



COLLEGE OF
VETERINARY MEDICINE

Strategic Plan

College of Veterinary Medicine

The Ohio State University

2011-2016

(2012 revision)



Strategic Planning at The Ohio State University

Supporting Faculty, Students, and the Structures that Foster their Success

Ohio State's future will be defined and driven by an unwavering commitment to our faculty, students and the structures—physical, administrative, curricular, and financial—that will foster their success. Such a commitment is founded in the overarching principles of the institution's vision, mission, values, and core goals.

VISION

The Ohio State University is the model 21st-century public, land grant, research, urban, community engaged institution.

MISSION

The University is dedicated to:

- Creating and discovering knowledge to improve the well-being of our state, regional, national and global communities;
- Educating students through a comprehensive array of distinguished academic programs;
- Preparing a diverse student body to be leaders and engaged citizens;
- Fostering a culture of engagement and service.

We understand that diversity and inclusion are essential components of our excellence.

VALUES

Shared values are the commitments made by the University community in how we conduct our work. At The Ohio State University we value:

- Excellence
- Diversity in people and of ideas
- Inclusion
- Access and affordability
- Innovation
- Collaboration and multidisciplinary endeavor
- Integrity, transparency, and trust

CORE GOALS

Four institution-wide goals are fundamental to the University's vision, mission and future success:

Teaching and Learning: to provide an unsurpassed, student-centered learning experience led by engaged world-class faculty and staff, and enhanced by a globally diverse student body.

Research and Innovation: to create distinctive and internationally recognized contributions to the advancement of fundamental knowledge and scholarship and toward solutions of the world's most pressing problems.

Outreach and Engagement: to advance a culture of engagement and collaboration involving the exchange of knowledge and resources in a context of reciprocity with the citizens and institutions of Ohio, the nation, and the world.

Resource Stewardship: to be an affordable public university, recognized for financial sustainability, unparalleled management of human and physical resources, and operational efficiency and effectiveness.



Table of Contents

Letter from the Dean	ii
College Overview.....	1
Strategic Scan	2
Strategic Focus Areas	5
Succeeding in Our Focus areas	
Teaching and Learning.....	8
Research and Innovation.....	10
Outreach and Engagement.....	13
Resource Stewardship.....	15
Tracking Performance (Excel Scorecards)	17

Letter from the Dean



Our accomplishments over the last 126 years have earned the College of Veterinary Medicine an exceptional national and international reputation in the profession. We are proud of our distinguished history and traditions, but today our energy and efforts must be focused on creating a successful and very different future. The challenges and opportunities facing the veterinary profession today will require transformational leadership and action. The mission, values, vision, and strategic plan of the College must be aligned with those of the University and be responsive to the changing needs of society. Like the University, our College's strong foundation grew from its roots as a land grant institution where societal problems are identified and strategies are devised to solve them. Although we are steadfast in our dedication to that tradition, the societies of the world today are at a tipping point in terms of the complex issues that confront them and our ability to address them. Our contemporary land grant philosophy is more global, calls for better partnerships, and is more socially embedded.

As a College and profession, we must:

- Renew our social contract to meet the changing needs and demands of those we serve
- Marshal our resources to solve major societal concerns that represent the next frontiers in teaching and learning, research and innovation, and outreach and engagement
- Develop new surveillance systems to identify emerging pathogens that threaten public health
- Create sustainable global food production systems to feed seven billion people
- Adopt vigilant conservation tactics to curtail an unprecedented loss of biodiversity arising from the extinction of animal species
- Devise alternative strategies to allow research and innovation and medical advances to proceed in an increasingly difficult economic environment
- Redesign clinical care delivery systems to meet the expectations of animal owners and producers for more sophisticated services.

By focusing on these critical themes, we will insure the relevance of our mission to benefit society by improving animal and public health through teaching and learning, research and innovation, and outreach and engagement.

As a College, we must transform and enlarge our sphere of influence and engagement to truly achieve a *"One Health"* approach to protect human and animal health. In doing this, Ohio State is uniquely situated by having Colleges of Medicine, Veterinary Medicine, Pharmacy, Public Health, Dentistry, Nursing, and Optometry on the same campus. Thus, we are prominently positioned to expand our programs in comparative medicine in ways not available at other veterinary colleges.

In today's world, our graduates must be knowledgeable about diseases not currently reported in the United States, but with the potential to emerge here in the future. This is especially important because the trans-global movement of people and animals interconnects the world and brings new challenges in the transmission of disease pathogens. The development of international programs will allow us to expand the horizons of our own students while simultaneously contributing to the

education of foreign veterinarians about sustainable food production practices and prevention of infectious disease. The scope, scale and influence of our College are expanding rapidly, and our programs and strategies must reflect this reality.

Ranking fifth among veterinary schools in the United States according to the 2011 *U.S. News and World Report*, our comprehensive patient services cover all clinical specialty areas. We have exceptional faculty, but need more. We must attract promising students and faculty by establishing a culture of collegiality, communication, and realistic expectations for life-work balance. We continue to have a strong applicant pool of highly qualified students, but socioeconomic and cultural factors lead minority college students to seek other careers. The College will devise strategies to recruit more minority students into the profession.

Our curriculum provides a strong, balanced and diverse core educational experience. Recent changes in the fourth year clinical experience will provide more flexibility for students to tailor their education to diverse career goals. The College has also begun a program to assess the clinical competency of its professional students based on measurable outcomes. We are reconfiguring our program to improve non-technical skills such as communications and business management, and promote awareness of non-traditional careers such as regulatory medicine, biomedical research, public health, and wildlife conservation to increase the marketability of our graduates.

The College has several highly successful research programs. For example, its “Public Health Preparedness for Infectious Diseases” project weaves together programs in six colleges (Veterinary Medicine, Medicine, Public Health, Arts and Sciences, Food, Agricultural and Environmental Sciences, and Pharmacy). In addition, the College’s signature programs promote multidisciplinary and interdepartmental collaboration in research beneficial to animal and human health. We will encourage new signature programs in promising areas such as animal welfare, sports medicine, and ecosystem health. In addition, our leadership group will help faculty commercialize relevant discoveries and will continue to strengthen our outreach programs for shelter medicine and delivery of in-home veterinary care to underserved urban neighborhoods in Columbus. The human-animal interface is intensifying and expanding, and so must our understanding of this phenomenon, as animals more and more impact our lives.

As we developed our strategic plan and aligned it with the University’s goals of teaching and learning, research and innovation, and outreach and engagement, we started with the end in mind. We asked ourselves, “What features will a world-class veterinary college have in 2016?” We concluded that, to be successful, such a school would have:

- Teaching and learning programs that promote student success by producing marketable, society-ready graduates well-equipped to achieve professional and personal satisfaction in their careers
- Translational research and innovation programs that promote animal and human health as well as safe and efficient food production
- Modern comprehensive facilities that allow nationally and internationally renowned faculty to conduct biomedical research and provide state-of-the-art clinical services for animal patients and clients

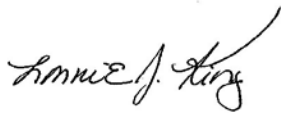
- Local and global outreach and engagement activities that provide service teaching and learning opportunities for students and promote a healthier, safer world
- Mutually-rewarding extramural strategic partnerships that expand services as well as provide diverse educational experiences for students and research opportunities for faculty
- Fruitful interdisciplinary collaborations within the University, especially with agriculture and the other health professions
- A culture of collegiality and effective communication, one that respects differences, life-work balance and quality of life for faculty, staff and students
- Engaged, innovative leadership responsive to the needs of our constituents and external stakeholders

A few academic institutions with the vision, capacity, and commitment to meet the changing needs of today's world will meet the profound challenges on the horizon for veterinary medicine. This strategic plan is designed to guide the transformation of our College and position it to continue as a leader in the veterinary profession in a constantly changing environment.

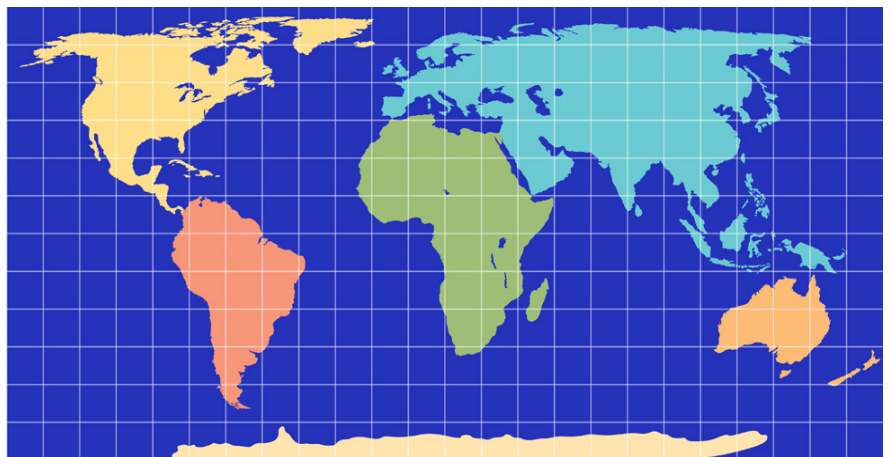
In closing, our strategic planning process included results from Focus Forward Weekends that brought together key industry stakeholders, open faculty and staff forums, faculty, staff and student surveys, input from the College's Strategic Leadership Team, culture shaping initiatives, a College research retreat, a College visioning and values retreat, an economic analysis of the impact of the College on the citizens of Ohio, and engagement of alumni and private practitioners.

Strategic planning in the College represents an ongoing process of evaluation, assessment, change, and adaptation. Our conversations continue and our thinking expands as we contemplate substantial shifts in programs to achieve greater impact on society. With this strategic plan and our goals before us, the College will better connect with the University and world around us as we shine a brighter light across campus, Ohio, and the entire globe. We envision a bold future built on our vision of *"creating a healthy and sustainable world for animals and people."*

Sincerely,



Lonnie J. King, DVM, MS, MPA, ACVPM
Dean
Ruth Stanton Chair in Veterinary Medicine
Professor, Veterinary Preventive Medicine



College Overview

The Ohio State University College of Veterinary Medicine is ranked fifth in the nation among veterinary schools according to the 2011 *U.S. News and World Report's* "Best Graduate Schools." The College includes more than 1,000 faculty, staff and students in the Departments of Veterinary Biosciences, Veterinary Clinical Sciences, and Veterinary Preventive Medicine.

The Veterinary Medical Center (VMC) is a comprehensive referral center and is among the largest facilities of its kind in the world, with more than 35,000 large and small animal patients each year. In addition, we operate a nationally recognized large animal ambulatory practice and teaching unit in Marysville, Ohio and a Food Animal Health Research Program in Wooster at the Ohio Agricultural Research and Development Center (OARDC).

The College provides:

- Comprehensive veterinary medical education to nearly 580 students seeking to earn the Doctor of Veterinary Medicine degree (140 to 160 per class for a four-year degree program)
- Many one-year internships and three-year clinical residency programs in specialty medical fields administered through the VMC
- A Veterinary Public Health master's degree (a joint program with the College of Public Health) for approximately 30 students
- A program for more than 120 graduate students who conduct research in the College

Outreach and engagement in the College include programs with the Ohio Department of Rehabilitation and Corrections, Columbus Zoo and Aquarium, Cleveland Metroparks Zoo, Capital Area Humane Society, Ohio Racing Commission, American Kennel Club, Ohio Standardbred Association, and Ohio Cattlemen.



Strategic Vision of the College of Veterinary Medicine

Education - Discovery - Service
Creating a healthy and sustainable world for animals and people
Healthy animals – Healthy people

Strategic Mission of the College of Veterinary Medicine

The mission of the College of Veterinary Medicine is to benefit society by improving animal and public health through education, research and innovation, service, and outreach. This mission includes the diagnosis, treatment, prevention, and understanding of animal diseases; the conservation of livestock resources; the promotion of public health; and, the advancement of medical knowledge through professional and graduate education, research, and service in the broad discipline of veterinary medicine. The College is an important resource for the biomedical and agricultural communities, contributing to the development of new knowledge and the training of future scientists. In keeping with the University's land-grant mission, the College is committed to disseminating new knowledge to the public, providing advanced and continuing education to veterinarians, and providing access to specialized veterinary medical services.

Shared Values of the College of Veterinary Medicine

We are committed to:

- Excellence
- Collaboration
- Integrity and Personal Accountability
- Openness and Trust
- Diversity in People and Ideas
- Change and Innovation
- Empathy and Compassion
- Efficiency in our Work

Strategic Scan

STRENGTHS

Nationally and internationally recognized high quality faculty The quality of the College's faculty is exceptional, and they are strongly motivated and dedicated to fulfilling the academic missions of the College. Many have received national and international recognition for their excellence in teaching, research, specialty clinical service, and continuing education. For example, the College is proud to have two National Academy of Sciences members, one Institute of Medicine member, and five American Association for the Advancement of Science fellows. The College has a rich tradition of excellence in clinical teaching that is evidenced by the presence of senior faculty interacting with clients, students, interns, and residents in the VMC. The Department of Veterinary Clinical Sciences was recipient of the first University Departmental Teaching Award. Likewise, our biomedical

research programs have enjoyed remarkable success. The College pioneered programs in preventive medicine, and continues today with strengths in food safety, infectious diseases, and global health.

High quality staff The College of Veterinary Medicine is fortunate to have a cadre of talented and skilled staff. Our technical, laboratory and research staff as well as our college and departmental support staff are dedicated to the College's mission of providing the best care and customer service possible to our patients and their owners, as well as the best support of teaching, research and outreach.

Comprehensive teaching hospital with large and diverse caseload Our comprehensive patient services cover nearly all specialty areas at our VMC and Marysville Large Animal Services Clinic. In 2011, our professional students were exposed to a caseload of almost 35,000 patient visits. Our large in-hospital farm animal (i.e., food and fiber) caseload is unusual in academic veterinary medicine today.

Large applicant pool of highly qualified professional students Our College continues to enjoy a strong applicant pool of well-prepared and highly qualified students. For the entering class of 2015, the ratio of applications per seat was 4.9 (788 applications for 162 seats) and the average overall grade point average (GPA) of admitted students was 3.65 with an average science GPA of 3.55. The average combined graduate record examination (GRE) score of admitted students in 2015 was 1192. For 2009, the College's student pass rate on the North American Veterinary Licensure Examination exceeded the US average by one percentage point (99% versus 98%). The employment rate for students graduating in 2011 was 93% in the veterinary profession.

Strong clinical residency and graduate education programs The College of Veterinary Medicine has had a strong commitment to clinical training programs for over 30 years. In 2011, the small animal internship program attracted more than 260 applications for eight positions and matched with four of its top five ranked candidates. Also in 2011, our residency programs attracted 350 applications for 13 positions, including 111 applications for two positions in small animal surgery. We matched with our top ranked candidate for nine of these 13 positions. In a recent assessment of the 87 doctoral programs within the university conducted by the Office of Academic Affairs, the doctoral program in Veterinary Biosciences was one of only 12 that received the highest ranking. These 12 programs were recognized as outstanding in terms of overall quality, planning, focus and potential to enhance the stature of the University.

Established leadership in research The College has several well-respected and highly funded research programs, with particular emphasis on oncology, pathobiology and therapy of infectious diseases (human and feline retroviruses, influenza, Lyme disease, rickettsia), immunology, endocrinology, food safety and animal health. For example, the College has been the recipient of a National Institutes of Health (NIH) Program Project Grant to study mechanisms of cell transformation by retroviruses that has provided almost \$20M in research funds over the last 10 years. Other areas of research expertise include the animal models of disease, musculoskeletal disease, gene therapy, and antimicrobial resistance. The College has a robust and growing Summer Research Program to introduce first and second year veterinary students to research as a career option. In addition, the strength of the Department of Veterinary Biosciences in research recently was affirmed by an external program review.

Signature Programs The College has a national reputation and strategic competitive advantage based on its three signature programs (Center for Retrovirus Research, Oncology, and Infectious Disease). The Oncology signature program is actively engaged with the Center for Clinical and

Translational Science (CCTS) and the Comprehensive Cancer Center (OSUCCC). The College is investigating new signature programs in sports medicine, ecosystem health, food safety and animal welfare.

CHALLENGES

Aging facilities Our College is fortunate to have two relatively new buildings: the Veterinary Medicine Academic Building completed in 2003 and the Marysville Large Animal Services Clinic completed in 2005. Current renovation of research laboratories in Goss Laboratory is being facilitated by a \$3.9 million extramural research facilities improvement grant from the NIH, and build out of laboratory and office space for the Center for Retrovirus Research was recently completed. A \$1.5 million renovation of clinical teaching space in the VMC was completed in 2011, adding new workspaces for oncology, small animal internal medicine, dentistry, blood bank, minor surgery, and interventional medicine as well as remodeling of examination rooms. While we are proud of these improvements, our VMC is in need of additional renovation and expansion. The original facility is 38 years old and receives the heaviest use of all of our buildings as it houses the clinical program. It has insufficient space to accommodate the new clinical disciplines that have emerged in the past 20 years as well as house the academic and administrative staff needed to conduct our professional teaching programs in an excellent and efficient manner. Renovation of the existing VMC is the number one priority for our fund raising efforts and capital campaign.

Low numbers of faculty and staff The College has excellent didactic, clinical and research programs. We have exceptional faculty and staff, and need more. Our student-to-faculty ratio of 4.5 based on 2011-2012 data from the American Association of Veterinary Medical Colleges (AAVMC) is more than 60% higher than the average value of 2.8 for 11 of our peer institutions.¹ Despite a very high student-to-faculty ratio, the national reputation of the College's programs is excellent due to the strong work ethic of the faculty and staff and the visibility of the faculty's scholarly works (e.g., authorship of several veterinary textbooks). The heavy workload of the faculty and staff, however, puts the College at risk for attrition. In addition, low numbers can lead to burn out, low morale and impairment of faculty and staff recruitment and retention.

Faculty recruitment and retention Faculty recruitment and retention constantly are challenged by a relatively small candidate pool of veterinarians at academic institutions and lucrative employment opportunities in the private sector. Specialty practice has emerged as a tempting option for highly trained clinicians who often feel the additional responsibilities of an academic appointment (e.g. teaching, research, and administration) are not justified by the unfavorable salary differential. The academic market likely will not be able to compete with specialty practice and industry on a salary basis alone, so we must attract promising young faculty members using means other than salary (e.g., superior health benefits, facilitation of life-work balance).

Insufficient funds to support our mission Erosion of state support over the past five years has resulted in the College making maximal use of student tuition as a source of operating revenue. Relying on increases in tuition places an excessive burden on the students. Between 2001 and 2010, indebtedness of our College's graduating students nearly doubled, increasing from \$66,756 to

¹The College considers the following its peer institutions: Cornell University, North Carolina State University, Purdue University, University of California at Davis, Michigan State University, Colorado State University, Texas A&M University, University of Minnesota, University of Wisconsin, University of Pennsylvania, and University of Illinois

\$133,225 whereas starting salaries have increased from \$39,132 to \$67,949 over the same time period. Thus, we believe that increases in professional student tuition, beyond normal inflationary increases, are not a viable long-term solution to increase College revenue. State support for the instruction of veterinary students (SSI – Medical 1) no longer reflects changes in the cost, quality or size of our program. It is based on a percentage of the Regents budget allocation for all four-year main campus academic programs across the state. This approach fails to take into account the above average inflationary costs of biomedical supplies and equipment. It also does not reflect the increasing size of our academic program.

Over the past five years, approximately 75% of the research funding in the College has come from Federal (NIH, USDA) sources. Obtaining Federal research dollars has become highly competitive as government funding of the NIH and USDA has not increased appreciably, resulting in an overall reduction of actual research dollars over that same time period, which necessitates that investigators spend more time seeking and applying for research funding. This situation creates an opportunity for College investigators to seek a greater degree of collaboration and focus more heavily on obtaining funding from alternative sources such as industry and foundation sponsors. In response to this need, the College has created an Office of Grant Support and Office of Commercialization. As such, increased indirect cost recovery from expanded extramural research programs also could contribute to revenue growth, as could new programs in regulatory science, animal welfare, and global health.

Additionally, College financial and staffing resources to maximize the use of technology in teaching and learning are limited. Students learn better when technology enhances instruction, and funds will need to be identified in order to transform more material into hybrid and online courses.

Strategic Focus Areas

The College has identified specific focus areas under each of the University's four major goals, providing a unified vision centered on the future:

Teaching and Learning Goal

- Incoming student quality
 - Maintain the high academic quality of incoming students
- Program excellence
 - Maintain a high quality professional degree program that ranks within the top five programs nationally
- Student outcomes
 - Assure confident, society-ready graduates with lower educational debt



Research and Innovation Goal



- State-of-the-art research infrastructure
 - Complete planned renovation of state-of-the-art research space
 - Expand Clinical Trials Office and BioSpecimen Repository
 - Support Technology Core Services
- Productivity
 - Promote translational research programs that advance the health and wellness of animals and people throughout the world
 - Expand extramural grant expenditures to \$11.2M by 2016 (\$14.6M including OARDC)
 - Provide incentives to reward productive faculty
 - Translate discoveries into patented products to create new revenue streams
 - Identify four new animal-human interface faculty positions
- Reputation
 - Diversify and strengthen research signature programs
 - Continue to support and promote research experiences for students
 - Develop a culture supportive of research

Outreach and Engagement Goal

- Strategic partnerships
 - Increase faculty awareness of and success with technology, licensing, and commercialization
 - Identify, pursue and secure key partnerships in industry, the military, and with other health professions schools on campus
- Outreach programs and awareness
 - Provide specialized medical care that fosters health and wellness in animals and humans
 - Develop programs in Columbus and Ohio that provide veterinary medical care for large and small animals in underserved communities
 - Develop international programs that provide international partners with information about sustainable farm practices and provide service teaching and learning opportunities for veterinary



students

- Develop learning programs that share resources with other colleges within Ohio State University and beyond
- Implement a Veterinary Public Health and Livestock Biotechnology consortium
- Build capacity in global public health and food security

Resources Stewardship

- People and Culture
 - Improve our workplace culture index by unifying faculty and staff under one shared vision for the College
 - Create pathways for faculty and staff professional growth and development
 - Foster a culture of open communication
 - Enhance collegiality and accountability
- Financial Stewardship
 - Increase total cash gifts through development and corporate partnerships (e.g., pet food industry, pharmaceutical industry)
 - Enhance earnings operations (e.g., expansion of emergency services, expanded hours of regular clinic operation, provision of innovative clinical services not available elsewhere)
 - Increase faculty awareness of commercialization of intellectual property and explore collaborative partnerships with other colleges of veterinary medicine
 - Expand on-line distance education courses
 - Increase indirect cost recovery from expanded extramural research programs
- World-class facilities
 - Renovate the VMC
 - Open a Companion Animal Wellness Clinic



Succeeding in Our Strategic Focus Areas

TEACHING AND LEARNING

The quality of our incoming professional students remains high. Our goal is to maintain this high quality by our recruitment and admissions processes. Although the diversity of our faculty mirrors that of our peer veterinary colleges, the percentage of our professional students who are minorities (8%) lags the average of our peers (13%). We will strive to increase the diversity of our student body by continuing to target under-represented students at the K-12 grade levels in our recruitment efforts as well as by designating more scholarships for students from under-represented groups.



We have exceptional faculty and staff, but need more to deliver our programs optimally. Despite a high student-faculty ratio, our programs have enjoyed national and international recognition for many years based on the strong work ethic and scholarly productivity of our faculty. In addition, our faculty teach and mentor over 120 graduate students and 60 interns and residents as part of their responsibility. The heavy workload has the potential to adversely impact faculty quality of life as well as recruitment and retention.



Our curriculum provides a strong, balanced and diverse core experience for professional students. We will implement a vertically integrated clinical reasoning course series in the curriculum, including proper handling, restraint and physical examination skills using live animals during the first year of the program. In response to the need for our students to develop non-technical skills, knowledge, and attitudes relevant to the practice of veterinary medicine, we will extensively revise the professional development course series and vertically integrate it into the first three years of the professional program. We will use our new Communications Center to train students how to conduct patient examinations and client interviews.

To meet requirements for accreditation, the AVMA now requires colleges of veterinary medicine to develop relevant measures to assess the clinical competencies of their students. The College



initiated clinical competency assessment with the class of 2010, and has moved to a commercial web-based system to evaluate and track clinical competencies. The College will have a fully operational clinical competencies outcomes assessment program by 2013 when its next AVMA accreditation site visit will occur.

The College's graduates are in high demand with approximately 1.63 job offers per student, as compared to a national average of 1.60 in 2011. The majority of veterinary graduates (our own and nationally) pursue companion animal practice despite shortages of veterinarians in other areas such as food animal and regulatory veterinary medicine. We will prepare our students for a broad spectrum of careers by providing exposure to opportunities in public health, biomedical research, academic veterinary medicine, global food systems, and ecosystem health.

We will support students by developing a Career Service Center, as well as, by providing increased exposure to alternative careers during their education. The Career Service Center will help students explore various career paths in veterinary medicine, obtain clinical externships, and develop job search skills such as resume development, interviewing skills and connections to potential employers.

The high educational indebtedness of veterinary graduates is a national problem with serious long-term consequences for the profession. The mean educational debt of our students at graduation in 2011 (\$157,135) is somewhat higher than the national average of \$142,613. The debt crisis is exacerbated by the fact that the average starting salary of graduating veterinarians in 2011 was \$67,520, as reported by the AVMA. We will strive to make our graduates more marketable by encouraging non-traditional career paths and will work to lower their educational debt load by increasing scholarship opportunities.

Primary elements of strategic approach

- *Maintain the high academic quality of incoming students and increase the diversity of our student body*
 - Increase professional student entry GPA to ≥ 3.70 and entry GRE to ≥ 1200
 - Increase percentage of minority professional students to 15%
- *Increase the number of and maintain the high quality of our faculty and staff*
 - Increase faculty by 13 positions
 - Increase staff by 20 positions



- *Assure society-ready graduates with lower educational debt load*
 - Increase graduate confidence and employer satisfaction with graduate preparedness
 - Improve non-technical skills of graduates (e.g., communications, business, leadership)
 - Increase flexibility in clinical training
 - Implement a vertically-integrated clinical reasoning course series
 - Fully implement clinical competency outcomes assessment
 - Prepare students for a broad spectrum of careers and increase the percentage of students entering non-practice careers by 15% in 2016
 - Increase endowments for scholarships by 25% in 2016
 - Improve student understanding of financial management and strategies to decrease educational debt

- *Facilities*
 - Provide comprehensive renovated facilities to deliver the College’s programs
 - Renovate 96,000 square feet of VMC space with net gain of 15,000 square feet
 - Open a Companion Animal Wellness Clinic

RESEARCH AND INNOVATION



The College is an important component of one of the most comprehensive health sciences centers in America and is central to creating a healthier world. Knowledge gained from our research improves the health of animals, assures the safety and quality of food animal products and contributes to the understanding of basic mechanisms of disease in animals and humans. Our interdisciplinary research programs bring together talented investigators from across the University, nationally and internationally to share knowledge, skills and ideas in collaborative research projects, technology development, and commercialization.

The discoveries of our investigators provide a foundation for the education and training of professional veterinary students, veterinarians seeking advanced degrees, graduate students, post-doctoral fellows, and research scientists. The Graduate Program in Comparative and Veterinary Medicine provides exceptional opportunities for interdisciplinary training for our graduate students that are aligned with the needs of the government organizations, industries and universities that hire our graduates.

Our College Signature Programs in Infectious Diseases and Comparative Oncology are actively engaged with the CCTS of the College of Medicine and the OSUCCC. In addition, a successful \$4.9 million Targeted Investment in Excellence (TIE) project entitled “Public Health Preparedness for Infectious Diseases” (PHPID) weaves together exceptional research programs in six colleges (Veterinary Medicine, Medicine, Public Health, Biological Sciences, Food, Agricultural and Environmental Sciences, and Pharmacy) for the protection of public health. The College is

investigating new signature programs in sports medicine, ecosystem health, food safety and animal welfare.

In FY2011, about 75% of the \$9.3M in research funds expended by College investigators was provided by federal agencies such as the NIH and the USDA. The remaining amount came mainly from industry sponsors and non-profit foundations. Over the last 5 years, the proportion of funding from federal sponsors has remained the same while actual research dollars obtained by investigators has decreased or remained stable. This funding environment creates an opportunity for investigators to seek funds from non-federal sources such as foundation and industry sponsors. The College has created and staffed an Office of Commercialization to help investigators form strategic partnerships with industry sponsors, capture intellectual property, and commercialize discoveries. In addition, a Grant Support Office was developed in 2007 to help College investigators identify funding and facilitate grant submissions.

The College's summer research program for veterinary students has grown dramatically, increasing from 33 students in 2008 to 49 students in 2011. Funds to support the Summer Research Program come from the NIH as well as from Merck, the Morris Animal Foundation and several donors to the College. In addition to traditional research grant support for graduate students, students are supported by a T32 NIH Institutional Training Grant that trains veterinarians to develop and effectively utilize mouse models of human disease. Additional training grants in molecular virology and comparative oncology are being considered. The College has been highly successful in obtaining career development and individual fellowships from the NIH.

The clinical trials office (CTO) is engaged in designing, conducting, analyzing, and reporting clinical trials in companion animals that evaluate novel diagnostics and therapeutics for spontaneous diseases. The office facilitates such studies by networking with regional veterinarians to insure timely enrollment, assisting in collection and coordination of data, and establishing standard operating procedures. This resource is routinely sought by pharmaceutical and biotechnology companies, as well as other academic institutions to design and conduct clinical studies in translational oncology. The CTO also provides a unique training environment for veterinarians in translational research and comparative medicine. Plans for establishing a Good Laboratory Practice (GLP) facility in the College are being realized with development of a business plan and acquisition of funding to renovate existing laboratory space. This GLP laboratory will facilitate proof-of-principle and concept development for our commercialization efforts.



Primary elements of strategic approach

- *Improve the support, resources and infrastructure for research*
 - Complete NIH C06 construction project to renovate College laboratory space and provide additional infrastructure for research
 - Expand the Clinical Trials Office and Biospecimen Repository

- Continue to provide support for Core Research Facilities by space allowances and investment in equipment and technical staff
 - Pursue funding for state-of-the-art animal facilities for research utilizing animal models for infectious disease, vaccine development and cancer (e.g., germ-free mice and pigs)
- *Promote translational research programs that advance the health and wellness of animals and people throughout the world*
 - Increase programs that promote improved food safety and sustainable farm practices locally and globally
 - Promote collaborative interdisciplinary programs that support the concepts of “Health and Wellness” and “One Health”
- *Diversify and strengthen research signature programs and other collaborative programs across campus*
 - Strengthen signature programs in retrovirology and comparative oncology
 - Explore feasibility of signature programs in sports medicine, animal welfare, and ecosystem health
- *Develop a culture that is supportive of research*
 - Establish a College-wide mentoring system for all faculty engaged in research
 - Facilitate faculty professional leaves and sabbaticals to enhance research capability
 - Reward faculty who collaborate throughout the University to increase research productivity
 - Establish areas of research focus that unite departments and support College-wide themes of research direction
 - Provide incentives for research accomplishments that are tied to research revenue.
 - Provide space to accommodate the growing needs of a robust research enterprise. Approximately 20,000 square feet of additional laboratory space will be required to support the College’s research goal. Space needs will be met by specific proposals to the University Office of Research, joint ventures with other colleges such as the College of Medicine and Public Health, and by fundraising.
- *Expand the College research program. Goal is to attain \$11.2M in research expenditures by 2016 (\$14.6M including OARDC).*
 - Increase the number and maintain the high quality of faculty engaged in biomedical research
 - Identify 4 new faculty positions to promote research at the animal-human interface
 - Assist with development of collaborative teams and facilitate pursuit of large grants such as Program Project Grants and Center Grants

OUTREACH AND ENGAGEMENT

Faculty research findings can have important intellectual property value and beneficial commercial application. Our goal is to increase patent applications and signed license agreements with a resultant increase in revenue from technology, licensing and commercialization. Increasing the number of strategic partnerships in the commercial and military sectors also will advance the College's research and innovation goal by capitalizing on mutually valuable, collaborative research efforts. At the Ohio State University, our College has the rare opportunity to collaborate with seven other health professions colleges, and our goal is to strengthen existing ties and establish new collaborations in the study of zoonotic diseases (i.e., infectious diseases transmissible between animals and humans), food safety, and biosecurity. The College will expand its collaboration with the School of Public Health by developing new global health initiatives, including on-line certificate and master's degree programs in Veterinary Public Health. The on-line Veterinary Public Health program will promote the health of humans and animals by providing training in prevention and control of zoonotic diseases, food safety and control of food-borne diseases, biomedical research, improvement of environmental health in agricultural settings, and bioterrorism preparedness and emergency response training. Courses in the program will be available to students in Ohio State's other health professions schools. An additional collaboration under discussion is development of certificate and master's degree programs in business with the Fisher College of Business. These programs will familiarize our students with the business aspects of practice, and increase their marketability in the workplace.

The College plans to open a new Companion Animal Wellness Clinic to improve delivery of medical care to the Columbus community while simultaneously freeing up space for continued renovations and improvements in the existing VMC. We will continue our successful in-home companion animal care program for underserved communities in Columbus and promote the importance of the human-animal bond in a collaborative effort with Ohio State's College of Social Work. Also under consideration is expansion of the College's popular and successful rural ambulatory clinical program in Marysville and establishment of a similar program in southeastern Ohio.



As veterinary professionals, our graduates will be asked to address both animal and human public health issues. Consequently, our graduates must be knowledgeable about diseases not currently reported in the United States, but with the potential to emerge in the future. At the global level, the College also is committed to developing skill-building international programs that teach sustainable food production practices to veterinarians and farm production personnel in our partner countries in Latin America, Eastern Africa, and Asia/Pacific while simultaneously providing valuable service teaching and learning opportunities for our veterinary students.



Primary elements of strategic approach

- *Increase faculty awareness of technology, licensing, and commercialization (TLC)*
 - Increase faculty participation to 50% in Veterinary Biosciences, 33% in Veterinary Preventive Medicine, and 25% in Veterinary Clinical Sciences
 - Achieve proactive marketing of 100% of assets within 18 months of identification
- *Identify and promote key commercial, industrial, government and military partnerships*
 - Establish at least four new commercial, industrial, government or military partnerships that enhance the College's teaching and learning or research and innovation goals
- *Collaborate with other health professions schools*
 - Collaborate with other health sciences colleges to develop service teaching and learning programs in zoonotic diseases
 - Establish at least three additional inter-college teaching and learning, research and innovation, or outreach and engagement collaborations
 - Develop "One Health" faculty position in collaboration with the College of Medicine
- *Provide specialized medical care that fosters health and wellness in animals and humans*
 - Open Companion Animal Wellness Clinic
 - Renovate 96,000 square feet of space in the VMC
- *Develop on-site and distance teaching and learning programs that share resources with other colleges within Ohio State University and beyond*
 - Collaborate with the School of Public Health to further develop the on-site and on-line certificate and master's degree programs in Veterinary Public Health
 - Collaborate with Fisher College of Business in the development of certificate and master's degree program
- *Develop local programs in Columbus and Ohio that provide veterinary medical care for underserved communities*
 - Incorporate human-animal bond component into in-home companion animal care program for underserved communities in collaboration with the College of Social Work

- Increase caseload and revenue of rural ambulatory clinical program in Marysville and consider a similar program in southeastern Ohio
- *Develop international programs that provide international partners with information about sustainable farm practices and provide service teaching and learning opportunities for our veterinary students*
 - Conduct five additional “farm-to-table” courses in Latin America, Eastern Africa, and Asia/ Pacific
 - Complete five-year research training program in food borne pathogens in Eastern Africa
 - Implement Veterinary Public Health and Livestock Biotechnology consortium for sustainable capacity
 - Build capacity in global public health and food security

RESOURCES STEWARDSHIP

The strength of the College of Veterinary Medicine is our people. Across all units, we have staff and faculty of outstanding caliber who are highly committed to fulfilling the mission of the College. Fulfilling our strategic plan depends on a collaborative community dedicated to mutual respect, accountability, fairness, empowerment and open dialogue that provides professional and personal fulfillment. With an eye to the future, the College is transitioning to a model of shared leadership that utilizes the strengths of faculty, staff, students, and external partners as well as administrators to develop and implement strategic initiatives. To promote a climate of shared leadership we must build a shared vision for the College, foster collegiality and accountability around values important to our profession, develop and empower our staff as well as our faculty for leadership opportunities, and create communication streams that allow for respectful open dialogue.

Our Veterinary Information Systems department provides vital, customer-focused information technology services to the College and VMC. Among these are service operations, infrastructure support and the Hospital Information System. Where practical, we leverage the university’s enterprise systems and services, such as the PeopleSoft systems, telephones, OSU network and the wireless network, and the Digital Union, to provide a full complement of services for the College’s faculty, staff and students.



With the erosion of state support, the primary sources for revenue growth in the College will be development, corporate partnerships (e.g. pet food industry, pharmaceutical industry), and creative enhancements of earnings operations (e.g. expansion of emergency services, expanded hours of clinic operation, provision of innovative clinical services, increased availability of magnetic resonance imaging). Increased faculty awareness of commercialization of intellectual property, collaborative partnerships with other colleges of veterinary medicine, and provision of on-line distance education courses are other examples of opportunities for revenue growth. Increased indirect cost recovery from expanded extramural research programs also could contribute, as could new programs in regulatory science, animal welfare, and global health.

We must identify innovative methods to increase support and find new streams of income, such as mutually beneficial industry collaborative efforts and redoubling our efforts at private development. Finally, we believe that it would be very beneficial if the University would partner with the Board of Regents to revise the funding model to include cost and enrollment as the primary basis.

A \$1.5 million renovation of clinical teaching space in the VMC was completed in 2011, and additional renovation of the VMC continues to be a high priority for our fund-raising efforts and capital campaign. To create an optimal teaching and learning environment, we have plans for continued renovation of the VMC using donor funds, and have completed a business plan to acquire space to open a Companion Animal Wellness Clinic. This clinic will enhance our ability to teach valuable communication and business management skills to our students in a simulated private practice setting under the supervision of the College’s community practice faculty.

Primary elements of strategic approach

- *People and Culture*
 - Unify the College and its faculty, staff and stakeholders with one shared vision
 - Foster a culture of open communication that encourages faculty, staff, and student participation in a model of shared leadership
 - Create pathways for staff development and growth and provide opportunities for participation in shared leadership
 - Enhance a climate of collegiality and accountability

- *Financial Stewardship*
 - Increase total cash gifts
 - Development
 - Corporate partnerships (e.g., pet food industry, pharmaceutical industry)
 - Creatively enhance earnings operations
 - Expand emergency services
 - Expand hours of regular clinic operation
 - Provide innovative clinical services not available elsewhere
 - Increased availability of magnetic resonance imaging
 - Increase faculty awareness of commercialization of intellectual property
 - Establish collaborative partnerships with other colleges of veterinary medicine
 - Expand on-line distance education courses
 - Increase indirect cost recovery from expanded extramural research programs

- *World-class Facilities*
 - Renovate 96,000 square feet of VMC space with a net gain of 15,000 square feet
 - Open a Companion Animal Wellness Clinic

