In 2013, the College of Veterinary Medicine produced a 3-year plan aligned with the NC State Strategic Plan – Pathway to the Future.

As 2016 draws to a close, we reviewed our progress toward the objectives identified in the 2013-2016 Strategic Plan as we work towards an updated plan for the next four years. Our goal is to build on experience so we can produce a refreshed vision for the future.

What follows is a report on the performance of the 2013-6 plan. This report should be read in conjunction with our key metrics report measuring progress toward the plan’s three major objectives:

1. Sustain a strong College community and culture of excellence.
2. Deliver an outstanding veterinary education.
3. Achieve transformational growth in our research accomplishments.

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Dean, College of Veterinary Medicine
October, 2016
OBJECTIVE ONE: SUSTAIN A STRONG COLLEGE COMMUNITY AND CULTURE OF EXCELLENCE

The College of Veterinary Medicine (CVM) has continued to grow and evolve to meet the changing needs of North Carolina. With many new buildings, and growing faculty, staff, and student numbers, we are no longer a small organization. We need a clear-shared vision and understanding of the College’s mission. To achieve this goal, efforts were directed to improve communications and create opportunities for our community to come together to share information and discuss important issues. New enrollment funding created unique opportunities to recruit new and talented interdisciplinary faculty and staff members. Equally important was the CVM’s commitment to achieve a high rate of faculty and staff retention and promotion through an emphasis on mentoring and professional development.

Specific outcomes for the College Culture and Community Goal were:

1. **Alignment around purpose and values.**
   Much was achieved in terms of building faculty and staff numbers, with 35% of the faculty in 2016 hired during the past 5 years. New mentorship programs were created focused around research. We increased investment in human resources, business and finance, and research support positions to sustain our growing programs. Diversity has increased in the student body, but progress has been limited elsewhere. A new Diversity Strategic Plan was created, significant increases in DVM class diversity were accomplished, and we increased investment in training and awareness programs. Community outreach has increased through programs such as Open House and the Student Speaker’s Bureau.

2. **Open communication and participatory shared decision making.**
   The college created new opportunities for communication, and worked to energize existing formats. Quarterly Faculty meetings recorded much stronger attendance. Town Hall meetings were introduced for Faculty, Staff, Students, and the Hospital, each on a semi-annual basis. Our website underwent a major revision with a focus on communication about our people and their roles and interests, we completed a branding exercise, and we renamed our hospital. New and evolving print and electronic communication tools were developed and deployed. We have conducted college leadership performance surveys on a regular basis.

3. **Reflection, celebration and renewal.**
   Planned events and celebrations, both formal and informal, were held to foster a strong sense of community. We have emphasized inclusive activities, engaging students, staff and faculty in Friday night socials, the Fall Welcome Back party, the summer picnic, and staff and faculty at the Winter Holiday Event. We have expanded social outreach events for donors and supporters, and CE activities. We have invested in remodeling social spaces and amenities, building a new canteen kitchen, adding exercise facilities and adding break areas when possible in re-modelling.
Key metrics for College Community and Culture of Excellence

Number and type of faculty staff employed at the College
Total employment at the CVM has increased from an average of 504 in 2013 to 565 in 2016.

Hospital Accessions
The total has increased from 25,839 in FY 2012 to 33,585 in FY 2016, an increase of almost 30%.

Hospital Revenues
Total revenues have increased from $23,295,987 in 2012 to $29,921,492 in 2016, an increase of 25%.

Giving and Development performance
Total fundraising results have increased from $8,906,393 in 2012 to $14,034,544 in 2016, an increase of 58%. In 2015, the R.B. Terry Charitable Foundation made a $16M pledge to the college to benefit scholarship, research and endowed professorships.

CE and Outreach performance
The total number of programs and outreach events has increased from 31 in 2012 to 50 in 2016, an increase of 61.2%.

Social Media Metrics
Social Media metrics as of 2016 were as follows:
- Facebook: 16,679 followers
- Twitter: 10,300 followers
- Instagram: 2,702 followers
- LinkedIn: 750 followers
OBJECTIVE TWO: DELIVER AN OUTSTANDING VETERINARY EDUCATION

The DVM curriculum has undergone significant evolution, and the new curriculum will be fully implemented at the end of the 2016-2017 academic year. This was a significant factor in our successful AVMA-COE re-accreditation in 2014. We have made progress towards our goals of better student training for postgraduate success, greater engagement in active learning, and increased competitiveness of our students in the job market.

Specific outcomes for the Veterinary Education Goal were:

1. **Our DVM students will have a high quality outcome-oriented education.**
   We have achieved significant increases in the number of faculty engaged in DVM education. Our recruiting also targeted new skill sets to support our evolving curriculum, including communication, educational science, outcomes assessment, and business management. We have achieved changes in our curriculum toward our goals of introducing:

   - Increased active learning and problem-solving courses in each pre-clinical year
   - Communication and professional skills courses in each pre-clinical year
   - Comprehensive revision of the business and professional skills course
   - Second year General Medicine Course and third year elective courses

   We also recognize that curriculum change must be an ongoing and evolving process and there is room for improvement in the implementation of our goals. For example, we must produce a comprehensive and functional curricular map to facilitate future curricular change and improvement.

   We have invested significantly in course budgets and support for new learning formats, and in primary care teaching programs, particularly the Health and Wellness Center and the equine primary care program. We have invested heavily in teaching facilities, building, upgrading and expanding the Health and Wellness Center, communications laboratory, simulation laboratory, library, lecture halls and small group teaching spaces, and the anatomy laboratory. Our clinical caseload has grown substantially, increasing access and learning opportunities for our students. We initiated a revitalized Global Health Education Program, hiring a new Director in 2015.

2. **We will make a high value education accessible to all students.**
   We successfully managed an increase in class size while increasing the percentage of in-state students to 80% of the class. We increased communication efforts directed to future DVM program applicants. Fundraising success doubled the amount of scholarship funding available to our DVM students. We are expanding our admissions committee in size and increased external representation. We doubled the number of “Under Represented in Veterinary Medicine” students in our class. We increased our engagement with undergraduate students through summer research programs, and we have explored...
ways to increase recruitment of pre-health students. We have explored strategies to develop “3+3” or “3+4” pathways to accelerated graduation.

3. **Our DVM students will achieve success on graduation.**
   We hired a Veterinary Career Service and Professional Development Director to assist our students in finding jobs and to ensure our students are equipped with the knowledge, skills, tools, and resources to look for jobs effectively. We hired a faculty position with an MBA qualification and expertise in career development. Together with an improved economy, these factors have increased the number of job offers our students are receiving, and their debt-to-income ratio is 75% of the national average.

**Key metrics for delivering an outstanding veterinary education**

**DVM Applicant Pool Numbers**
Applications have increased from 662 to 892 over the past five years, an increase of 34.7%. The percentage of students from groups that are Underrepresented in Veterinary Medicine (URVM) has increased from 9% the incoming class in 2016 to 21% in 2020.

**Number of DVM Degrees Awarded**
The number of degrees awarded each year has been consistently strong -- 76 in 2012 (95% of the starting class size); 72 in 2013 (90% of the starting class size); 81 in 2014 (101.3% of the starting class size); 79 in 2015 (98% of the starting class size); and 98 in 2016 (98% of the starting class size).

**Alumni Satisfaction**
Alumni are surveyed 12 to 18 months after graduation to determine their overall satisfaction with the DVM program. Those expressing approval over the past five surveys have been 97.2%, 93.9%, 96.3%, 97% and 95%.

**DVM Scholarships Awarded**
The amount of scholarship money awarded to CVM students has increased by 141.1% over the past five years.

**Financial Performance of Our DVM Program**
The average educational debt amount for an NC State student graduating with a DVM degree is currently approximately 37% below the national average.
OBJECTIVE THREE: ACHIEVE TRANSFORMATIONAL GROWTH IN OUR RESEARCH
ACCOMPLISHMENTS

The College has made significant strategic investments in our research and graduate programs. In addition, we made crucial investments in our research facilities and infrastructure, with a modern renovation and expansion of our research laboratory spaces that promotes collaboration and interdisciplinary research. Finally, the College has actively fostered leadership development in our research faculty by instituting structured mentorship programs for our faculty and graduate students.

Specific outcomes of our Research Growth Goal are:

1. **Exploit our unique position at the junction of multiple converging initiatives in translational science.**
   We significantly increased partnerships at the College level. We developed a much-enhanced relationship with the College of Agriculture and Life Sciences, co-funding collaborative research projects and making joint presentations and proposals to stakeholders and industry. We have similarly developed formal relationships with partners like Quintiles, the College of Sciences, the Duke Cancer Institute and the Duke Global Health Institute, and with the UNC-Chapel Hill Gillings School of Global Public Health. The College is an important partner in NC State’s Center for Human Health and the Environment, and the Biotechnology Program. The Center for Comparative Medicine and Translational Research was converted to the new NC State Comparative Medicine Institute. The new institute has a significantly increased membership, and increased central financial support while still retaining a major footprint in the College. This initiative promises to increase biomedical research and collaboration opportunities across the campus and the region.

2. **Maximize the impact of our opportunity to invest in faculty and resources.**
   We have invested significantly in new research-focused faculty positions across the college, hired primarily through the Chancellor’s Faculty Excellence Program and the CVM Cluster Hiring Initiative. We have increased investment in faculty start-up funding and internal competitive pilot project funding, and we have extensively remodeled the majority of the college research space. The new Biomedical Partnership Center will greatly expand research space and opportunities for new collaborations through co-location with NC State and private industry research partners. A new $3 million research endowment has been established.

3. **Invest in our innovative graduate training program, giving it a leadership position.**
   We have consolidated graduate degree training under the multidisciplinary Comparative Biomedical Sciences program. We are expanding PhD trainee numbers, and we have increased undergraduate research training opportunities.

4. **Maintain critical investment in the core scientific strengths of our research platform.**
   Our hiring processes have been significantly driven by strategic research investment decisions, and these have evolved in response to new opportunities in biomedical science. For example, we have
hired several computational biologists and we are building a core GMP regenerative medicine facility. We have also invested in our traditional areas of strength, such as gastrointestinal biology and infectious disease, and we are rebuilding our strength in food animal production science.

**Key Metrics for Achieving Transformational Growth**

**Number of Research Publications**
The number of research publications has increased each of the past five years, growing from 217 in 2011 to 280 in 2015.

**Number and type of Research Proposals submitted**
The number of research proposals submitted over the past five years has increased from 170 in 2012 to 228 in 2016.

**Successful funding of our Research Grants and Contracts**
Research grant funding has increased from a low of $8.8 million in 2012 to $10.3 million in 2016.

**Production and efficiency of our Graduate Programs**
Total enrollment and graduation of Doctoral and Masters students has remained stable over the last five years, with 76 graduate students being enrolled and 13 students graduating in the 2015-16 academic year.

**Employment outcomes of our Graduate Programs**
Employment outcomes of our Graduate Programs is measured via survey. The number of survey responses is limited; however, one-and-five-year analysis of the responses reveals employment trends towards academia, industry, federal and advanced training programs.
SUMMARY

The three-year period of this strategic plan was characterized by substantial changes, including an expanded DVM class, an evolution of our DVM curriculum, greatly increased faculty and staff hiring, and extensive facility expansion and remodeling. There was perhaps no greater change than the opening of the Randall B. Terry, Jr. Companion Animal Veterinary Medical Center, which was largely responsible for a 30% increase in hospital caseload during this period. Often this growth has increased workload for many of our clinicians, educators and researchers, and we must find strategies to govern this if we are to have sustainable success.

These changes brought opportunity, but with new opportunity comes the possibility of disruption, as well. Our strategic plan was designed to manage this process, and many successes were recorded. We also learned through the experience. Our vision for the future, developed in the 2016-20 strategic plan, includes an increased focus on engaging the whole College community in planning and participation in everything we do.

Both the College and the environment have changed, and as we plan for the future we need to use new approaches. For example, our curriculum has been improved by the introduction of new subject materials and learning strategies, but for the next stages in its growth we recognize that we need to provide better educator training and technological resources to manage teaching. We also need to carefully examine the balance of materials in our curriculum, and ensure that everything we teach is contributing effectively to producing the best veterinarians in the world.

We have made substantial investments in research, and recruited exciting new talent, resulting in several new initiatives. While we have seen substantial growth in activity, our performance as measured by external funding has grown modestly. What we are seeing appears to be a product of some established laboratories winding down, balanced by new faculty finding their feet and achieving their first grants. Now is the time to focus on faculty development and providing the resources so that our current researchers can achieve their full potential.

The NC State College of Veterinary Medicine is increasingly a global leader in our discipline. We are fortunate to have the resources and opportunities we do. We need to learn from the success and challenges we encountered while implementing the 2013-6 strategic plan and put this knowledge to work for the future.