

**Department of Clinical Sciences
College of Veterinary Medicine & Biomedical Sciences
Strategic Plan
October 2005**

Summary

The faculty of the Department of Clinical Sciences, College of Veterinary Medicine & Biomedical Sciences (CVMBS) contributed to the Strategic Plan contained within this document. Departmental personnel reviewed the Colorado State University Strategic Plan, the CVMBS plan, and documents generated within the department during the last 12 months including 5-year goals for all sections and centers, and reports generated from two departmental retreats held in October 2004, and August 2005. All these documents were considered in developing a draft Departmental plan, which was then reviewed by the faculty of the department. This document, together with appendices representing plans specific to centers housed principally within the department, represents the Department of Clinical Sciences unit strategic plan consistent with CSU and CVMBS plans as presented to the college in October, 2005.

The approach to and outcomes of this strategic planning reflect the mission and culture of the Department of Clinical Sciences, and University. The mission statement and objectives of the Department of Clinical Sciences together with a brief outline of the organization of the department form the preamble to this strategic plan.

Mission statement – Department of Clinical Sciences

Assure the health and productivity of animals to meet societal needs through high quality educational programs for professional veterinary medical students, graduate veterinarians, and the public through a faculty and veterinary medical center of excellence. Advance and disseminate comparative biomedical knowledge in an environment of interdisciplinary collaboration.

Departmental objectives

1. Provide the best possible faculty, curriculum and facilities for undergraduate and graduate training in the clinical sciences, in a manner consistent with the present and anticipated needs of the department and profession.
2. Develop and maintain a progressive research and clinical investigative program to advance the state of the art and science of veterinary medicine and surgery.
3. Provide, in agreement with the College guidelines, postgraduate education for veterinarians, graduate students and practitioners at this institution and at international, national, state and local levels.

Department Organization and Culture

The Department of Clinical Sciences is composed of a large group of faculty (55 tenure track and 24 Special Appointment), who pursue a diverse set of goals in support of our objectives in teaching, research and service. While these faculty are necessarily primarily composed of veterinarians with specialty qualifications, we also include non-DVMs with basic science and teaching skills that are critical to our mission. A majority of the departmental faculty work in

clinical sections, with specific areas of responsibility in the Veterinary Teaching Hospital. However, a large number of faculty are members of centers with more diverse goals in veterinary medicine, including CSU designated centers (CIOSU) such as the Animal Cancer Center, the Animal Population Health Institute, the Orthopedic Research Center, and the Comparative Pain Management Center, and departmental centers and institutes including the Integrated Livestock Management Program, the Argus Institute for Veterinary Communication, and the Small Ruminant Comparative Orthopedic Laboratory. Departmental faculty and centers are significantly involved, and in some instances lead, four out of the five Programs of Scholarship and Scholarly Excellence in the university. The heads of clinical sections and centers are members of the Departmental Advisory Committee, which provides guidance to the Department Head and Assistant Department Heads. The departmental faculty meet on a monthly basis and decide issues affecting the department and its mission on a democratic basis. The department's operation is governed by a Departmental Code and additional policy documents, which are reviewed on a 5 year basis.

Through the diversity and strength of our faculty, this department has a broad and extensive involvement in all aspects of veterinary clinical science. There are five areas in which we have special focus: comparative orthopedics, infectious disease, oncology, population health and epidemiology, and therapeutic intervention (e.g. cardiac surgery, minimally-invasive surgery and diagnostics). We believe that we are amongst the premiere veterinary clinical science departments in the world, on the basis of the quality and diversity of our accomplishments. As such it is our responsibility to play a leadership role in animal care through our activities in teaching, research and service.

Departmental Strategic Plan

The strategic plan for the Department of Clinical Sciences is presented as a series of statements within tables. It is organized in parallel with the strategic plan for CVMBS and CSU.

Teaching

No department at this university has a more diverse range of teaching responsibilities, in undergraduate, graduate, professional veterinary medicine, clinical specialty resident training, continuing education, and extension. We play a centrally important role in the PVM program. Because of these responsibilities the department identifies didactic and clinical teaching as its major area of emphasis, and its most important obligation.

Commitments	Goals
Support Quality Academic Programs	<ol style="list-style-type: none"> 1. Establish the goal of improved animal care and well-being as an outcome in all our teaching activities. 2. Develop and sustain review and evaluation of curriculum and teaching quality in the PVM, graduate, and clinical resident training programs through student evaluations, exit interviews, and mandatory course review by curriculum and resident/graduate committees. 3. Prioritize investment in innovative clinical training methodologies so that our clinical graduates (PVM, interns, residents and fellows) are amongst the most highly prized in

	<p>the veterinary workplace.</p> <p>4. Constantly evaluate the need for use of animals in teaching, seeking alternatives where appropriate, always conscious of our mission in animal care and welfare.</p> <p>5. Be the leader in development and application of the science of communication in teaching and clinical care through the leadership of the Argus Institute.</p> <p>6. Offer PVM experiences tailored to future job opportunities, specifically expand teaching of core practice skills in areas such as community practice, dentistry, animal behavior, exotic animals, emergency care, shelter practice, and large animal ambulatory practice.</p>
Provide Distinctive Undergraduate Experiences	<p>7. Continue teaching in major undergraduate departments (e.g. Animal Sciences, Biomedical Sciences), and in the All-University Core Curriculum, by teaching IU 192 seminars designed to enhance the experience of Freshman students.</p> <p>8. Use VTH volunteer, Vet-Start and Hughes Undergraduate Scholar programs to provide undergraduate experiences that will recruit students to the PVM program, and increase student diversity.</p> <p>9. Formalize the APhi undergraduate internship agreement within CVMBS. Increase the number of APhi research internships to 3-4 per year and expand the ILM Summer Student Program to include 3-5 undergraduates per year with interest in animal agriculture.</p>
Grow Graduate Education	<p>10. Develop a national and international reputation for quality graduate degree training, as evidenced by recruitment of our graduates to elite post-graduate, faculty, and clinical positions.</p> <p>11. Increase the number of residents trained and centrally supported throughout the clinical sections by 10 over the next 10 years so as to fulfill our mission in populating veterinary academia and referral practices with outstanding clinicians trained at CSU.</p> <p>12. Develop high quality graduate courses that will be required in our graduate degrees. Specifically a statistics/experimental design course within 2 years, and a physiological basis of medicine course within 3 years.</p> <p>13. Develop an integrated veterinary epidemiology curriculum for graduate students in the Department of Clinical Sciences.</p> <p>14. Assure the relevance and quality of MS program training for clinical residents, target relevance to clinical science and recruitment of residents to further post-graduate research and academic careers.</p> <p>15. Expand recruiting of CVMBS DVM-PhD Program and Cancer Biology Graduate students within the department.</p> <p>16. Expand the post-DVM training opportunities in the areas of Anesthesia and Pain Management.</p>
Increase the Number of	<p>17. Play a leadership role in implementation of the Food Animal</p>

<p>Graduating Veterinarians Who Enter Food and Fiber Animal Practice and Public Practice</p>	<p>Veterinary Career Incentive Program.</p> <p>18. Actively participate in the design and operation of new Food Animal Diagnostic and Therapeutic facilities on South Campus.</p> <p>19. Provide summer training programs to veterinary students with emphasis on research and outreach activities related to food and fiber animals, consistently fund 10-15 students in ILM-SSP.</p> <p>20. Establish professional links with local, federal, and international agencies to open opportunities for professional veterinary students for future jobs.</p> <p>21. Obtain funding for ILM Summer Student Program (ILM-SSP) through submissions to USDA-HECG and FFF Smith-Lever as well as continued solicitation of industry and producer groups.</p>
<p>Enhance Scholarly Communication</p>	<p>22. Continue and expand our influence through high profile faculty presentations not only at local and regional meeting, but also at prestigious national and international meetings.</p> <p>23. Develop distance learning, with current Web-based learning as the model for progressive delivery of education to veterinarians, the animal owning public and agricultural industry.</p> <p>24. Create a learner-centered culture through our enterprise in veterinary communication (Argus Institute), promote life-long learning and provide opportunities for active and experiential learning in the simulated client laboratory.</p>

Research

The department is amongst the most active clinical veterinary science units across the nation in research, and by this measure a world leader. Funding flows from federal and non-federal competitive grants, and the department is highly successful in securing industry and private support. Research is at the heart of our ability to innovate in clinical science, and a key factor in our ability to recruit the very best faculty. We encourage research in every form, independent of the scale of projects. We view the impact on animal and human health as the key outcome.

<p>Commitments</p>	<p>Goals</p>
<p>Attract and Retain Faculty Talent</p>	<p>25. Recruit and retain an elite faculty by being the top choice of faculty candidates pursuing positions in veterinary clinical science. Achieve this through providing our faculty with the best possible opportunities for pursuing their careers.</p> <p>26. Establish and fund endowed chairs through our strong and sympathetic relationship with the animal owning public. Specifically, achieve full funding for the Alexander Chair in Large Animal Reproduction and the Kenneth W. Smith Chair in Companion Animal Research, and seek new funding for chairs in Food Supply Veterinary Medicine, Cardiology, Equine Surgery, Equine Medicine, Comparative Pain Management, Equine Imaging, Musculoskeletal biology and</p>

	<p>Complementary and Integrative Medicine.</p> <p>27. Recruit four new faculty positions through the ACC AEP initiative, in Complementary and alternative medicine, musculoskeletal biology, cancer genetics and clinical pharmacology.</p> <p>28. Establish and maintain salary equity for new and existing faculty, and a merit based approach to salary distribution.</p> <p>29. Set new standards in terms of support and career development for Special Appointment faculty equivalent to those offered for tenure track positions. Explore mechanisms for provision of “rolling horizon” appointments after promotion to Associate Professor rank.</p>
Deliver Excellence in Scientific Discovery	<p>30. Establish the goal of improved animal care and well-being as an outcome in all our scientific discovery.</p> <p>31. Guarantee research opportunities for faculty through provision of clinical service appointments consistent with research goals; i.e. 18-20 weeks of clinic rotations or less if research commitment is over 40% effort.</p> <p>32. Increase research laboratory space, specifically triple research lab. space on 2nd floor of VTH building within 3 years</p> <p>33. Expand core shared research resources on South Campus, including proteomics, genomics, imaging, and pharmacology facilities.</p> <p>34. Maintain and develop Department of Clinical Sciences dedicated research animal housing for companion animals, horses and food and fiber animals on the South Campus, Foothills Campus and at the ARDEC Facility.</p> <p>35. Expand the knowledge base on economically important infectious diseases to include animal disease surveillance, disease transmission factors and risk analysis methodologies related to the control of infectious diseases and use this information to shape public policy and trade on a national and international scale.</p> <p>36. Recruit faculty or staff to meet needs for data analysis, study design, and management of clinical trials.</p>
Create and Expand Multidisciplinary Research Superclusters	<p>37. Play a significant role in the Biomedical/Infectious Disease Supercluster in all areas of excellence supported by the department.</p>

Service and Extension

The department mission is significantly concerned with the provision of service through the Veterinary Teaching Hospital as a center for primary, secondary and tertiary care. We offer comprehensive ambulatory and field investigation services on a local, regional and national level. We provide extensive consultancy for industry, for veterinarians and owners, and have a significant commitment to extension within the state.

Commitments	Goals
--------------------	--------------

Serve CVMBS Alumni	<p>38. Be the source of choice for veterinary secondary and tertiary referral care and consultation at the local, regional and national level.</p> <p>39. Sustain and elevate the reputation of the alumni's alma mater as the center of veterinary clinical excellence.</p> <p>40. Provide outstanding continuing education at the local, regional and national level, and through distance learning (web-based) to serve our PVM alumni.</p> <p>41. Provide alumni with classroom opportunities to coach/teach/model communication skills, which can subsequently be applied in their business and practice models.</p>
Serve Members of Society	<p>42. Be the model source of outstanding veterinary care in the nation.</p> <p>43. Be an excellent source of veterinary education for the animal owning public, practicing veterinarians, and industry.</p> <p>44. Provide an annual Foreign Animal Disease Training Course for veterinarians and annual Basic Veterinary Epidemiology hybrid training courses for USDA, APHIS, VS veterinary medical officers and animal health technicians.</p> <p>45. Make an excellent contribution to society through the impact of our research on both veterinary and human health. Distribute research findings to diverse audiences (veterinarians, producers, government and the general public) in a timely fashion.</p> <p>46. Contribute to the Combined MSPH/DVM Program and developing virtual Colorado School of Public Health by providing training to facilitate the role of veterinarians as a unique national resource, trained in multi-species comparative medicine, to serve and protect the extraordinary link between agriculture and human medicine.</p> <p>47. Collaborate broadly on initiatives that impact pre-harvest food safety locally and nationally, and collaborate with CSU partners to develop a Beef Herd Health Assurance program to enhance quality of beef production and health in Colorado.</p>
Expand Contributions to Economic Development and Quality of Life	<p>48. Develop a Veterinary Teaching Hospital financial model that can sustain and expand this vital teaching, research, and service resource.</p> <p>49. Promote the activities of service and research laboratories in development and modification of diagnostic test methodologies for use and validation in the field.</p> <p>50. Develop relationships with veterinary practitioners in Colorado that expand their economic opportunities, and our opportunities for outreach, PVM and graduate education and research.</p>
Collaborate and Contribute to Public Health	<p>51. Have a high impact on human health through translational and comparative veterinary research in our major focus areas: comparative orthopedics, infectious disease, oncology, population health and epidemiology, and therapeutic intervention.</p>

	<p>52. Play a major role for national scientific bodies such as the NIH, NCI, USDA, and similar groups as consultants, grant panel members, and opinion makers, emphasizing translational and comparative impact of veterinary research.</p> <p>53. Continue a research focus on animal health, microbial shedding within defined population settings, and related topics on the interface between human and animal health that affect food safety.</p> <p>54. Maintain biosecurity and infection control research and outreach to assist national and state animal health authorities in securing the national food supply and health of livestock.</p> <p>55. Provide concise information for the general public through press releases, packaging key animal health information tailored to specific audiences.</p> <p>56. Expand Livestock Worker Training program to improve worker safety on Colorado livestock operations, with a focus on the Hispanic labor force.</p>
Address Global Challenges	<p>57. Maintain an extensive national and international professional network to promote involvement in the policy making process in animal health arenas and development of control regulations for specific diseases of global economic importance.</p> <p>58. Assist developing countries in formulating and implementing regional and national animal health monitoring and disease control programs.</p>

Culture, Connection, and Community

Commitments	Goals
Integrate Academic and Co-curricular Activities	<p>59. Support a diverse array of seminars and communication events addressing the broad range of issues involved in delivering veterinary care, ethics, and research, and so increase the sense of community among students, staff and faculty.</p> <p>60. Provide opportunities for student engagement and civic involvement to build leadership and citizenship skills. (SHARE, HABIC, Pet Hospice).</p>
Promote Health and Well-being	<p>61. Generate materials for the general public to provide timely and user friendly information on animal diseases, zoonoses and concepts of control of infectious diseases</p> <p>62. Act as a knowledgeable resource of animal health information when the journalist community calls for interviews on timely topics such as infectious disease and zoonosis, food safety, cancer and other topical issues.</p> <p>63. Support student, faculty, and staff well-being on a college-wide basis through counseling and psychological support delivered by our faculty and staff (Argus Institute and the College Clinical Psychologist).</p> <p>64. Recognition of the role of animals, as a source of social support</p>

	<p>and as a positive factor in public health, and acknowledging and supporting the human-animal bond.</p> <p>65. Promote and explain the role of animals as a source of comparative modeling for human diseases and effectively communicate the contribution of animal research to human health to the public.</p>
--	--

Diversity

Commitments	Goals
Diversify Student Body	<p>66. Maintain recruitment of high-quality, international graduate students, currently a key area of opportunity for this department. Implement changes to graduate course requirements to assure financial sustainability in this process.</p> <p>67. Include multicultural and global perspectives in the veterinary communication curriculum (diversity represented through clientele in the communication laboratory and addressing cultural communication issues).</p> <p>68. Offer PVM experiences tailored to unique ethnic, cultural, and socioeconomic practice opportunities, specifically to include provision of additional practice skills especially relevant to communities or conditions of veterinary practice outside of traditional career pathways.</p>
Diversify Faculty and Staff	<p>69. Take advantages of the opportunities resulting from the global community of veterinary scientists to achieve recruitment of international post-doctoral fellows, visiting scientists and faculty members.</p>
Build Inclusive Intellectual Community	<p>70. Provide educational opportunities for regional, national and international communities with limited access to contemporary veterinary and public health information.</p> <p>71. Target animal worker training towards Hispanic population, providing unique teaching and training resources so as to improve animal care, and worker safety.</p> <p>72. Continue annual Basic Veterinary Epidemiology training courses for Spanish-speaking colleagues of Latin and South American countries.</p>

Facilities and Information Technology

Commitments	Goals
South Campus Master Site Plan	<p>73. Participate actively in development fund raising, and in planning and implementation of new facilities for clinical teaching, research and service, in keeping with CVMBS strategic plan.</p> <p>74. Develop dedicated research animal housing for companion animals, horses and food and fiber animals on the South</p>

	Campus, with supporting facilities at the Foothills Campus and other CSU sites.
Support Advances in Information Technology	75. Develop an effective IT solution to VTH management of the medical record and financial transactions. 76. Require the provision of state-of-the-art access to electronic resources supporting teaching and research.

Human and Financial Resources

Commitments	Goals
Set the Standard in Human Resources	77. Provide the outstanding faculty mentoring program in CSU, leading to consistent positive communication in faculty evaluation, and success in promotion and tenuring of faculty.
Be Nationally Competitive in Compensation Provided to Faculty and Staff of the College	78. Ensure faculty salary is consistent with national standards for elite clinical veterinary schools. 79. Work to ensure Special Appointment salary compensation rewards are equivalent to tenure track positions for equally accomplished individuals.

Accountability

Commitments	Goals
Set the Standard in Financial Accountability	80. Provide outstanding grant management at the pre-and post-award stage through a strong relationship with OSP. 81. Achieve the model performance for facilities based management in the college.

Appendices:

Four Centers with principal homes within the Department of Clinical Sciences have provided their own strategic plans which are included as appendices:

1. The Animal Cancer Center
2. The Animal Population Health Institute
3. The Center for Comparative Pain Medicine
4. The Orthopaedic Research Center