

College of Veterinary Medicine

At a glance. . .

Academic Degrees Offered

- Doctor of Veterinary Medicine (DVM)
- Master of Science / Doctor of Philosophy in Comparative Biomedical Sciences, Fisheries & Wildlife, Immunology, Physiology
- Master of Veterinary Public Health
- Master of Specialized Veterinary Medicine
- Combined DVM/MBA
- Combined DVM/PhD

Departments

- Department of Clinical Sciences
- Department of Molecular Biomedical Sciences
- Department of Population Health & Pathobiology

CVM Community

- The College involves some 155 faculty, 400 staff members, and enrolls more than 300 DVM students, 75 graduate students, and 75 interns and residents.
- CVM faculty members are involved in: numerous public engagement activities; research with practical applications for animals, agribusiness, and human health; and preparing future veterinarians to care for domestic and wild animals and for careers in food safety, biomedical research, investigating animal-to-human diseases, and general public health.

Centennial Biomedical Campus (CBC)

- The CBC is designed to attract industry and government researchers, entrepreneurs, clinical trial companies, and collaborators from other universities who will work with College faculty and students. The partnerships will have direct economic impact to the state.
- The \$35 million, 100,000-square foot College Research Building is the first new structure on the CBC. The four-story facility includes 33 state-of-the-art laboratories plus two BioSafety Level 3 labs for infectious disease research. Some 190 faculty researchers, research technicians, and graduate students occupy the building.

- The College Research Building houses leading-edge investigations in genomic sciences, gene therapy, vaccine development, creation of diagnostic tests, new cancer immuno-therapy, and genetic research to prevent inherited and acquired diseases in livestock and companion animals. CBC research activities have significant applications in both animal and human health and welfare.
- A 20-year CBC master plan projects that another 24 buildings—totaling some 1.6 million square feet of space—will be developed for additional laboratories, offices, and animal care facilities.

Research

- The goal of the Center for Comparative Medicine and Translational Research (CCMTR) is to enhance collaborative, interdisciplinary approaches for the comparative study of animal and human diseases by developing mechanisms that encourage and facilitate interactions between the clinical and basic research scientists within the CVM, NC State, and external partners. At present, the CCMTR has more than 100 faculty participants representing 18 departments from five NC State University colleges.
- Individual centers, institutes, programs, and labs conduct clinical and basic research on a broad range of veterinary medicine topics.
- Annual research expenditures exceed \$12 million.

Public Engagement

- The College is engaged in numerous public service support activities through a multitude of programs, projects, centers, and activities that support both animal and human health, agriculture business concerns, and the environment.
- The Community-Campus Partnership offers a range of veterinary services to our surrounding communities, while providing opportunities for students to practice routine surgical procedures, and diagnose and treat common diseases of dogs and cats.
- The CVM Office of Continuing Education and Outreach offers some 40 continuing education workshops, professional training seminars, conferences, and public workshops annually.

Veterinary Teaching Hospital

- The Veterinary Teaching Hospital (VTH) provides professional student interaction and state-of-the-art veterinary medical services for some 3,000 NC veterinarians and the animal-owning public. The VTH includes some 18 specialty services supported by more than 80 faculty, 70 interns and residents, 75 veterinary students, and more than 130 permanent staff. Some 23,000 cases—primarily companion animals and horses—are examined in the Teaching Hospital's small and large animal clinics each year.
- The VTH partners with NC veterinarians and animal organizations that refer difficult cases to our specialists for consults, diagnosis, and treatment. This partnership is designed to provide expert and seamless healthcare for a broad range of animal patients. The full-service hospital includes state-of-the-art technology including the linear accelerator and access to the AnimalScan Veterinary Imaging Center, the region's first magnetic resonance imaging (MRI) facility dedicated solely for use on pets and domestic animals.
- A tertiary care medical facility, the VTH offers companion animal and equine health services and, within a 30-mile radius, ruminant health management services.
- When it opens in early 2011, the new 110,000 s.f. Randall B. Terry, Jr. Companion Animal Veterinary Medical Center is expected to be the national model for excellence in companion animal medicine.

Alumni

- The College has granted some 1,639 DVM degrees since the first graduating class in 1985.
- College alumni are involved in leadership positions supporting such economic considerations as:
 - Estimated \$11.1 billion spent in U.S. on veterinary care for pets in 2008,
 - The NC equine industry has a total economic impact of \$1.9 billion annually,
 - Animal agriculture accounts for 60% of total farm cash receipts in NC.

Financial Support

- The College's Campaign for Animal Health and Welfare raised \$6.3 million for student scholarships and fellowships; \$12.8 million for endowed professorships, assistant professorships, and fellowships; \$19.8 for research investigations into animal and human health; \$22.3 million for

innovative programs; \$1.8 million for emerging opportunities; and \$33 million for the Randall B. Terry, Jr. Companion Animal Veterinary Medical Center.

Fast Facts

- The **House Officer** specialty training program and research funding rank among the top five schools, and its faculty-student ratio is near the top.
- At the **Equine Health Center at Southern Pines**, a satellite facility of the College, faculty and staff members offer CEM import quarantine (the only such facility in NC), equine reproduction, ophthalmology, podiatry and rehabilitation, and diagnostic testing services.
- One of two national centers for the **Food Animal Residue Avoidance Databank (FARAD)** is located at the College. FARAD has been protecting drug residues from entering food animals and the public food supply for some 20 years.
- The national **Food Safety Research and Response Network (FSRRN)**, a \$5 million USDA project involving 22 universities in the U.S. and Canada, is managed and directed by College professor Dr. Jay Levine. FSRRN seeks to protect the food supply from pre-harvest food pathogens and the FSRRN team can also respond to the after-effects of agriculture bioterrorism.
- The NC State CVM is the only location in the country where dog owners can obtain a **bone marrow transplant** for their pets.
- The College has a working 80-acre farm, also known as the **Teaching Animal Unit (TAU)**, on its campus. The TAU is a dynamic teaching lab for veterinary students to learn husbandry, production management, and routine procedures used in livestock production.
- In a unique partnership with the College of Engineering, the CVM has **pioneered an orthopedic surgery procedure** called osseointegration, which fuses a prosthetic limb with an animal's bone and may one day benefit humans who lose limbs through combat, accidents, or disease.
- **CVM researchers helped map the canine genome** and are involved in numerous "One Health" genetic studies investigating the connections between human and animal health.

www.cvm.ncsu.edu