

# College of Veterinary Medicine

**Michael D. Lorenz, D.V.M.,** *Interim Dean*

**S. A. Ewing, D.V.M., Ph.D.,** *Interim Associate Dean for Academic Affairs*

**Jerry Malayer, Ph.D.,** *Associate Dean for Research*

**Robert A. Smith, D.V.M.,** *Director of Veterinary Extension*

**Carolynn MacAllister, D.V.M.,** *Director of Continuing Education*

The primary objective of the College of Veterinary Medicine is to educate veterinarians for private practice. However, the professional curriculum provides an excellent basic medical education in addition to 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, physical facilities and equipment, clinical resources, library and learning resources, enrollment, admissions, faculty, curriculum, continuing and post-graduate education, and research.

## Preparatory Requirements

Attainment of the Doctor of Veterinary Medicine degree requires, at a minimum, six academic years of collegiate training. In preparation for the professional training the student must complete both prescribed and elective collegiate courses. The minimum prescribed preparatory studies, totaling 60 semester hours of course work, can be completed in two calendar years. Most of the entering veterinary medical students in recent years have had three to four years of preparatory training, often a bachelor's degree. It is recommended that the student undertake an appropriate regular bachelor's degree program in the sciences, in the course of which he or she will complete the prerequisites for entry

into the College of Veterinary Medicine by the end of at least the third year of preparatory training.

## Admission Requirements

Collegiate course requirements for entry into veterinary medical college may be completed at any accredited university or college. Special pre-veterinary curricula are available at Oklahoma State University through the College of Agricultural Sciences and Natural Resources and through the College of Arts and Sciences. Both colleges 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 College 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 College of Veterinary Medicine.

*English composition and technical/professional report writing*—eight semester credit hours. An English elective may be substituted for the technical writing.

*Chemistry*—17 semester credit hours including five semester credit hours of organic chemistry designed for pre-veterinary, premedical and pre-dental

students which must include both the aliphatic and aromatic series of organic compounds. Additionally three semester credit hours of biochemistry are required.

*Physics*—four semester credit hours of descriptive physics or two semesters of general physics (preferred).

*Mathematics*—three semester credit hours. Mathematical courses must include the fundamental operations of algebra, exponents and radicals, simple equations, graphs, simultaneous equations, quadratic equations and logarithms.

*Biological science*—15 semester credit hours. Courses in zoology, microbiology and genetics are required. These courses must include laboratory work. Comprehensive courses in biology will be considered but must be evaluated before credit is accepted.

*Animal Nutrition*—three semester credit 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 credit hours.

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 several scholarships which are available to veterinary medicine students; most are based on academic achievement and financial need.

## Veterinary Medical Studies

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 fall semester.

Applicants who are legal residents of Oklahoma will be given first priority. However, a limited number of the first-year students may be selected from a pool of nonresident applicants. Questions about residency should be directed



to the Office of Admissions, Oklahoma State University. Requests for application materials should be directed to the manager of veterinary medicine admissions, College of Veterinary Medicine.

Students are admitted as candidates for the Doctor of Veterinary Medicine degree on the basis of records of academic performance in preparatory studies, standard achievement tests, and references to determine personal characteristics and career motivation.

The College has an alternative admissions program. For further information, contact the Office of the Associate Dean.

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 Programs

Professor and Graduate Coordinator  
Charlotte Ownby, Ph.D.

The veterinary biomedical sciences (VBS) graduate program is a multidisciplinary program intended to provide a broad base to address individual student interests. The program is administered within the College of Veterinary Medicine 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 and 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 via

the Internet ([www.cvm.okstate.edu/graduate](http://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 multiplied by their GPAs (last 60 hours) totaling 4,500 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 M.S. 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 biochemistry and one course in statistics. The student must also pass a final oral examination covering the thesis and related course work.

**The Doctor of Philosophy Degree.** The Ph.D. degree requires a total of 90 credit hours beyond the bachelor's degree or 60 hours beyond the M.S. or D.V.M. 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), 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. Details of these programs appear in each of these departmental sections.

## Physiological Sciences

Professor and Head Cyril R. Clarke,  
B.V.Sc., Ph.D.

Refer to "Veterinary Biomedical Sciences Graduate Program".

## Veterinary Clinical Sciences

Professor and Head Charles G.  
MacAllister, D.V.M., M.S.

## Internship and Residency Programs

The department offers graduate professional programs (internships and residencies). Internships are one-year post-D.V.M. clinical programs in small or large animal medicine and surgery. Internships are designed in part to prepare students for residencies or graduate academic programs. Residencies are two- or 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, zoo animal

medicine, and theriogenology. Graduate academic programs may be available in association with some 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.

# Veterinary Pathobiology

Professor and Head Kenneth D. Clinkenbeard, D.V.M., Ph.D.

## Residency Programs

A residency in anatomical or clinical veterinary pathology is offered. Candidates must have the D.V.M. degree or equivalent. The anatomical pathology residency program is two years with options for either a third year of residency training or entering the graduate program for Ph.D. degree. The clinical pathology residency is a three-year 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. 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*.