REDE FOR GREATNESS

An Annual Strategic Plan for Research and Engagement at America’s Next Great National University

Developing aspirational goals to support the growth and stature of ECU was among my highest priorities when I became Vice Chancellor. This document summarizes our first set of annual targets designed to help propel ECU in its quest to become America’s next great national university. This inaugural Research, Economic Development and Engagement Strategic Plan, REDE for Greatness, results from hard work from our wonderful team paired with the critical input of ECU faculty, staff, and students, along with key stakeholders from across eastern North Carolina.

My promise is to increase transparency and communicate our progress; thus, we will publish an updated version of this strategic plan on an annual basis. By holding ourselves accountable for achieving annual targets and documenting cases where we fall short, we will be able to stay true to our 5-year goals. While our success is important for ECU, it is vital for improving prosperity in eastern North Carolina. We are excited to embark on this endeavor and lead ECU’s research and engagement initiatives on a path toward greatness.

Jay

REDE VISION STATEMENT

ECU will be recognized as a great national research university that is transformative for the people and economies of our region and around the world through impactful research, scholarship, innovation, and global engagement.

VISIT OUR WEBSITE:
http://www.ecu.edu/cs-acad/research/

OFFICE OF THE VICE CHANCELLOR

The Division of Research, Economic Development and Engagement is a service organization focused on advancing impactful research across the university, growing the economy throughout our region and engaging with partners around the globe to support this mission.

REDE 5-Year Divisional Goals

1. Have university research and service awards total $100M by end of 2022
2. See university research expenditures total $50M by end of 2022
3. Have no major research conduct or compliance infractions
4. Develop ECU’s planned Millennial Campus building and secure an occupancy mark greater than 90 percent
5. Raise at least $3M to support micro-business initiatives which results in at least 15 new student-lead micro-businesses per year in eastern North Carolina
6. Secure a top-3 ranking among all UNC system institutions for NSF HERD research expenditures
7. Have all ECU colleges and schools achieve their 5-year research award and expenditure targets
8. Have annual clinical trials total $10M
9. Increase undergraduate student engagement in research from 2016-17 baseline by 100 percent
10. Maintain 15 active start-up license agreements, including eight revenue-producing agreements, doubling ECU’s current license agreement totals

Vice Chancellor AY 2017-18 Goals

1. Develop and implement an annual REDE Strategic Plan to identify research priorities that leverage ECU and partner intellectual and infrastructure strengths and needs
2. Develop an external ECU Research Annual Report as a marketing tool to elevate the image of ECU and attract corporate partners, foundational donors, and individual donors
3. Implement an external advisory council
4. Create an ECU Research Foundation to more effectively serve the university’s research and economic development enterprises
5. Implement a university-wide research tracking and communications system
6. Create a formal engagement program with RTI International to advance regional and global research
7. Develop a partnership with SAS to help build ECU’s Big Data and Analytics capabilities
8. Develop data and models to publish in general and academic publications and media outlets that communicate the unique research and economic development needs of rural and coastal regions, using eastern North Carolina as the exemplar
9. Launch eight new pan-university research clusters to drive new interdisciplinary collaborations that increase the impact of ECU’s research projects
10. Work with the Dean of the Graduate School and Academic Council to establish programs that grow the number of ECU Ph.D. students and create a system to manage how ECU financially supports Ph.D. students
11. Select a private development partner for the Export Leaf Tobacco Building
12. Build-up ECU’s presence in Research Triangle Park through partnerships with companies
13. Launch a New Ventures and Innovation Office in REDE with a new executive director
ACADEMIC AFFAIRS AND HEALTH SCIENCE RESEARCH

Led by Dr. Mary Farwell, Assistant Vice Chancellor for Academic Affairs and Dr. Kathy Verbanac, Assistant Vice Chancellor for Health Science

Academic Affairs and Health Science Research oversees undergraduate, graduate, and post-doctoral research spanning the entire university and all disciplines. The branch is committed to raising ECU’s research profile while providing students with research opportunities.

5-Year Goals

1. Secure a top-3 ranking among all UNC system institutions for NSF HERD research expenditures
2. Have all ECU colleges and schools achieve their 5-year research award and expenditure targets
3. Increase annual clinical trials total to $10M
4. Grow annual Department of Defense funding total to $4M
5. Have annual NSF funding total to $8M
6. Increase annual industry and foundational funding total to $20M
7. Have a 100 percent increase in annual student internships from 2017 baseline
8. Increase undergraduate student engagement in research from 2016-17 baseline by 100 percent

STRATEGIC INITIATIVES

Led by Dr. Brandon Morrison

Strategic Initiatives will take the lead in the development of multi-institutional partnerships and business relationships that support economic development and research activities. The unit will also support the advancement and administration of ECU’s pan-university research clusters.

AY 2017-18 Goals

1. Develop a process of identifying NSF, NIH, DOE, NASA, EPA, and NEA proposal opportunities, including limited submissions
2. Communicate identified proposals to targeted research cluster co-directors, ADRs and faculty members
3. Facilitate work with cluster co-directors and ECU development to identify top immediate funding needs
4. Develop a list of top foundations to pursue funding
5. Develop a detailed list of research funding opportunities, including potential funding amount, funding timelines, and principal investigators
6. Facilitate research partnerships with North Carolina State University on biomaterials with Engineering, Dental Medicine, and Colleges of Allied Health Sciences
7. Develop a repository for faculty that includes best examples of data management plans, management plans, education plans, budget justifications, ECU facilities information sheets, and eastern North Carolina fact sheets
8. Facilitate research partnerships with RTI with pan-university research clusters
9. Launch regular on-campus undergraduate research recruitment and information sessions
10. Establish programs to track graduate and undergraduate research projects and document them in partnership with the REDE communications office
11. Ensure successful launch of the eight pan-university research clusters and their external advisory councils
12. Review progress of existing start-up packages provided to faculty and make recommendations for continued support or remedial actions

AY 2017–18 Goals

1. Secure a top-3 ranking among all UNC system institutions for NSF HERD research expenditures
2. Have all ECU colleges and schools achieve their 5-year research award and expenditure targets
3. Increase annual clinical trials total to $10M
4. Grow annual Department of Defense funding total to $4M
5. Have annual NSF funding total to $8M
6. Increase annual industry and foundational funding total to $20M
7. Have a 100 percent increase in annual student internships from 2017 baseline
8. Increase undergraduate student engagement in research from 2016-17 baseline by 100 percent

1. Develop a process of identifying NSF, NIH, DOE, NASA, EPA, and NEA proposal opportunities, including limited submissions
2. Communicate identified proposals to targeted research cluster co-directors, ADRs and faculty members
3. Facilitate work with cluster co-directors and ECU development to identify top immediate funding needs
4. Develop a list of top foundations to pursue funding
5. Develop a detailed list of research funding opportunities, including potential funding amount, funding timelines, and principal investigators
6. Facilitate research partnerships with North Carolina State University on biomaterials with Engineering, Dental Medicine, and Colleges of Allied Health Sciences
7. Develop a repository for faculty that includes best examples of data management plans, management plans, education plans, budget justifications, ECU facilities information sheets, and eastern North Carolina fact sheets
8. Facilitate research partnerships with RTI with pan-university research clusters
9. Launch regular on-campus undergraduate research recruitment and information sessions
10. Establish programs to track graduate and undergraduate research projects and document them in partnership with the REDE communications office
11. Ensure successful launch of the eight pan-university research clusters and their external advisory councils
12. Review progress of existing start-up packages provided to faculty and make recommendations for continued support or remedial actions

Dr. Maria Torres and Dr. Darrell Neuler on the fourth floor of the ECHI. Torres research deals with Estrogen and Mitochondria. (2017)
COMMUNITY ENGAGEMENT AND RESEARCH

Led by Dr. Sharon Paynter, Assistant Vice Chancellor

The Office of Community Engagement and Research connects ECU with the larger community to create new ways of understanding complex issues through partnerships which advance the scholarship of research and engagement.

5-Year Goals

1. Have a 25 percent annual increase in the number of community-engaged research projects led by students
2. Increase the number of student internships or capstone projects with nonprofits, local governments, or other community-based organizations through the Public Service Fellows Program to 50 per year by 2020
3. Grow extramural funding proposals generated by Engagement and Outreach Scholars Academy (EOSA) alumni by 100 percent
4. Have a 100 percent increase in funded research that incorporates community engaged scholarship
5. Increase the number of community partnerships by 100 percent
6. Grow the number of academic, peer-reviewed products generated by EOSA alumni by 50 percent
7. Receive the APLU Magrath Award for Community Engaged Scholarship

AY 2017–18 Goals

1. Submit a successful proposal to the Golden Leaf Foundation for micro-business partnerships with Pitt and Beaufort counties
2. Submit a successful proposal to the Golden Leaf Foundation for micro-business partnerships with Hyde County and the state of North Carolina
3. Develop partnerships with Duplin County and Smithfield Foods for micro-business and community engagement renewable biogas projects
4. Develop a proposal for micro-business and community engagement in Bethel, N.C.
5. Launch inaugural faculty research training and bus tours of eastern North Carolina

NEW VENTURES AND INNOVATION

Led by TBD, Executive Director

New Ventures and Innovation oversees pan-university efforts to develop and grow student and faculty micro-businesses and discoveries which drive economic growth in eastern North Carolina. The unit includes the licensing and commercialization office.

5-Year Goals

1. Raise at least $3M to support micro-business initiatives
2. Maintain 15 active start-up license agreements, including eight revenue-producing agreements, doubling ECU’s current license agreement totals
3. Create 15 new student-lead micro-businesses per year in eastern North Carolina that have gone through the ECU Venture Fund and Entrepreneurship program
4. Develop 10 new industry-university Advisory Councils with a paying membership to support emerging research initiatives
5. Create an external advisory council
6. Develop an industry consortium in Research Triangle Park
7. Provide faculty, students and external partners access to state-of-the-art bioprocess and research greenhouse facilities by:
   I. Procuring property for a research greenhouse, identifying and employing a design firm, assembling a design team, and completing a conceptual plan
   II. Completing designs for an extraction facility in the new Life Sciences Building

AY 2017–18 Goals

1. Recruit an Executive Director for New Ventures and Innovation
2. Establish and implement the U.S. Economic Development Administration i6 Challenge program and generate three multi-disciplinary team projects
3. Execute 2–3 start-up licenses
4. Support and incubate 20 new entrepreneurs, ventures and businesses at Greenville Seed @ ECU
5. Serve and support 304 new and existing businesses within the 12-county ECU Small Business and Technology Development Center region through general business counseling and technical assistance, international business development, and technology commercialization, with an expected impact of creating and retaining 200 jobs; $7M in capital formation; and 5,068 counseling hours delivered by staff and student team projects
RESEARCH POLICY AND INTEGRITY

Led by Dr. Michael Van Scott, Senior Associate Vice Chancellor

The Office of Research Policy and Integrity includes the units of Sponsored Programs, Grants and Contracts, and Research Integrity and Compliance. The office also manages the Institutional Animal Care and Use Committee (IACUCU) and the Institutional Review Board (IRB).

The Research Policy and Integrity branch of REDE is responsible for the research infrastructure across ECU’s campus including research facilities, proposal development and submission (Office of Sponsored Programs), post-award financial accounting and auditing (Office of Grants and Contracts), and research compliance (Office of Research Integrity and Compliance), including human subjects’ protection, protected health information related to research, and animal welfare. The branch works closely with the unit and Research Administration Hub personnel to ensure highly skilled and competent pre-award and post-award support for all faculty and staff at this institution.

The branch’s overarching goal is to provide the administrative infrastructure capable of supporting $100M in sponsored programs with no major infractions and at a minimal increase in cost by increasing effectiveness and efficiency, aligning activities with appropriate revenue streams, and leverage existing resources.

5-Year Goals

1. Have no major research conduct or research compliance infractions
2. Integrate research administration infrastructure across ECU, connecting departmental, college, and central offices into a coordinated, effective, and efficient service-oriented administrative network
3. Implement an electronic research administration platform with seamless integration of proposal development and submission, award acceptance and management, financial reporting, and research compliance
4. Develop a competence-based research administration career ladder supported by a model institutional professional training program
5. Establish a comprehensive portfolio of research reports to track investments, productivity, potential liabilities, and system performance
6. Design and implement a research administration plan under a unified Vidant-ECU practice plan
7. Establish an Office of Export Controls
8. Streamline connectivity between the Office of Research Integrity and Compliance and the Office of Institutional Integrity and Regulatory Affairs

Office of the Senior Associate Vice Chancellor Goals for AY 2017–18 Goals

1. Align the REDE Strategic Plan with the UNC BOG Strategic Plan
2. Maximize faculty access to pre-award and post-award support by fully implementing Research Administration Hubs by:
   I. Populating the West AA Hub through aggregation of resources from the component colleges and REDE
   II. Establishing a Hub for the School of Dental Medicine, Center for Health Disparities, and future School of Public/Population Health
   III. Developing a plan for a Hub that serves the Brody School of Medicine, the East Carolina Diabetes and Obesity Institute (ECDOI), and the North Carolina Agromedicine Institute
   IV. Redirecting resources and capacity of the central offices to provide training and special projects support for Hubs
   V. Developing uniform processes and procedures across the Hubs and central offices
3. Increase access to short-term discretionary funding for research initiatives by implementing transparent accounting of unit F&A accounts that enables $5M in residual funds to be aggregated into a central account from which temporary investments in projects can be made
4. Ensure continuity in leadership within the central administrative offices by:
   I. Hiring an Export Control Officer that can establish a comprehensive export control program
   II. Hiring a Director of Grants and Contracts that can build a comprehensive post-award research administration infrastructure that spans the institution
   III. Working with the Director of Research Integrity and Compliance to develop a leadership plan for the Office of Research Compliance
5. Reduce the effort for faculty and staff to comply with federal guidelines for human subjects and animal welfare by successfully upgrading the electronic IRB platform, ePirate, and implementing an electronic platform for animal welfare that automates processes and reporting and fully integrates information across the institution
6. Increase the research productivity of the major research institutes, including the Coastal Studies Institute (CSI) and the ECDOI, by working with Academic Council, directors, deans, department chairs, and faculty to redefine allocation of resources and accountability for the value-added to the institution
7. Transition seamlessly to a unified practice plan with no loss of research expenditures by:
   I. Identifying what critical activities are risk
   II. Working through the transition team with counterparts to define processes supporting critical activities under the current and unified practice plan
   III. Reorganizing support offices as necessary to perform the required processes

Student, Ellen Velte, washes samples in Dr. Christopher Geyers lab. (2017)
Sponsored Programs Goals for AY 2017–18

1. Reduce faculty administrative burden on sponsored projects by ensuring provision of quality proposal development and pre-award services at the local Hub level. This includes:
   I. Facilitating realignment of proposal development administrative responsibilities to Hub pre-award staff
   II. Providing subject matter expertise and mentoring to Hub staff to ensure quality pre-award services
   III. Implementing a research administrator training program for Hub staff, with initial focus on pre-award basics and ECU pre-award standard operating procedures, tools, and forms

2. Increase institutional capacity to efficiently prepare and submit proposals and track award actions and contract negotiations

3. Identify, adopt, and configure a commercial, state-of-the-art, comprehensive electronic research administration (eRA) system that supports integration with Banner HR, proposal and multi-period budget development, electronic routing and approval, system-to-system proposal submission, award receipt and award modifications, contract negotiation management, system integration to populate Banner HR with award data, and reporting on proposal and award activity

4. Increase institutional capacity and reduce the turnaround time to negotiate and execute complex industry and federal contracts and sub-awards by:
   I. Converting the existing SHRA grants officer position to an EHRA contracts officer position
   II. Identifying and hiring a candidate with appropriate knowledge and experience to develop, negotiate, and manage complex contracts and sub-awards

Grants and Contracts Goals for AY 2017–18 Goals

1. Undertake a work flow analysis and make appropriate modifications to assure highest productivity and responsiveness to researchers

2. Implement an automated billing process (Banner Billing) and accounts receivable process to replace the manual billing process that currently exists

3. Work with ECU’s Office of Sponsored Programs to develop and implement a comprehensive research administration training program for Hub and departmental employees

4. Conduct an internal review of processes and procedures within the Office of Grants and Contracts to identify areas of improvement

5. Identify key processes and procedures across campus that impact research administration and implement streamlined procedures and processes

6. Meet or exceed UNC General Administration Key Performance Indicators (KPIs) which are reported monthly to the UNC General Administration and the Chancellor

7. Identify areas of risk related to research administration within the Office of Grants and Contracts and across the university, ensuring that internal controls are implemented or modified to mitigate risk

8. Implement a new data system to replace RAMSES while developing processes and procedures over the first 6-12 months of project implementation

9. Complete the planning process and implement the initial first phase of an institutional training program based on clearly identified competencies and desired outcomes, while planning for continuous improvement and delivery

10. Develop and implement a formal risk assessment and oversight process that identifies areas of non-compliance risk and provides actionable data for risk mitigation while adjusting or modifying KPIs to reflect identified risks as needed

11. Ensure that KPIs are tracked and reported to monthly UNC General Administration

12. Perform periodic samples of potential areas with identified risk to determine if risk levels are acceptable

Research Integrity and Compliance Goals for AY 2017–18 Goals

1. Review all processes and forms, including upgrading the IACUC application and review to a digital platform, to identify problem areas and streamline the steps investigators are required to complete with the purpose of:
   I. Meeting new regulatory requirements
   II. Enhancing the review process
   III. Streamlining the time frame for achieving approval
   IV. Reducing the frustrations of faculty to increase their productivity

2. Develop a streamlined process for HIPAA and other ancillary reviews in preparation for the Project Unity before July 2018

3. Conduct a required self-study in preparation for accreditation of ECU’s Human Research Protections Program

4. Achieve accreditation for ECU’s Human Research Protections Program to ensure ECU is valued by other institutions and funding entities as a partner in multi-centered clinical trials

5. Bring national attention to ECU’s premier Human Research Protections Program through a community forum conference held in conjunction with the Office of Human Research Protections, North Carolina Central University, North Carolina State University, and other appropriate entities

6. Revamp relevant training requirements to develop a portfolio of training that reduces time and frustration while increasing retention

7. Assist the Clinical Trials Office in the development and implementation of an electronic system that allows for expansion and growth of clinical research

8. Prepare for the impact of:
   I. The VECU governing board on current processes
   II. Anticipated growth in research and specifically clinical trials
   III. An increase in our activities in research endeavors to better assist faculty without increasing the need for additional resources

9. Restructure the responsibilities of the office to separate non-research activities, such as export control and use of unmanned aircraft systems, from research activities, while transitioning those non-research activities to non-research funding sources

10. Hire a director and administrative assistant to focus on compliance in non-research activity areas

Terence Ryan works with muscle regeneration. (2017)
Millennial Properties and Regional Industrial Growth

Led by Dr. Ted Morris, Associate Vice Chancellor

The mission of the branch of Millennial Properties and Industrial Growth is to advance the university’s considerable research, innovation, and programmatic resources with external partnerships through development of the East Carolina Research and Innovation Campus (Millennial Campus) and value-adding partnerships.

5-Year Goals

1. Build a fully developed, programmed, and operational Advanced Manufacturing and Innovation Workforce Consortium serving targeted industry clusters (including pharmaceuticals, packaging, medical devices, and defense), including 30 industrial members
2. Build a fully developed, programmed, and operational Innovation and Economic Development Hub within the Export Leaf Tobacco Building with a greater than 90 percent occupancy rate
3. Develop a business plan for a contract manufacturing facility on the Millennial Campus
4. Build a fully developed, programmed, and operational research greenhouse as part of the ECRIC in partnership with Academic Affairs
5. Develop fully integrated strategic and operational plans for the ECRIC and Greenville Center City Arts and Innovation District
6. Develop an aligned agreement among ECU, Vidant, Pitt County and the City of Greenville regarding economic development priorities for the Greenville Metropolitan Statistical Area and county
7. Design and utilize an economic development brand for our community using an umbrella of local economic development entities
8. Build a fully developed and jointly occupied ECU-Industry Biosciences lab in the 4th floor of the School of Dental Medicine

Touring the Haynie Building, where renovations will begin for ECU’s Research and Innovation Campus. Ted Morris, left, ECU associate vice chancellor for innovation and economic development.

ECU has completed planning for a new Life Sciences and Biotechnology Building that will attract industry partners and serve as a rural-based research facility for new discoveries.

FY 2017-18 Goals

1. Identify and engage with at least five prospective corporate tenants for existing Millennial Campus facilities in collaboration with economic development partners
2. Catalogue all laboratory, maker, and innovation spaces throughout campus
3. Create a marketing plan and materials for Millennial Campus and each specific facility including Health Sciences and CSI
4. Create an ECU development and implementation plan for the Export Leaf Tobacco Building
5. Seek a signed memorandum of understanding and create an operational plan for an Advanced Manufacturing Leadership Capability Center with paying industry partners
6. Develop a Big Data and Analytics Collision Space at Laupus Library
7. Establish and implement the U.S. Economic Development Administration i6 Challenge program and generate three multi-disciplinary team projects
8. Extend the Millennial Campus designation to fully include the LS & BB, research greenhouse and CSI
9. Develop an implementation plan for marketing, occupying and utilizing the 4th floors of the SODM and ECHI, as well as other ECRIC spaces
10. Develop and deliver five customized, place-based economic development training workshops in partnership with local economic development officials and volunteers
11. Finalize development of the North Carolina Economic Development Academy in partnership with the North Carolina Economic Developers Association, as well as alignment with the University Economic Development Association and International Economic Development Council
12. Design and plan the Advanced Manufacturing and Innovation Workforce Consortium in conjunction with ECU’s colleges of Engineering and Technology, Business, and Fine Arts & Communication
COMMUNICATIONS
Led by Matthew Smith

The communications unit is responsible for developing and maintaining a consistent branding for research, economic development, and engagement activities. The unit will support the offices within REDE with their external communication and marketing needs.

AY 2017–18 Goals
1. Launch REDE's new web portal
2. Launch REDE's web-based, bi-monthly external newsletter
3. Develop a comprehensive mailing list for external communications to include academics, industry, government, alumni, and NGOs
4. Launch REDE's internal newsletter
5. Create a printed ECU Research Annual Report
6. Create social media channels to distribute research news and events to ECU students, faculty and community members
7. Develop a database featuring ECU research facilities, institutes and centers fact sheets
8. Develop research materials to use for the eight pan-university research clusters
9. Create marketing materials to support research and engagement fundraising
10. Support university-wide communications to promote ECU research and engagement activities

ADMINISTRATIVE SERVICES
Led by TBD, Executive Director

The Office of Administrative Services coordinates all financial and human resource activity within REDE and its departmental units. This includes financial monitoring and reporting; financial projections and resource allocation; Human Resource management including projecting needs, position creation, and maintenance; position advertisements and applicant screening; on-boarding and training; and monitoring the completion of employee evaluations.

AY 2017–18 Goals
1. Develop policies and procedures manuals for the Vice Chancellor’s Office and other administrative staff in the division
2. Evaluate duties and resources in all of the departmental units and reallocate resources and reassign duties to ensure efficiency of operations
3. Evaluate space and equipment needs for new and existing employees and allocate accordingly
4. Evaluate current Vice Chancellor’s Office procedures and implement changes to ensure financial and work flow efficiency
5. Meet with Assistant Vice Chancellors to determine their administrative needs and write the Administrative Support Associate job description accordingly
6. Develop regular training sessions on university processes for new and current administrative employees in the division