Center for Veterinary Health Sciences

Michael D. Lorenz, DVM - *Dean*
Chris Ross, DVM, PhD - *Associate Dean for Academic Affairs*
Jerry Malayer, PhD - *Associate Dean for Research and Graduate Education*

205 McElroy Hall • (405) 744-6651 • fax: (405) 744-6633
Web site: www.cvhs.okstate.edu

Doctor of Veterinary Medicine Program

A primary objective of the Center for Veterinary Health Sciences is to educate veterinarians for private practice. In addition, the professional curriculum provides an excellent basic biomedical education and training in diagnosis, disease prevention, medical treatment and surgery. Graduates are qualified to pursue careers in many facets of veterinary medicine and health-related professions.

Accreditation

The College has full academic accreditation status approved by the Council on Education of the American Veterinary Medical Association. Accreditation is based on an assessment of 11 essential factors, namely, the college's organization, its finances, facilities and equipment, clinical resources, library and learning resources, enrollment, admissions, faculty, curriculum, continuing and post-graduate education, and research.

Preparatory Requirements

In preparation for the professional DVM training the student must complete both prescribed and elective collegiate courses. The minimum prescribed preparatory studies, totaling 64 semester hours of undergraduate course work, can be completed in three calendar years. Most of the entering veterinary medical students in recent years have had three to four years of preparatory training, often earning a bachelor's degree.

Admission Requirements

Collegiate course requirements for entry into veterinary medical college may be completed at any accredited university or college that offers the required courses. Pre-veterinary curricula are available at Oklahoma State University through the Division of Agricultural Sciences and Natural Resources and through the College of Arts and Sciences. Both offer programs of study in pre-veterinary medical sciences, which provide for the award of a bachelor's degree after successful completion of the first or second year of veterinary medical studies.

Requests for information on pre-veterinary medical study programs and applications for admission to such programs should be addressed to the dean of either the Division of Agricultural Sciences and Natural Resources or the College of Arts and Sciences.

Listed below are the *minimum* course prerequisites for consideration for admission to the Center for Veterinary Health Sciences:

English —nine semester hours including six hours of composition and three hours of an English elective. Course work in speech or technical writing is encouraged.

Chemistry—general inorganic chemistry including labs; an organic chemistry series (8 semester hours) designed for pre-veterinary and pre-medical students that includes both the aliphatic and aromatic compounds or survey course with lab (5-8 hours); and 3 semester hours of biochemistry.

Physics—Eight hours of general physics.

Mathematics—three semester hours. Minimum level of college algebra or higher math. Course work in statistics is not acceptable.

Biological science—16 semester hours. Courses in zoology, general biology, microbiology and genetics are required. These courses must include laboratory work.

Animal Nutrition—three semester hours of the basic principles of animal nutrition, including digestion, absorption and metabolism of the various food nutrients and ration formulation. Courses in human nutrition are not acceptable.

Humanities and social science—six semester hours.

Business electives—although not required, courses in business are encouraged.

The information on admission requirements was current at the time of publication but is subject to change. The admission requirements are under annual review and changes may be made at any time.

Scholarships

The College has scholarships which may be available to matriculating veterinary medicine students; most are based on academic achievement.

Application Process

Admission is competitive and enrollment in veterinary medicine is restricted. Applications for admission must be submitted by October 1, and a new class enters the College each year at the beginning of the subsequent fall semester.

Applicants who are legal residents of Oklahoma will be given first priority. In addition, a limited number of nonresidents will be selected. Questions about residency should be directed to the Office of the Registrar, Oklahoma State University. Requests for application materials should be directed to the manager of admissions and records, Center for Veterinary Health Sciences.

Students are admitted as candidates for the Doctor of Veterinary Medicine degree on the basis of records of academic performance in preparatory studies, GRE and Biology subject tests, and references to determine personal characteristics and career motivation. Details concerning admissions pathways and procedures are available via the Center for Veterinary Health Sciences Web site www.cvhs.okstate.edu/FutureStudents/.

The veterinary curriculum extends over four calendar years. The first two academic years conform to the normal semester system of the University. The last two academic years are continuous, with the fourth starting shortly after completion of the third. The fourth year is clinical in nature and classes are primarily in the Boren Veterinary Medical Teaching Hospital. The fourth year is organized into three-week rotations to provide for lower faculty-student ratio and more efficient use of clinical facilities and resources.

Veterinary Biomedical Sciences Graduate Program

Kenneth Clinkenbeard, DVM, PhD - *Professor and Coordinator of Graduate Studies*

The veterinary biomedical sciences (VBS) graduate program is a multidisciplinary program intended to provide a broad base of research interests to address individual student interests. The program is administered within the Center for Veterinary Health Sciences but may involve faculty outside of the college. Programs of research and study leading to the degrees of Master of Science and Doctor of Philosophy are available within the broad areas of focus: infectious diseases, pathobiology, physiological sciences. The Master of Science degree is also available in the clinical sciences. The program is designed to prepare individuals for careers in teaching and research, and specialization is possible within each area dependent upon faculty interests, student needs and available funding.

Current areas of research focus include molecular, cell and developmental biology, clinical sciences (including laser applications and oncology), infectious diseases (including vector-borne diseases, bacterial and viral diseases in wild and domestic animals), pathobiology and toxicology. Faculty and their specific areas of interest are available through the graduate coordinator or online at www.cvm.okstate.edu/graduate.

—Prerequisites. Candidates for admission must possess at least a bachelor's degree or equivalent, with a background in biological or physical sciences. While there are no absolute grade requirements, applicants with combined verbal, quantitative and analytical GRE total scores of 500, 700 and 4.0 or greater GPAs (last 60 hours) of 3.0 or greater, will receive strongest consideration. Provisionary status may be awarded to those not having these credentials with specific requirements dependent on recommendations of the departmental graduate faculty.

—The Master of Science Degree. The MS may be earned with 30 credit hours beyond a bachelor's degree or 21 hours beyond the DVM degree, including not more than six credit hours for the thesis. The plan of study is designed to meet the student's needs and interests and typically includes two credits of seminar, one course in statistics, and courses in molecular or cell biology, immunology or physiology. The student must also pass a final oral examination covering the thesis and related course work.

—The Doctor of Philosophy Degree. The PhD requires a total of 90 credit hours beyond the bachelor's degree or 60 hours beyond the MS or DVM degree, including up to 45 credit hours for research and dissertation. The plan of study is designed to meet the student's needs and interests and typically includes courses in biochemistry, statistics and seminar. Written and oral qualifying examinations are required. Students must prepare a research proposal and complete a dissertation based on original research.

—Application Procedure. Applications are accepted at any time; however, all documents should be received prior to March 1 for admission to the fall semester, and July 1 for the spring semester. Applicants are required to submit scores for the Aptitude Test portion of the Graduate Record Examination. (The Advanced Test in Biology is also recommended.) International applicants are required to take the English Proficiency Exam (a passing score on the TOEFL of 550 or above on paper-based or 250 or above on computer-based exam), unless a student is from a country where English is a first language. The Test of Spoken English (a passing score on the TSE of 220 or above), is required for students receiving graduate teaching assistantships.

Applicants generally select a major professor before they are admitted to the VBS program. They are urged to correspond with a member of the faculty whose interests reflect their own before making application. Information about faculty research interests is available upon written request to the graduate coordinator. After acceptance to the graduate program, the student and major professor select an advisory committee and develop a plan of study consistent with the VBS graduate group requirements and subject to approval of the dean of the Graduate College.

—Assistantships. A limited number of graduate teaching and research assistantships are available.

Internship and Residency Programs

Internships and residency programs in clinical medicine and surgery are offered through the Department of Veterinary Clinical Sciences. Residency programs in pathology are offered through the Department of Veterinary Pathobiology.

Veterinary Clinical Sciences

Charles G. MacAllister, DVM, DACVIM - *Ricks-Rapp Professor and Head*

Internship and Residency Programs

The department offers graduate professional programs (internships and residencies). Internships are one-year post-DVM clinical programs in small or large animal medicine and surgery.

Internships are designed in part to prepare students for residencies or graduate academic programs. Currently residencies are offered in small animal medicine and surgery, small animal medicine, equine internal medicine, equine surgery, equine theriogenology, food animal medicine and surgery, and anesthesiology.

Residencies are three-year clinical programs in various disciplines designed in part to prepare for specialty board certification. Currently, residencies are offered in small animal surgery, small animal internal medicine, equine internal medicine, equine surgery, food animal medicine and surgery, anesthesia, and theriogenology. Graduate academic programs may be available in association with residencies.

—Application Procedure. Applications are accepted at any time and are considered as positions become available. Most open positions are listed in the Veterinary Internship/Residency Matching Program at www.virmp.org.

Veterinary Pathobiology

James H. Meinkoth, DVM, PhD, DACVP - *Interim Department Head*

Residency programs in anatomical and clinical veterinary pathology and veterinary microbiology are offered. Candidates must have the DVM degree or equivalent. The anatomical and clinical pathology residency programs are three years with options to enter into the PhD program. The programs are designed for those interested in diagnostic veterinary pathology and board certification by the American College of Veterinary Pathologists. Residency training occurs through the Veterinary Medical Teaching Hospital and through the Oklahoma Animal Disease Diagnostic Laboratory. The program involves extensive diagnostic casework on primarily domestic animals and includes weekly case conferences and seminars. In addition, abundant archived materials are available for the specialty board preparation. The clinical microbiology program is a two-year program designed to prepare individuals for a career in veterinary microbiology. In addition to pursuing the master's degree in infectious diseases, individuals will participate, on a limited basis, in the instruction of infectious disease courses in the veterinary curriculum, as well as rotate through the bacteriology, virology, mycology and serology sections of the Oklahoma Animal Disease Diagnostic Laboratory. The program is designed to prepare students for opportunities in several areas, including diagnostic veterinary medicine, teaching, board certification in the American College of Veterinary Microbiologists, and PhD/research programs. For more information about graduate degrees, see "Veterinary Biomedical Sciences Graduate Programs."

—Application Procedure. Applications for the residency program are accepted at any time. Usually one new residency training position is available each year. Open positions are listed in the "Educational Opportunities" section of the *Journal of the American Veterinary Medical Association.*