COLLEGE OF VETERINARY MEDICINE

College Administration
Carlos Risco, DVM, Dipl. ACT—Dean
Jerry Ritchey, DVM, PhD, DACVP—Associate Dean Academic and Student Affairs
Jerry Malayer, PhD—Sr. Associate Dean for Research and Graduate Education

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College of Veterinary Medicine
The College of Veterinary Medicine (CVM) is the premier provider of animal care in the state of Oklahoma and for the region. The CVM provides quality educational opportunities to prepare our graduates for varied careers within the veterinary profession. The veterinary medical profession is rewarding, exciting, and one that touches the environment and the lives of humans and animals alike. The career options available to graduates with a Doctor of Veterinary Medicine (DVM) degree are as varied as the people who make veterinary medicine their life-long commitment. The College of Veterinary Medicine at Oklahoma State University offers a program designed to prepare new graduates for a variety of biomedical careers including private practice, post-DVM clinical training, research, industry, military, and government.

Vision: To be innovative world leaders in healthcare, research, and professional education.

Core Values:

- Communication: Understanding the importance of good communication for the proper functioning of the team and advancing our common goals.
- Integrity: We will demonstrate at all times, and expect of our colleagues, the highest standards of personal integrity.
- Accountability: We will be accountable for our own actions, work, and words
- Teamwork: Understanding that a team is stronger than the sum of its parts, and that we perform better as a team.
- Leadership: Recognizing that we can all be leaders.

Accreditation
The College is accredited 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.

High School Preparation
Preparation for a career in veterinary medicine includes understanding the profession. Volunteering, shadowing or working with a veterinarian is essential. Students should develop emotional maturity and become aware of how medical decisions include patient, client and financial issues. Professionalism and ethics are fundamental for veterinarians. Although the veterinary school does not use your high school grades to determine eligibility, students in high school are strongly encouraged to take coursework heavy in the math and sciences if offered.

Admission and Application Requirements
Earning a DVM degree requires dedication and hard work, but the rewards are returned for a lifetime. In general, students must complete three to four years of pre-veterinary undergraduate coursework followed by four years of a professional program in a college of veterinary medicine.

Students may choose any accredited college/university to complete their pre-veterinary coursework, however, choosing a major related to the student’s interest in science and animals is wise. The College requires all applicants to be within 1 year of completing specific required courses to be eligible for application. For a list of required courses, visit the website: https://vetmed.okstate.edu/students/pre-vet-courses.html (https://cvhs.okstate.edu/students/pre-vet-courses.html)

Other factors can contribute to an applicant’s eligibility for application to the DVM Program. For a detailed list of those factors, visit the “Eligibility” portion of the OSU-CVM website: https://vetmed.okstate.edu/students/eligibility.html (https://cvhs.okstate.edu/students/eligibility.html)

Early Admission Program
Students pursuing careers in the health sciences often make their career decision prior to undergraduate enrollment. The goal of the Early Admission Program is to aid students with strong academic ability that are interested in veterinary medicine and guide them in their pursuit of a veterinary medical career. The Early Admission Program strives to provide guidance, direction, mentorship, and provisional admission for students with superior academic achievement and interpersonal skills that are well-suited to the missions of the veterinary profession. The EAP is open to all incoming true college freshmen attending a 4-year Oklahoma institution. Visit the Early Admission Program page on the CVM website for more information: https://vetmed.okstate.edu/students/early-admission.html (https://cvhs.okstate.edu/students/early-admission.html).

Scholarships
The College has a variety of scholarships available to currently enrolled veterinary medicine students. The scholarship application opens late in the fall semester.

Selection Factors
The Admissions Committee seeks to admit students with excellent records of academic achievement, in addition to backgrounds that help predict potential success in a variety of veterinary medical careers. Because the veterinary medical profession is constantly changing, the faculty supports the concept of achieving diversity in each entering class. The College of Veterinary Medicine typically admits 106 students annually of which 58 are Oklahoma residents and 48 are out-of-state students.
In selecting applicants for admission, the Admissions Committee will consider both quantitative (grade point averages, course load, and standardized test scores) and qualitative factors (veterinary experience, background, personal statement and letters of recommendation).

Residents receive a score based on the evaluation of their application materials as well as a personal interview conducted by members of the Admissions Committee. Interviews for resident applicants are not automatically granted but are strictly by invitation only. The nonresidents’ qualitative score is based on file review by members of the Admissions Committee. Personal interviews are not offered to nonresident applicants.

Strong applications include letters of recommendation from references who have had recent experiences with the applicant. The CVM requires three letters of recommendation, one of which must come from a veterinarian, preferably one with whom has working experience with the applicant (e.g. employment, job shadowing, training, etc.).

College Curriculum

The veterinary school’s curriculum prepares students for a wide variety of careers. It emphasizes educating general practitioners and prepares students for nonpractice careers. The curriculum is built on a culture of scholarship that has led to an excellent reputation for educating students not only to be ready to enter practice but to become successful veterinarians.

The curriculum is integrated across departments and is systems-based rather than topic-based. The teaching style includes lecture and small-to-large group case discussion formats. Hands-on animal experiences are emphasized beginning in a student’s first year. The college teaches all animal species. Students may pursue their area of interest through elective courses starting in their second year and can continue through their fourth. These electives include opportunities to focus on animal species interests, discipline interests and research. The 4th year is a mixture of required hospital rotations and electives including off-campus experiences. They are encouraged to take externships in private practice, referral centers, specialty practices, government laboratories, zoos, or other facilities to expand their experience of the realities of the diverse careers available to them.

For a full list of the OSU DVM Curriculum, visit the “DVM Curriculum” portion of the CVM website: http://catalog.okstate.edu/college-veterinary-medicine/degree-programs/veterinary-medicine-dvm/ (http://catalog.okstate.edu/college-veterinary-medicine/degree-programs/veterinary-medicine-dvm/20/)

Graduate Program

Comparative Biomedical Sciences

Joshua Butcher, PhD—Assistant Professor and Assistant Faculty Graduate Coordinator

The comparative biomedical sciences (CBSC) graduate program is a multidisciplinary program intended to provide students with a broad base of research areas to address individual student interests. The program is administered within the College of Veterinary Medicine but may involve faculty from other colleges. 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 program is designed to prepare individuals for careers in teaching and research, and specialization is possible within each area dependent upon student and faculty interests and available funding.

Current areas of research focus include molecular, cell and developmental biology, clinical sciences (including laser applications and oncology); infectious and parasitic 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 (cbsc@okstate.edu (vbsc@okstate.edu)) or online at https://vetmed.okstate.edu/students/comparative-biomedical-sciences/index.html (https://vetmed.okstate.edu/students/comparative-biomedical-sciences/).

Prerequisites

Candidates for admission must possess a bachelor’s degree or equivalent, with a background in biological or physical sciences. Although there are no absolute performance level requirements, applicants with quantitative GRE scores at the 75th percentile or greater and GPAs of 3.0 (out of 4.0) or greater, will receive the strongest consideration.

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 and pathobiology. 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 minimum of 60 credit hours beyond the bachelor’s degree 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 cell and molecular biology, pathobiology, statistics, and seminar. Written and oral qualifying examinations are required. Students must prepare a research proposal and complete and defend a dissertation based on original research.

Application Procedure

Applications are made to the Graduate College (http://gradcollege.okstate.edu/apply (http://gradcollege.okstate.edu/apply/)) and are accepted at any time; however, all documents should be received before March 1st for admission to the fall semester. Applicants are required to submit official transcripts of all college-level work and scores for the GRE general test. International applicants are required to take an English proficiency exam, unless a student completed a baccalaureate or graduate degree from an accredited institution of higher learning at which English is the primary language of instruction. For students seeking graduate teaching assistantships, a score of 22 or greater on the speaking part of the internet-based TOEFL (iBT) or 7.0 on the speaking portion of the IELTS is required. In addition, the applicant will submit a statement of purpose stating their preparation for graduate study as well as how earning a graduate degree will further their educational and career goals and will have three persons knowledgeable of their preparation for graduate study write and submit letters of reference.

Information about faculty research interests is available upon request to the graduate coordinator (cbsc@okstate.edu (vbsc@okstate.edu)). After acceptance to the graduate program, students select a major professor.
and an advisory committee and develop a plan of study consistent with the CBSCC graduate program requirements and subject to the 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.

**Academic Areas**

- Veterinary Clinical Sciences (http://catalog.okstate.edu/college-veterinary-medicine/veterinary-clinical-sciences/)
- Veterinary Pathobiology (http://catalog.okstate.edu/college-veterinary-medicine/veterinary-pathobiology/)
- Physiological Sciences (http://catalog.okstate.edu/college-veterinary-medicine/physiological-sciences/)
- Degree Programs (http://catalog.okstate.edu/college-veterinary-medicine/degree-programs/)

**Graduate Programs**

- Comparative Biomedical Science, MS (http://catalog.okstate.edu/college-veterinary-medicine/degree-programs/comparative-biomedical-sciences-ms/)
- Comparative Biomedical Science, PhD (http://catalog.okstate.edu/college-veterinary-medicine/degree-programs/comparative-biomedical-sciences-phd/)

**Professional Programs**

- Veterinary Medicine, DVM (http://catalog.okstate.edu/college-veterinary-medicine/degree-programs/veterinary-medicine-dvm/)

**Faculty**

**Veterinary Pathobiology**

- Jerry Ritchey, DVM, PhD, DACVP—Professor and Department Head

**Regents Professors and Endowed Chairs:** *Anthony W. Confer, DVM, PhD, DACVP (emeritus) and Walter R. Sittlington Endowed Chair; Clinton J. Jones, PhD, and Sittlington Endowed Chair; *Susan Little, DVM, PhD, DAVPC-Parasitology and Krull/Ewing Endowed Chair

**Professors:** Kenneth Clinkenbeard, DVM, PhD (emeritus); *Jean M. d’Offay, DVM, PhD, DACVP (emeritus); Richard W. Eberle, PhD (emeritus); *Robert W. Fulton, DVM, PhD, DACVM (emeritus); *Katherine M. Kocan, MSPH, PhD (emeritus); *James H. Meinke, DVM, PhD, DACVP; *Mason Reichard, PhD; *Timothy Snider, DVM, PhD, DACVP

**Associate Professors:** Tom Oomens, PhD; *Jared Taylor, DVM, MPH, PhD, DACVM, DACVP

**Assistant Professors:** *Kelly Allen, MS, PhD; *Fernando Vicosa Bauermann, DVM, PhD; *Valerie McElliott, DVM, PhD, DACVP; *Craig Miller, DVM, PhD, DACVP; *Akhilsh Ramachandran, BVSc&AH, PhD, DACV

**Clinical Professors:** *Todd Jackson, DVM, DACLAM; *Theresa Rizzi, DVM, DACVP

**Clinical Associate Professors:**

**Clinical Assistant Professor:** *Susan E. Fielder, DVM, DACVP; Yoko Nagamori, DVM

**Associate Research Professor:** Edmour Blouin, PhD (emeritus)

**Lecturer:** Dr. Jennifer Rudd, DVM, Meriam Saleh, PhD

**Research Scientist:** Maraya Maggiori

**Residents:** Kaethryn Duncan, DVM; Dah Jiun Fu, DVM; Ryan Kalish, DVM; Sierra Salopek, DVM; Ruth Scimeca, PhD; Erin Stayton, DVM

**Post-Doctoral Fellows:** Kelly Harrison, PhD; Jeff Oster, PhD

**Graduate Teaching Associates:** Leximan Sawant, BVSc, MVSc

**Veterinary Clinical Sciences**

*Daniel J. Burba, DVM, DACVS, McCasland Professor of Biomedical Laser Surgery and Department Head

**Regents Professor and Endowed Chairs:** Kenneth Bartels, DVM, MS, and Cohn Family Chair for Animal Care (emeritus); *Melanie Boileau, DVM, MS, DACVIM, and Clinical Professorship in the Center for Veterinary Health Sciences; *Daniel J. Burba, DVM, DACVS, and McCasland Endowed Chair; *Danielle Bugat, Cohn Family Chair for Animal Care; *Andrew Hanzlicek, DVM, MS, DACVIM, and Kirkpatrick Chair in Small Animal Medicine; *Todd Holbrook, DVM, DACVM, DACVSMR, and Jack & June Jacobs Chair in Veterinary Medicine; G. Reed Holyoak, DVM, PhD, DACT, and Bullock Professor; *Michael D. Lorenz, DVM, DACVIM, and Regents Service Professor (emeritus); *Lara Sypniewski, DVM, DABVP, and Henthorne Clinical Professorship

**Professors:** *Joseph Alexander, DVM, DACVS (President, CIED) (emeritus); *Kenneth Bartels, DVM, MS (emeritus); *Daniel J. Burba, DVM, DACVS; *Lionel J. Dawson, BVSc, MS, DACT; *Margi A. Gilmour, DVM, MS, DACVO; *Todd Holbrook, DVM, DACVM, DACVSMR, G. Reed Holyoak, DVM, PhD, DACT; *John P. Hoover, DVM, MS, DACVIM, DABVP (emeritus); *Charles G. MacAllister, DVM, DACVIM (emeritus); *Mark Neer, DVM, DACVIM (emeritus); *Richard Shawley, DVM, MS, DACVA (emeritus)

**Associate Professors:** *Robert J. Bahr, DVM, DACVR (emeritus); *Melanie Boileau, DVM, MS, DACVIM; *Mary H. Bowles, DVM, DACVIM (emeritus); *Erik Clay, DVM, PhD, DACVS; *Daniel Bugat, DVM, DACVS; *Lyndi Gilliam, DVM, DACVIM; *Nicola Di Girolamo, DVM, Msc, PhD, DECZM; *Andrew Hanzlicek, DVM, MS, DACVIM; *Henry W. Jann, DVM, MS, DACVIM, DACVSMR (emeritus); *Meredith Jones, DVM, MS, DACVIM; *John Kirkpatrick, DVM, DABVP (emeritus); Carolyn T. MacAllister, DVM (emeritus); *Gregor L. Morgan, MVSc, PhD, DACT (emeritus); *Michael J. Schoonover, DVM, MS, DACVS, DACVSMR

**Assistant Professors:** *Joao Manuel Lemos Brandao, LMV, MS, DECZM; *Shane Lyon, DVM, DACVIM; *Laura Nafe, DVM, MS, DACVIM; *Emily McCool, DVM; *Megan Williams, DVM, DACVS

**Clinical Professor:** Marjorie Gross, DVM, MS, DACVA (emeritus)

**Clinical Associate Professor:** Patricia Coan, DVM, PhD, DACLAM; *Stefano Di Concetto, DVM, MS, DACVAA; *Paul DeMars, DVM, CABVP; *John Gilliam, DVM, DAVBP, DACVIM; *Robert Streeter, DVM, MS, DACVIM; *Lara Sypniewski, DVM, DABVP; *Asitha Vasudevan Pillai, DVM, MS

**Adjunct Associate Professors:** Wei R. Chen, PhD; Alex Cohen, M.D. PhD; *William Dubois, DVM, DABVP, DACVIM; *Cheryl Lopate, DVM, MS, DACT; *Mark Munson, MD

**Clinical Assistant Professors:** Kimberly D. Carter, DVM; *Carrie Kuzma, DVM; Katrina Meinke, DVM; Sarah Peakheart, DVM

**Adjunct Assistant Professors:** *Kay Backues, DVM, DACZM; *Jennifer D’Agostino, DVM, DACZM; *Lindsay Donnelly, DVM, MS, DACVIM

**Lecturer:** Jillian Pagegelo, DVM

**Residents:** Kristen Clark, DVM, Small Animal Internal Medicine (2017-2020); Adam Moore, DVM, Small Animal Internal Medicine (2017-2020); Samantha A. Bailey, DVM, Small Animal Internal Medicine (2018-2021); Emily Davis, DVM, Small Animal Internal Medicine (2019-2021)
Physiological Sciences

Martin Furr, PhD—Professor and Department Head

Regents Professors: Lin Liu, BS, PhD (Lundberg-Kienlen Professor of Biomedical Research); Carey N. Pope, PhD (Sitlington Chair in Toxicology)

Professors: James E. Breazile, DVM, PhD (emeritus); Nicholas L. Cross, PhD (emeritus); *Michael S. Davis, DVM, MS, PhD (Oxley Chair in Equine Sports Medicine); Jerry R. Malayer, PhD; *Dianne McFarlane, MS, DVM, PhD (Ricks Rapp Professorship); Lara K. Maxwell, DVM, PhD; Charlotte L. Ownby, MS, PhD (emeritus); Chris Ross, DVM, PhD; Alastair G. Watson, BVSc, PhD (emeritus)

Adjunct Professors: David W.A. Bourne, MS, PhD; Stephen Brimijoin, BA, PhD; Larry P. Gonzalez, BS, MA, PhD; Terence H. Risby, PhD

Associate Professors: Jill Akkerman, DVM, PhD; Guangping Chen, MS, PhD; Myron Hinsdale, DVM, PhD; Veronique Lacombe, DVM, PhD; Diplomate ACVIM; Diplomate ECEIM; James W. Lish, MS, PhD (emeritus); Pamela G. Lovern, BA, PhD; Joseph P. McCann, PhD; *Sandra E. Morgan, MS, DVM (emerita); Ashish Ranjan, B.V.Sc., PhD (Kerr Endowed Chair); Larry E. Stein, PhD (emeritus)

Adjunct Associate Professors: Joseph R. Bidwell, BSc, MSc, PhD; David R. Wallace, BS, PhD; Guolong Zhang, BS, MS, PhD

Assistant Professors: Joshua Butcher, M.S., PhD; Madhan Subramanian, BVSc, PhD

Adjunct Assistant Professor: Terry A. Gipson, BS, MS, PhD

Assistant Research Professors: Chaoqun Huang, MD, PhD; Narasa Raju Teluguakula, BSc, MSc, PhD

Research Associate: Yurong Liang, BS, PhD; M. Cristina Munteanu, MS, PhD; Pulavendran Sivasami, MS, PhD

Post-Doctoral Fellows: Allison Campolo, PhD; Kalyani Ektate, BVSc, MVSc, PhD; Fang Hau, PhD; Sri Nandhini Sethuraman, BVSc, MVSc; Kishor Vaddadi, PhD; Lingyan Wang, BS, MS, PhD

Graduate Teaching Associates: Harshini Ashar, BVSc, MVSc; Bridgette French-Harbison, BS, MS; Girish Patil, MVSc; Mohit Singh, MVSc; Kun Song, BS; Joshua VanOsdol, BS; Nishani Wijesekera, BVSc; Dao Xu, BS

Graduate Research Associates: Gayan Bamunuwarachchi, BS; Mike Gorbet, BS; Sugandhika Gothami, BS; Wenzhuo Hao, BS, MS; Kong Lin, BS; Stacey Herriage, BA; Robert Jeyasingh, BVSc; Kirstin Hester, BS; Raisa Monteiro, BVSc; Shannon Remerowski, BS, DVM; Oluwayemisi Semola, U; Lakmini Senaviratna, BS

Staff: Montana Fulton, RVT; Dallas Karcher, BS; Erin Langford-Loftis, BS; Christopher H. Pivinski, BS; Lana Schler, BS

*Board Certification in Specialty Area