# **CENTER FOR VETERINARY HEALTH SCIENCES**

### **College Administration**

Carlos Risco, DVM, Dipl. ACT—Dean Margi Gilmour, DVM, MS, DACVO—Associate Dean for Academic Affairs Jerry Malayer, PhD—Associate Dean for Research and Graduate Education

## **Campus Address and Phone**

Address: 205 McElroy Hall, Stillwater, OK 74078

Phone: 405.744.6651 Fax: 405.744.6633

Website: www.cvhs.okstate.edu (http://www.cvhs.okstate.edu)

### **Center for Veterinary Health Sciences**

The Center for Veterinary Health Sciences (CVHS) is the premier provider of animal care in the state of Oklahoma and for the region. The CVHS provides quality educational opportunities to prepare our graduates for varied careers within the veterinary profession. The profession of veterinary medicine 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 Center for Veterinary Health Sciences 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.

**Mission:** Innovation in animal and human health. **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 be within 1 year of completing specific required courses to be eligible for application. For a list of required courses, visit the website: 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-CVHS website: 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 applicable to all incoming true college freshmen attending a 4-year Oklahoma institution. Visit the Early Admission Program page on the CVHS website for more information: https://cvhs.okstate.edu/students/early-admission.html

#### **Scholarships**

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

## **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 Center for Veterinary Health Sciences 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 CVHS requires three letters of recommendation, one of which must come from a veterinarian, preferably one with whom the applicant has worked under (e.g. employment, job shadowing, training, etc.). Other letters may come from an academic adviser, professor and/or employer.

#### **College Curriculum**

The veterinary school's curriculum prepares students for a wide variety of careers. It emphasizes educating general practitioners and also prepares students for nonpractice careers. The curriculum is built on a culture of scholarship that has led to the 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 4<sup>th</sup> 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 to 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 CVHS website: https://cvhs.okstate.edu/students/dvm-curriculum.html

#### **Graduate Program**

## **Veterinary Biomedical Sciences**

Pamela Lovern, PhD—Associate Professor and Coordinator of Graduate Studies

The veterinary biomedical sciences (VBS) graduate program is a multidisciplinary program intended to provide students a broad base of research areas to address individual student interests. The program is administered within the Center for Veterinary Health Sciences 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 (vbsc@okstate.edu) or online at https://cvhs.okstate.edu/veterinary-biomedical-sciences-graduate-program.

#### **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 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 pathophysiology. 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, pathophysiology, 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) and are accepted at any time; however, all documents should be received prior to 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 TOEFL or equivalent exam, unless a student is from a country where English is a first language. For students seeking graduate teaching assistantships, a score of 22 or greater on speaking part of the internet-based TOEFL (ibT) 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 (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 VBS graduate program 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.

#### **Academic Areas**

- · Veterinary Clinical Sciences (p. 2095)
- · Veterinary Pathobiology (p. 2096)
- · Physiological Sciences (p. 2097)

## Faculty Veterinary Pathobiology

\*Jerry Ritchey, DVM, PhD, DACVP—Professor and Department Head Regents Professors and Endowed Chairs: \*Anthony W. Confer, DVM, PhD, DACVP and Walter R. Sitlington Endowed Chair; Clinton J. Jones, PhD, and Sitlington Endowed Chair; \*Susan Little, DVM, PhD, DAVPC-Parasitology and Krull/Ewing Endowed Chair

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

Associate Professors: Tom Oomens, PhD; \*Jared Taylor, DVM, MPH, PhD, DACVIM, DACVPM

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

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

Clinical Associate Professors: \*Keith Bailey, DVM, PhD, DACVP Clinical Assistant Professor: \*Susan E. Fielder, DVM, DACVP; Yoko Nagamori, DVM; Grant B. Rezabek, DVM, MPH

**Associate Research Professor:** Edmour Blouin, PhD (emeritus) **Lecturer:** Maggie McCourt, DVM; Dr. Jennifer Rudd, DVM

Residents: Rory Chen, DVM; Katheryn Duncan, CVM; Ryan Kalish, DVM; Sierra Salopek, DVM; Ruth Scimeca, PhD; Erin Stayton, DVM Post-Doctoral Fellows: Kelly Harrison, PhD; Jeff Oster, PhD; Meriam Saleh, PhD

Graduate Teaching Associates: Laximan 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 Dugat, Cohn Family Chair for Animal Care; \*Andrew Hanzlicek, DVM, MS, DACVIM, and Kirkpatrick Chair in Small Animal Medicine; \*Todd Holbrook, DVM, DACVIM, DACVSMR, and Jack & June Jacobs Chair in Veterinary Medicine; G. Reed Holyoak, DVM, PhD, DACT; \*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, DACVIM, DACVSMR; G. Reed Holyoak, DVM, PhD, DACT—Bullock Professor; \*John P. Hoover, DVM, MS, DACVIM, DABVP (emeritus); \*Kip Lemke, DVM, MSc, DACVA; \*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 Clary, DVM, PhD, DACVS; \*Lyndi Gilliam, DVM, DACVIM; \*Nicola Di Girolamo, DVM, Msc, PhD, DECZM; \*Andrew Hanzlicek, DVM, MS, DACVIM; \*Henry W. Jann, DVM, MS, DACVS, DACVSMR (emeritus); \*Meredyth Jones, DVM, MS, DACVIM; \*John Kirkpatrick, DVM, DABVP (emeritus); Carolynn T. MacAllister, DVM (emeritus); \*Gregor L. Morgan, MVSc, PhD, DACT (emeritus); \*Michael J. Schoonover, DVM, MS, DACVS, DACVSMR;

Assistant Professors: \*Ryan Baumwart, DVM, DACVIM; \*Cara Blake, DVM, DACVS; \*Joao Manuel Lemos Brandao, LMV, MS, DECZM; \*Danielle Dugat, DVM, DACVS; \*Candace Lyman, DVM, DACT; \*Shane Lyon, DVM, DACVIM; \*Laura Nafe, DVM, MS, DACVIM; \*Emily Sharpe, DVM; \*Megan Williams, DVM, DACVS

Clinical Professor: \*Marjorie Gross, DVM, MS, DACVA (emeritus)
Clinical Associate Professor: \*Patricia Coan, DVM, PhD, DACLAM, \*Paul
DeMars, DVM, CABVP; \*John Gilliam, DVM, DAVBP, DACVIM; \*Robert
Streeter, DVM, MS, DACVIM; \*Lara A. Sypniewski, DVM, DABVP
Adjunct Associate Professors: Wei R. Chen, PhD; Alex Cohen, M.D. PhD;
\*William Dubois, DVM, DABVP; \*Cheryl Lopate, DVM, MS, DACT; \*Mark
Munson, MD

Clinical Assistant Professors: Kimberly D. Carter, DVM; \*Mackenzie Hallman, DVM, DACVR; \*Carrie Kuzma, DVM; Katrina Meinkoth, DVM; Sarah Peakheart, DVM; Justin Plank, DVM

Adjunct Assistant Professors: \*Kay Backues, DVM, DACZM; \*Jennifer D'Agostino, DVM, DACZM; \*Lindsay Donnelly, DVM, MS, DACVIM Lecturer: Julia Baldrighi, DVM, MS, PhD

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 (2019-2022); Donald Holter, DVM, Small Animal Surgery (2018-2021); Jane Park, DVM, Small Animal Surgery (2018-2021); Rodrigo Roca, DVM, Small Animal Surgery (2019-2022); Clay Hallman, DVM, Diagnostic Imaging/Radiology (2017-2020); Amy Lovett, DVM, Equine Internal Medicine, (2017-2020); Jessica Rutledge, DVM, Equine Internal Medicine (2017-2020); Hugh Duddy, DVM, Equine Surgery (2018-2021); Kelsey Jurek, DVM, Equine Surgery (2019-2022); Brian Weaver, DVM, APVP Food Animal (2018-2020); Natasha Williams, DVM, Food Animal Medicine (2019-2022); Cory Anderson, DVM, Theriogenology (2019-2022); Adam Bassett, DVM, Theriogenology (2019-2022)

Interns: Chelsea Connor, DVM, Small Animal Medicine & Surgery; Sarah Gronsky, DVM, Small Animal Medicine & Surgery; Jacklyn Gross, DVM, Small Animal Medicine & Surgery; Ivette Irizarry, DVM, Small Animal Medicine & Surgery; Sydney St. Clair, DVM, Small Animal Medicine & Surgery; Evan Crisman, DVM, Equine Medicine and Surgery; Kelsey Studer, DVM, Avian Exotics and Zoological; Elizabeth Soler, DVM, Ophthalmology.

## **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.VSc., 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: Shitao Li, 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: Erin Williams, PhD; Lingyan Wang, BS, MS, PhD; Fang Hau, PhD; Kishor Vaddadi, PhD; Lingling, Xu, PhD

Graduate Teaching Associates: Harshini Ashar, BVSc, MVSc; Kalyani Ektate, BVSc; Bridgette French-Harbison, BS, MS; Girish Patil, MVSc; Sri Nandhini Sethuraman, BVSc, MVSc; Mohit Singh, MVSc; Kun Song, BS; Megolhubino Terhuja, U; Joshua VanOsdol, BS; Nishani Wijesekera, BVSc; Dao Xu, BS

Graduate Research Associates: Gayan Bamunuarachchi, BS; Allison Campolo, 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 Senavirathna, BS

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

<sup>\*</sup>Board Certification in Specialty Area

## **Veterinary Clinical Sciences**

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

The Department of Veterinary Clinical Sciences is one of four academic departments at the CVHS. The Veterinary Clinical Sciences faculty are an integral part of the Boren Veterinary Medical Hospital. The faculty train veterinary students through hands-on experience and provide the highest quality of care to clients and patients. In addition to training veterinary students, there are several residents and interns in various sections of the hospital who are guided by the VCS faculty.

Visit the Veterinary Medical Hospital webpage (https://cvhs.okstate.edu/veterinary-medical-hospital) to learn more about the faculty and staff and the services they provide.

### **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, internships are offered in anesthesiology, small animal medicine and surgery rotating, equine internal medicine and surgery rotating, shelter medicine, ophthalmology, and zoological medicine.

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, diagnostic Imaging/radiology, equine internal medicine, equine surgery, food animal medicine and surgery, and theriogenology. Graduate academic programs may be available in association with residencies.

## **Application Procedure**

Most open positions are listed in the Veterinary Internship/Residency Matching Program at www.virmp.org (http://www.virmp.org) and applications are submitted through the VIRMP.

#### **Faculty**

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

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\*Board Certification in Specialty Area

## **Veterinary Pathobiology**

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

The Department of Veterinary Pathobiology provides contemporary and state-of-the-art instruction and research for the disciplines of bacteriology, immunology, parasitology, pathology, virology, epidemiology and public health. The Department is the proud home of the National Center for Veterinary Parasitology, the Director of the University's Animal Resource Unit, and faculty associated with the Oklahoma Animal Disease Diagnostic Laboratory. Departmental faculty participate in research sponsored by the NIH, USDA and private industry focused on infectious diseases important in animals and people. The department is actively engaged in training the next generation of veterinarians and scientists, publishing basic and applied works and presenting our findings at scientific and educational platforms throughout the world.

#### **Residency Programs**

Residency Coordinators: Dr. Melanie A. Breshears, Anatomic Residency Coordinator; and Dr. James H. Meinkoth, Clinical Residency Coordinator

Residency programs in anatomic and clinical veterinary pathology are offered. Candidates must have the DVM degree or equivalent. The anatomic 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.

## **Application Procedure**

Usually one new residency training position is available each year in anatomic pathology and two of every three years in clinical pathology. Open positions are listed at the ACVP website (https://www.acvp.org/) and typically in the "Educational Opportunities" section of the Journal of the American Veterinary Medical Association.

#### **Faculty**

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Associate Professors: Tom Oomens, PhD; \*Jared Taylor, DVM, MPH, PhD, DACVIM. DACVPM

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

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

Clinical Associate Professors: \*Keith Bailey, DVM, PhD, DACVP
Clinical Assistant Professor: \*Susan E. Fielder, DVM, DACVP; Yoko
Nagamori, DVM; Grant B. Rezabek, DVM, MPH
Associate Research Professor: Edmour Blouin, PhD (emeritus)
Lecturer: Maggie McCourt, DVM; Dr. Jennifer Rudd, DVM
Residents: Rory Chen, DVM; Katheryn Duncan, CVM; Ryan Kalish, DVM;
Sierra Salopek, DVM; Ruth Scimeca, PhD; Erin Stayton, DVM
Post-Doctoral Fellows: Kelly Harrison, PhD; Jeff Ostler, PhD; Meriam

Graduate Teaching Associates: Laximan Sawant, BVSc, MVSc

\*Board Certification in Specialty Area

Saleh, PhD

## **Physiological Sciences**

Martin Furr, DVM, Ph.D., Department Head

The Department of Physiological Sciences at Oklahoma State University contributes substantially to the teaching, research and service components of the Center for Veterinary Health Sciences.

The department currently has 17 tenure/tenure-track, ten adjunct and two research track faculty members, ten postdoctoral fellows and approximately 21 graduate students.

Teaching responsibilities within the department include the areas of veterinary morphology, physiology, pharmacology and toxicology, providing professional coursework leading to the DVM degree and graduate coursework leading to the Master's and Doctor of Philosophy degrees. Departmental faculty have a wide range of research interests including neurotoxicology, lung biology, enzymology of drug metabolism, exercise physiology, reproductive physiology, therapeutics, comparative aging, cardiovascular physiology, raptor biology and cetacean biology. Extramural funding in support of research from agencies including NIH, DoD, USDA, American Cancer Society and others totals over \$2 million annually.

#### **Faculty**

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, BVSc, 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: Shitao Li, PhD; Madhan Subramanian, BVSc, PhD Adjunct Assistant Professor: Terry A. Gipson, BS, MS, PhD

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

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

Post-Doctoral Fellows: Erin Williams, PhD; Lingyan Wang, BS, MS, PhD; Fang Hau, PhD; Kishor Vaddadi, PhD; Lingling, Xu, PhD

**Graduate Teaching Associates:** Harshini Ashar, BVSc, MVSc; Kalyani Ektate, BVSc; Bridgette French-Harbison, BS, MS; Girish Patil, MVSc; Sri Nandhini Sethuraman, BVSc, MVSc; Mohit Singh, MVSc; Kun Song, BS; Megolhubino Terhuja, U; Joshua VanOsdol, BS; Nishani Wijesekera, BVSc; Dao Xu, BS

Graduate Research Associates: Gayan Bamunuarachchi, BS; Allison Campolo, 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 Senavirathna, BS

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

\*Board Certification in Specialty Area