 3. Develop and provide tools to make collaboration easy and efficient.
- 4. Facilitate new interdisciplinary research, innovation, and economic development activities.
- 5. Sponsor and host networking events to bring the research and innovation community together.

# GOAL 4: ENHANCE ORGANIZATIONAL EXCELLENCE BY CREATING A CULTURE OF CONSTANT IMPROVEMENT

An excellent university is pervasively excellent. The standard of excellence applies to all NC State faculty and staff and to all departments, institutes, centers, and units. But excellence is not a static target. Achieving excellence requires constant attention, self-assessment, inclusion, and the courage to change and adapt.

#### **ORIED STRATEGIES**

#### A. Improve research information systems and processes.

- 1. Streamline regulatory processes that affect research such as the Institutional Review Board, Institutional Biosafety Committee, and Institutional Animal Care.
- 2. Develop online inventory and searchable database of existing physical and research infrastructure that meets the needs of multiple researchers across campus.
- 3. Create a Research Toolbox that provides easy online access to all necessary information and support to campus researchers.
- 4. Develop comprehensive online resources to keep the research and innovation community updated on news, opportunities, requirements, procedures, and achievements.
- 5. Provide information and metrics to assess and plan research activities.
- B. Develop and implement standard approaches for administrative processes such as startups and cost-sharing.
- C. Increase collaboration and communication among research administrative units (Purchasing, Technology Transfer, SPARCS, Contracts and Grants, General Counsel). Decrease duplication of effort among same.
- D. Create a process to identify, nurture, and nominate promising candidates for prestigious faculty awards and fellowships.

# GOAL 5: ENHANCE LOCAL AND GLOBAL ENGAGEMENT THROUGH FOCUSED STRATEGIC PARTNERSHIPS

As the world has changed, NC State's reach has expanded beyond our borders and across the globe, challenging us to be locally responsive to the needs of our community and our state while globally engaged in solving the grand challenges facing our global community.

#### **ORIED STRATEGIES**

### A. Develop strategic partnerships

- 1. Develop an advisory board to enhance visibility, build partnerships, create opportunities, and forecast emerging needs.
- 2. Increase and reward participation in national and international review panels, committees, consortia, academies, advisory boards, and other organizations.
- 3. Complete a Vision Plan for Centennial Campus' next 25 years.
- 4. Develop a Centennial Campus recruitment plan that brings complementary research partners to campus.
- 5. Develop strategic partnerships with internationally esteemed institutions that complement our research expertise.

## B. Increase awareness of NC State's research, innovation, and economic development impacts.

- 1. Promote the achievements and partnerships of our research community, (e.g., notable publications, discoveries, awards, etc.).
- 2. Track and promote the economic impacts of NC State's: corporate recruitment and retention successes; and startup companies and commercialization activities, (e.g., products available to the public, jobs created, royalties generated, etc.).
- 3. Promote NC State's innovation resources.
- 4. Promote the societal and economic impacts of NC State's statewide activities, (e.g., 10% Campaign, IES, SBTDC, tourism development, etc.).
- 5. Work with the Chief Communications Officer and University Communications to ensure that NC State research, innovation and economic development is appropriately represented in University messaging.